

Inequality, Too Much of a Good Thing

As the title of this essay suggests, I believe inequality has both positive and negative effects. On the positive side, differential rewards provide incentives for individuals to work hard, invest, and innovate. On the negative side, differences in rewards that are unrelated to productivity—those that result from racial discrimination, for example—are corrosive to civil society and cause resources to be misallocated. Even if discrimination did not exist, however, income inequality is problematic in a democratic society if those who are privileged use their economic muscle to curry favor in the political arena and thereby secure monopoly rents or other advantages. Moreover, for several reasons discussed in the next section, poverty and income inequality create negative externalities.¹ Consequently, it can be in the interest of the wealthy as well as the poor to raise the incomes of the poor, especially by using education and training as a means for redistribution.

The term *inequality* is often used rather loosely and can be a lightning rod. Some have argued that only extreme poverty is a concern. Others have argued that the gap in

income or wealth between the well off and the poor is a concern. Yet others have argued that the rapid growth in income disparity between the richest of the rich and everyone else is an issue. I will argue that, for various reasons elaborated below, all of these forms of inequality are of concern to contemporary American society, and that America has reached a point at which, on the margin, efficiently redistributing income from rich to poor is in the nation's interest.

A theme of my contribution to this debate is that societies must strike a *balance* between the beneficial incentive effects of inequality and the harmful welfare-decreasing effects of inequality. The optimal balance will differ across societies and time, but too much inequality can be harmful in any society, just as too much equality can suppress innovation and drive. . . .

Why Care about Rising Inequality?

Philosophers have argued about income inequality and social justice for centuries. I will sidestep most of that debate. What follows is

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a thumbnail sketch of reasons why I think it is in our interest for U.S. public policy to try to restore a more balanced distribution of income in the country. Because such a conclusion fundamentally rests on one's values as well as an empirical view of the world, I will touch lightly on these reasons. Suffice it to say that I hope there are enough arguments here to persuade the reader that it is worth considering using education and training as part of an overall strategy to reduce income inequality in America.

Philosophy

As Atkinson (1983) observes, "different principles of justice lead to quite different views about inequality" (p. 5). Principles of justice provide guidelines for society's welfare function, and with a welfare function for a particular society, economists could judge the distribution of inequality in that society against the optimal level. The rub, of course, is that the welfare function in a society is *not* observable and depends on philosophical arguments that are not testable. In addition, one has the Arrow impossibility theorem² with which to contend. Consequently, appealing to philosophical arguments can never be universally dispositive.

Principles of social justice can be divided into those that focus on fair exchange starting from a just distribution of endowments, and those that focus on the equality of outcomes. Rawls invites readers to arrive at a theory of justice by selecting the principles they would desire if they were choosing such principles in an original position behind a veil of ignorance, unaware of their standing in society or initial endowment of talents. He argues that in this case the social justice that would be desired would involve two principles: one protecting liberties and the other providing for an egalitarian distribution of opportunities and material goods. This leads him to a maximin welfare function in which the well-being of the worst off in society should be as high as possible. Interestingly,

Adam Smith arrived at a somewhat similar conclusion nearly two hundred years earlier, positing that "[n]o society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable. It is but equity, besides, that they who feed, clothe and lodge the whole body of the people, should have such a share of the produce of their own labour as to be themselves tolerably well fed, clothed and lodged" (Smith 1776, 110–111).

Nozick (1974) questions whether a theory of justice can be based on the distribution of outcomes. Using the analogy of fans who are willing to pay a fee to watch Wilt Chamberlain play basketball—an updated analogy might substitute Shaquille O'Neal—Nozick argues that "no end-state principle or distributional patterned principle of justice can be continuously realized without continuous interference with people's lives" (p. 163). Who could complain about Wilt Chamberlain's exorbitant salary if it results from rational choices? Nozick also raises the issue of the adverse incentive effects Rawls's theory of justice would have on the acquisition of talent.

Religion

I would argue that religious beliefs provide as strong (or weak) a justification for views toward society's implicit welfare function as do philosophical reflections behind a veil of ignorance. Indeed, I would go further and say that religious tenets reflect the demand for equality among the public. If people did not adhere to the basic tenets of their religion, they would not practice or would eventually change faiths. Thus, long-standing religious views toward inequality provide something of a revealed-preference argument.³ And with regard to wealth inequality, the world's major religions are united in favoring redistribution of wealth toward the poor. Robert Nelson (1991), for example, observes that "Roman Catholicism has traditionally instilled a strong concern for the poor; in the Middle Ages the church itself provided much of the care for the indigent.

The welfare state today similarly accomplishes substantial internal redistribution with the approval of many of the wealthier contributing members of the community” (p. 326). The Jewish *Siddur* advises followers to “Be just to the poor and the orphan; Deal righteously with the afflicted and the destitute” and comments, “Happy are they who are thoughtful of the needy; In time of trouble may the Lord Keep them from harm.” And the Koran criticizes the egoism of the rich inhabitants of Mecca and urges believers in Islam to support poor people, orphans, and captives. Islam requires five major obligations of its followers, including *zakat*, an obligatory contribution to the needy (which today is implemented in the form of a tax).

Enlightened Self-Interest

Another line of argument for achieving and maintaining a minimum level of equality rests on self-interest. If wide disparities in income or education create negative externalities for a majority of people, then it clearly is in the self-interest of members of society to reduce those disparities. Individuals acting on their individual preferences (e.g., paying to see Shaquille O’Neal play basketball) will not internalize these externalities. What might such externalities be? An incomplete list would involve the following.

- More-educated voters make the democratic process work better. First, people with more education are more likely to be informed and more likely to participate in democracy. Second, more-informed citizens are likely (though not guaranteed) to make better decisions. For the latter reason, even a devout defender of free markets like Milton Friedman (1982) can be found supporting a minimum compulsory level of education.
- Available evidence suggests a link between crime and inequality (e.g., Ehrlich 1973; Freeman 1983, 1995; and Imrohoroglu, Merlo, and Rupert

2001). Other things being equal, the incentive for those with limited market opportunities to commit property crimes rises as inequality increases. From the criminal’s perspective, the potential gain from crime is higher if inequality is higher, and the opportunity cost is lower. Society can devote more resources to crime prevention and incarceration, or to reducing inequality.

- Society is not willing to allow citizens to be totally destitute, to fall below some minimum level of basic consumption when it comes to food or health care (see, e.g., Pauly 1971). By providing those likely to have low incomes with skills, therefore, and thereby raising their future earnings, society can reduce the cost of providing transfer payments later on. . . .
- Nelson and Phelps (1966) and Romer (1990) model the level of education in a society as generating positive externalities for economic growth, although empirical support for this model is mixed (see Krueger and Lindahl 2001).

Low Wages, Imperfect Monitoring, and Public Safety

In an advanced economy, people are connected via markets in a myriad of ways. Employee performance can be monitored only imperfectly. If an employee performs poorly because he or she feels poorly compensated, others may suffer as a result of his or her poor performance. The tragic events of September 11th, for example, highlighted the importance of paying baggage screeners better wages.

Market Failure

More generally, market failures could lead the distribution of income in a society to be suboptimal. Credit constraints, for example, might prevent children from poor families from investing adequately in education. Monopsony power on the part of employers might enable firms to pay workers less than

the value of their marginal products.⁴ Statistical discrimination might lead to lower-than-optimal investment in education for discriminated-against groups (e.g., Lundberg and Startz 1983).

Efficient Policy Changes

Another type of externality could arise in the political arena in a society if income inequality in that society is viewed as excessive. Treaties to reduce international trade barriers offer an example. A policy that reduces trade barriers undoubtedly will increase national income in the society that enacts it. However, there will be winners and losers from such a policy. If some segments of society feel that they have not benefited from developments in the economy, then they are unlikely to support efforts to reduce trade barriers. I am not talking here just about the losers from the trade barrier reduction policy specifically, who are usually few in number and concentrated in a handful of industries. Instead, views toward free trade seem to be class related. For example, Blendon et al. (1997) find that 72 percent of those with less than a college education say one reason the U.S. economy is not doing better is that "companies are sending jobs overseas," whereas only 53 percent of college graduates agree with the same statement, and just 6 percent of American Economic Association members. Less-educated people are also less likely than those with more education to respond in the survey that trade agreements are good for the economy. I suspect that one reason Presidents (George W.) Bush and Clinton had difficulty securing fast-track authority for the passage of trade agreements is that large segments of the public perceived that they would lose from free trade, an inference that they drew because they had seen their real incomes stagnate or decline over the previous twenty years while trade expanded. Although I suspect trade has had little to do with rising wage inequality in the United States, it is understandable why so many people would draw such an inference.

Unless the public perceives that it will benefit from more efficient policies, there is little reason to suspect it will support such policies, and with 94 percent of income growth accruing to the top 1 percent of the U.S. population since 1973, it is understandable why the American public might be a little skeptical that it gained from past changes such as expanded trade.

Money Buys Influence

Economists at least since Adam Smith have fretted that wealthy merchants and manufacturers would be led by self-interest to seek government regulation and privilege to protect their monopoly position, thereby preventing the invisible hand from working its magic. Money buys access and influence in politics. It also buys influence through think tanks. A negative consequence of the skewed distribution of income in the United States is that some individuals have much more political influence than others.

Benabou (2000) develops a formal model in which the progressivity of educational funding and taxation is endogenous. He shows that the political influence of the wealthy interacts with income inequality to block efficient progressive policies or impose inefficient regressive ones. When income inequality is high, he finds, the wealthy are more likely to block *efficiency-enhancing* programs that would improve educational opportunities for the less well off.

Growth and Income Inequality

Persson and Tabellini (1994) develop a model of economic growth in which income inequality negatively influences growth through the political process. In their model, income inequality leads to policies that do not protect property rights and therefore do not allow full private appropriation of the returns from investment. A growing body of cross-country and cross-state studies have estimated the relationship between initial income inequality and subsequent GDP growth.⁵ Although at-

tributing causality is difficult in these studies, the correlation between income inequality and growth is negative, conditional on variables like initial GDP per capita and average education. Two-stage least-squares estimates that use variables such as initial literacy and infant mortality as instruments for income inequality also show an inverse relationship between GDP growth and such inequality.

Health and Income Inequality

One common argument I will *not* make concerns health and income inequality. Wilken-son (1996), for example, argues that average health is negatively affected by the societal level of income inequality. The evidence in support of this view, however, is far from compelling (see, e.g., Smith 1999 and Deaton 2001), although Eibner and Evans (2002) provide evidence that relative deprivation affects health, and a large body of evidence finds that a person's own income level is related to his or her health.

Winner-Take-All Inefficiency in Superstar Markets

Frank and Cook (1996) argue that technological changes have facilitated a shift to superstar markets in many top-paying professions. The reward received by the one who finishes first is much greater than the reward received by the also-rans. They lament that this shift is inefficient and inequitable, causing too many students to pursue careers in law, finance, and consulting at the expense of more socially beneficial fields such as engineering, manufacturing, civil service, and teaching. The winner-take-all society engendered by this shift may create the same type of misallocation of talent that Murphy, Shleifer, and Vishny (1991) attribute to rent seeking. To some extent, income inequality probably leads to legions of tax lawyers and lobbyists who look for ways to help wealthy clients avoid taxation. Frank and Cook believe that superstar markets have led to inefficient investment and wasteful competition.

Although I think we are at little risk of becoming a nation of Tonya Hardings, there may be something to the argument that superstar salaries provide perverse incentives and unnecessary competition in some sectors and divert some workers from pursuing more socially rewarding careers.

Public Preference

Last but not least, I would surmise that a majority of the public demands a certain amount of equality and is particularly supportive of using education and training to achieve more equality of outcomes. A survey of 1,001 adults by Lake, Snell, Perry & Associates in July 2000 posed the following request to respondents: "I am going to read some different ways the government can help poor Americans find and keep good jobs. For each, please tell me if you strongly support, somewhat support, somewhat oppose, or strongly oppose this idea." Fully 90 percent supported "helping to pay for education and job training for people leaving welfare." Similarly, a Gallup poll sponsored by General Motors in May 1998 asked the following free-form question: "Just your opinion, in what ways do you think the government should help the poor?" By far, the top two responses were providing better/more affordable education (38 percent) and providing job training/skills training (29 percent). The next-highest response was providing more jobs/job opportunities, at 16 percent. Only 5 percent of those surveyed cited lowering taxes as a way the government might assist poor people.

Even when given an explicit choice of lower taxes, the public prefers education and training. A CBS News poll in September 1999, for example, asked 1,376 respondents, "Which comes closer to your view? Government should provide tools to help families better their lives, such as education and job training programs. The best thing that government can do for families is to cut taxes and allow individual families to decide for themselves how to allocate their money." Fifty-five percent of respondents said the first statement

more closely reflected their views, whereas only 42 percent replied that the second statement came closer to what they believed.

Wrapping Up

In supporting minimum schooling, Milton Friedman (1982) argued that “[a] stable and democratic society is impossible without a minimum degree of literacy and knowledge on the part of most citizens and without widespread acceptance of some common set of values” (p. 86). I would argue that inequality could grow so extreme that it eventually jeopardizes any type of “widespread acceptance” of a democratic capitalist society that might be established. This leads me to agree with Victor Fuchs (1979): “For me the key word is *balance*, both in the goals that we set and in the institutions that we nourish in order to pursue these goals. I value freedom *and* justice *and* efficiency, and economics tells me that I may have to give up a little of one goal to insure the partial achievement of others” (p. 180).

Targeted Education and Training: Part of the Solution

In a perfect world, children from all families would invest in educational resources up to the point that their marginal return equaled their discount rate, and all families would have equal access to credit and discount investments at the same prevailing rate. The evidence suggests, however, that education decisions are not made in a perfect world. Children from poor families *behave* as if they have higher discount rates. The most plausible explanations for this phenomenon are that poor families are credit constrained (i.e., cannot borrow at the same rate as everyone else), or that they discount future benefits of human capital investments at a higher than market rate because they are impatient, have a greater disutility of schooling, or fail to appreciate the benefits of education. Of these possible explanations, credit constraints have received the most attention in the literature,

because students cannot easily use the return on their future human capital as collateral to borrow for human capital investments. This may be a reason for discount rates to vary. Poor families face different borrowing costs than rich ones.

The following five observations are consistent with the view that low-income families face credit constraints when it comes to education. First, Ellwood and Kane (2000) find that when the return to college education increased in the 1980s, four-year college enrollment increased for children from all quartiles of the income distribution except the bottom one. Second, Behrman and Taubman (1990) find that the timing of parental income matters for children’s educational attainment. Using data from the Panel Study of Income Dynamics (PSID), they find that father’s income earned when children are teenagers has a stronger effect on children’s educational attainment than income earned later on. Third, Shea (2000) looks at the effect on children’s human capital of differences in parental income emanating from noncompetitive factors, such as employment in a high-paying union job or industry. Wage differences for reasons such as these arguably are independent of parents’ ability. Shea finds that family income matters for children’s human capital investment in a sample of low-income families, but not for the broader population. He concludes that this finding is consistent with the idea that the accumulation of observable skills by poverty sample fathers may have been suboptimal due to liquidity constraints. Fourth, Björklund and Jantti (1997) find stronger family income effects on children’s outcomes in the United States than in Sweden, which provides much more generous educational subsidies than the United States. Fifth, the reaction of college enrollment to changes in tuition, especially at the two-year-college level, is substantially larger than the reaction of college enrollment to equivalent, present-value changes in the payoff to education (see Kane 1999).

Although it is possible to construct complicated explanations of the above findings that are consistent with all families' having equal access to credit—and I suspect part of the association between education and parental income reflects intergenerational transmission of ability and motivation for schooling, as Cameron and Heckman (2001) argue—Occam's razor and common sense suggest that families have different access to credit. For example, some families borrow for college costs by accumulating debt on their credit cards at exorbitant rates, whereas others tap into their family finances or take out home equity loans that are given tax-preferred treatment.

One does not have to resort to theoretical assumptions or indirect tests of credit constraints, however, to support the view that redistribution of wealth via targeted education and training is desirable. *It is clear that returns to education and training are at least as big at the bottom of the income distribution as at the top.* I have presented evidence elsewhere (Krueger 2003) that the *social return* from investment in education and training for poor children, from infancy through early adulthood, is at least as great as the social return from investments in education and training in the general public.

A theme that emerges from my survey of the evidence (see Krueger 2003) is that the real rate of return from investment in various education and training programs for the disadvantaged is 6 to 11 percent. This range applies to a diverse set of programs, ranging from preschool to Job Corps to conventional K–12 public schools. To put this figure in perspective, note that the historical real rate of return on the stock market has been calculated at 6.3 percent (Burtless 1999). So investment in human capital for the disadvantaged seems to yield at least as great a return as investment in the equity market. Also, because there is not currently universal access to most of the educational and training programs, and many willing participants are thus turned away, I would argue that the re-

turns estimated from various evaluations reviewed below would approximately apply if the programs were greatly expanded to accommodate more participants. . . .

I would emphasize that I do not envision investment in human capital development as the sole component of a program to address the adverse consequences of income inequality. It is part of the solution, not the whole solution. In principle, the optimal government policy regarding income inequality would employ multiple instruments, up to the point at which the social benefit per additional dollar of cost of each instrument is equal across the instruments.

NOTES

1. In referring to “negative externalities,” Krueger is claiming that decisions resulting in poverty and inequality are made without taking into account the full costs of those decisions, just as decisions by firms to pollute are often made without those firms having to bear the full costs of such decisions (e.g., the social costs of the resulting asthma).—EDS.

2. The Arrow impossibility theorem refers in this context to the impossibility of devising a “fair” procedure for translating individual preferences about how much inequality should be allowed into a collective decision about how much inequality should be allowed.—EDS.

3. The simple point that Krueger is making here is that consumers of religion are, by virtue of their decision to consume, revealing a taste for the egalitarian doctrines of most major religions.—EDS.

4. When workers face a single employer to whom they can sell their labor, that employer has “monopsony power” that makes it possible to offer wages that are lower than would be predicted in competitive markets.—EDS.

5. The GDP (Gross Domestic Product) is the total value of the final goods and products produced in a year within a country.—EDS.

REFERENCES

- Atkinson, Anthony. 1983. *The Economics of Inequality*, 2d ed. Oxford: Oxford University Press.
- Behrman, Jere, and Paul Taubman. 1990. “The Intergenerational Correlation between Children’s Adult Earnings and Their Parents’ Income: Results from the Michigan Panel Survey of Income

- Dynamics." *Review of Income and Wealth* 36, no. 2: 115-127.
- Benabou, Roland. 2000. "Unequal Societies: Income Distribution and the Social Contract." *American Economic Review* 90, no. 1 (March): 96-129.
- Björklund, Anders, and Markus Jantti. 1997. "Intergenerational Income Mobility in Sweden Compared to the United States." *American Economic Review* 87, no. 5 (December): 1009-1018.
- Blendon, Robert, John Benson, Mollyann Brodie, Richard Morin, Drew Altman, Daniel Gitterman, Mario Brossard, and Matt James. 1997. "Bridging the Gap between the Public's and Economists' Views of the Economy." *Journal of Economic Perspectives* 11, no. 3 (Summer): 105-118.
- Burtless, Gary. 1999. "Risk and Returns of Stock Market Investments Held in Individual Retirement Accounts." Testimony before the House Budget Committee Task Force on Social Security Reform, May 11.
- Cameron, Stephen, and James Heckman. 2001. "The Dynamics of Educational Attainment for Black, Hispanic, and White Males." *Journal of Political Economy* 109, no. 3 (June): 455-499.
- Deaton, Angus. 2001. "Health, Inequality, and Economic Development." Research Program in Development Studies working paper, Princeton University.
- Ehrlich, Isaac. 1973. "Participation in Illegitimate Activities: A Theoretical and Empirical Investigation." *Journal of Political Economy* 81, no. 3 (May): 521-565.
- Eibner, Christine, and William Evans. 2002. "Relative Deprivation, Poor Health Habits and Mortality." University of Maryland, College Park, mimeo.
- Ellwood, David, and Thomas Kane. 2000. "Who Is Getting a College Education? Family Background and the Growing Gaps in Enrollment." In *Securing the Future: Investing in Children from Birth to College*, Sheldon Danziger and Jane Waldfogel, eds. New York: Russell Sage.
- Frank, Robert H., and Philip J. Cook. 1996. *The Winner Take All Society*. New York: Free Press.
- Freeman, Richard. 1983. "Crime and the Labor Market." In *Crime and Public Policy*, James Wilson, ed. San Francisco: Institute for Contemporary Studies.
- Freeman, Richard. 1995. "The Labor Market." In *Crime*, James Wilson and Joan Petersilia, eds. San Francisco: Institute for Contemporary Studies.
- Friedman, Milton. 1982. *Capitalism and Freedom*. Chicago: University of Chicago Press.
- Fuchs, Victor. 1979. "Economics, Health, and Post-Industrial Society." *Health and Society* 57, no. 2 (Spring): 153-182.
- Imrohoroğlu, Ayşe, Antonio Merlo, and Peter Rupert. 2001. "What Accounts for the Decline in Crime?" Penn Institute for Economic Research working paper no. 01-012.
- Kane, Thomas. 1999. *The Price of Admission: Rethinking How Americans Pay for College*. Washington, D.C.: Brookings Institution Press.
- Krueger, Alan. 2003. "Economic Considerations and Class Size." *Economic Journal*, forthcoming.
- Krueger, Alan, and Mikael Lindahl. 2001. "Education and Growth: Why and for Whom?" *Journal of Economic Literature* 39, no. 4 (December): 1101-1136.
- Lundberg, Shelly, and Richard Startz. 1983. "Private Discrimination and Social Intervention in Competitive Labor Markets." *American Economic Review* 73, no. 3 (June): 340-347.
- Murphy, Kevin M., Andrei Shleifer, and Robert Vishny. 1991. "The Allocation of Talent: Implications for Growth." *Quarterly Journal of Economics* 106, no. 2 (May): 503-530.
- Nelson, Richard, and Edmund Phelps. 1966. "Investment in Humans, Technological Diffusion, and Economic Growth." *American Economic Review* 56, no. 2 (March): 69-75.
- Nelson, Robert. 1991. *Reaching for Heaven on Earth*. Savage, Md.: Rowman & Littlefield.
- Nozick, Robert. 1974. *Anarchy, State, and Utopia*. New York: Basic.
- Pauly, Mark V. 1971. *Medical Care at Public Expense: A Study in Applied Welfare Economics*. New York: Praeger.
- Persson, Torsten, and Guido Tabellini. 1994. "Is Inequality Harmful for Growth?" *American Economic Review* 84, no. 3 (June): 600-621.
- Rawls, John. 1971. *A Theory of Justice*. Cambridge: Belknap Press of Harvard University Press.
- Romer, Paul. 1990. "Endogenous Technological Change." *Journal of Political Economy* 98, no. 5 (October): 71-102.
- Shea, John. 2000. "Does Parents' Money Matter?" *Journal of Public Economics* 77, no. 2 (August): 155-184.
- Smith, Adam. [1776]. *The Wealth of Nations*. New York: Random House.
- Smith, James P. 1999. "Healthy Bodies and Thick Wallets: The Dual Relation between Health and Economic Status." *Journal of Economic Perspectives* 13, no. 2 (Spring): 145-166.
- Wilkinson, Richard. 1996. *Unhealthy Societies: The Afflictions of Inequality*. London: Routledge.