

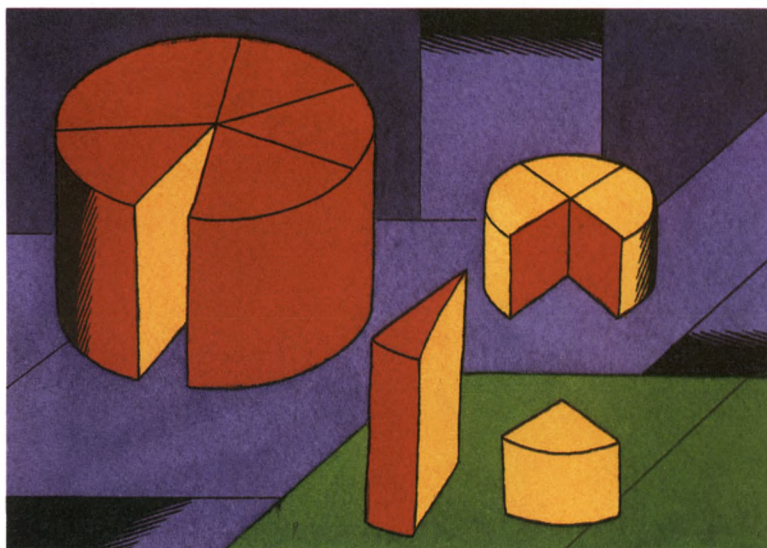
Federal Reserve Bank of Minneapolis

1993 Annual Report

The High Cost of Being Fair

by Preston J. Miller

Vice President and Monetary Adviser



Government interventions in the name of fairness distort the incentive structure. These distortions reduce growth and create the possibility that recipients of the government's redistribution schemes eventually would be better off without them: a small slice of a big pie could eventually exceed an equal slice of a small pie.

The views expressed in this annual report are solely those of the author; they are not intended to represent a formal position of the Federal Reserve System.

President's Message

Since the fall of the *Ancien Régime*, governmental policy-makers, especially in democratic societies, have debated values. Looking back at this debate and then bringing it forward to today, it seems that arguments fall roughly into four categories: our highest priority should be an egalitarian world characterized by fairness and equality, or we must seek the greatest utility through efficient decisions, or we must allow markets to operate freely because that will yield the greatest benefit to the most people, or nothing has a higher value than the quality of life so that we must always be mindful of the environment.

These competing values have been present in the political consciousness of our lawmakers in varying forms since the early days. As time passes, one value may rise above the others, and then be supplanted by another as the political landscape changes. At all times, though, none has fallen away completely.

In the following essay, Preston Miller takes a hard look at an important aspect of the value conflict I have just described. As an economist, his interest brings him to the questions of the marketplace and efficiency. He asks about the costs of consistently favoring one value over another and his answer is clear.

There is much to learn from Preston's examination of free market outcomes in comparison with governmental intervention. And the lessons transfer well to other value clashes like that between development and the environment. As a national policymaker, I have become convinced that the "best solution" seldom means mutual exclusiveness, but rather involves searching for the policy that honors, not necessarily equally, competing values.



A handwritten signature in black ink, which appears to read "Gary H. Stern". The signature is stylized and fluid, with a long horizontal line extending from the end.

Gary H. Stern
President

The High Cost of Being Fair

by Preston J. Miller

Vice President and Monetary Adviser

It's been a little over 30 years since Milton Friedman published *Capitalism and Freedom*. In this book, which was cited in Friedman's Nobel prize award, he argues passionately and cogently in support of free markets. He stresses that government interventions in markets generally restrict individuals' freedom of choice and impair the efficiency of the economy.

Friedman, and later his critics, pointed out that efficiency is not the whole story. Although free markets generally lead to efficient outcomes, that alone is not sufficient to guide policymaking. Policymakers must be guided by other social objectives—namely, fairness, or equity. Friedman's critics argued that efficient outcomes are not necessarily fair because some individuals can receive too little of the economy's goods or services.

Policymakers, then, can be viewed as facing a trade-off between efficiency and fairness. According to this common view, increasing government intervention in markets leads to more fairness at the cost of less efficiency. But, because government interventions in the economy have been allowed to expand, the public must view the cost of this lost efficiency as low.

However, a lot has happened since *Capitalism and Freedom* was published. New knowledge and evidence have accumulated on the relationship between economic performance and government involvement in the economy. These new developments suggest that the costs of government interventions typically are higher than formerly thought. Such interventions not only result in one-time losses in economic efficiency, as is commonly thought, but they typically also reduce growth over time.

If the costs of achieving fairness are higher than formerly thought, government interventions to achieve that goal ought to be scaled back. The public must realize that the trade-off between efficiency and fairness is not so favorable when viewed in a dynamic, or growth, context.

To make my arguments concrete, I examine just three of the many ways the government intervenes in markets: trade protection, redistributive taxes and transfers, and social security. (Of course, I could have also included government interventions in health care, agricultural price support policies, industrial policies, and so on.) In each case, I explain why the government has intervened to make things fairer and then show how the new tools and research reveal much higher economic costs to these interventions than has been commonly thought. The case of social security is slightly different. Some government intervention in annuity markets can be defended on efficiency grounds. But actual government operation of the social security system can be defended only on fairness grounds. So the argument here is that once the efficiency concerns are addressed, the costs of government operation of the system are much higher than commonly thought.

I begin with the trade-off between efficiency and fairness as it is usually argued. A key reason the standard analysis fails to capture all of a policy's costs is that it usually considers costs at a point in time rather than costs over time. The difference between the two can be dramatic.

Restoring the balance between efficiency and fairness is simple economically, but difficult politically. Economically, the solution is to scale back government interventions made in the name of fairness by better targeting benefits to the poor and needy. However, politically, that is hard to do. Government programs spread benefits widely to low-, middle-, and high-income people in order to buy support for the program. But there is no clear rationale for the government to intervene in the name of fairness and distribute benefits to middle- and high-income people. People in these income classes must be convinced that such interventions are not in their collective best interests. Until they are, politics suggests that the government's role in the economy will continue to grow.

The Cost of Government Interventions in Theory . . .

The Public Demands Fairness . . .

By almost any measure, the government's role in the economy has been growing. For example, the ratio of total government expenditures to gross domestic product has risen steadily in the last 30 years, from less than 28 percent in 1963 to more than 34 percent in 1993. And even these figures vastly understate the government's role in the economy because they exclude mandates, regulations, tax subsidies, and other types of interventions. The government's role has expanded even though economists since the time of Adam Smith have agreed that, except in special cases, private unfettered markets are the most efficient way of delivering goods. So why the expansion?

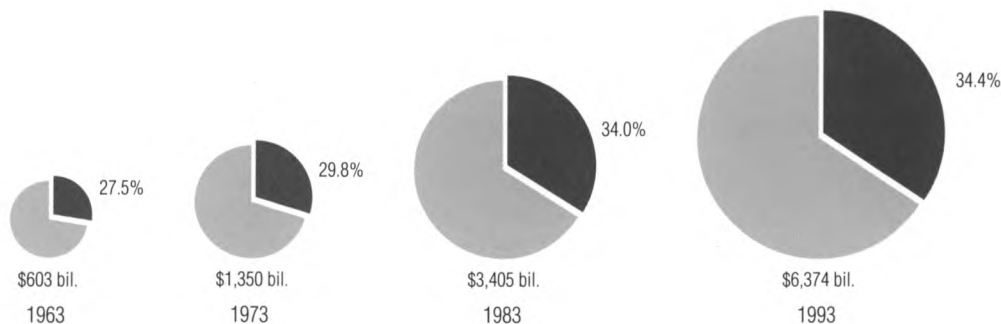
The short answer is that the public wants to be fair. Admittedly, some interventions can be attributed to special cases. Examples include interventions in decreasing cost industries, such as price controls in the cable television industry; interventions because of externalities, such as pollution abatement programs; and interventions in certain private information, insurance environments, such as the mandate of automobile insurance for all drivers. But these special cases cannot explain the extent of the expansion. Rather, the increase in government interventions reflects a dissatisfaction with the ability of markets to provide fair outcomes. Departures from free trade are one example. Concessions under the North American Free Trade Agreement (NAFTA) to individual industries such as sugar beet growers, textile producers, and truckers

were justified because it would be unfair to cause workers in these industries to lose their jobs or receive less income. Recent changes in the income tax structure are another example. The Clinton administration's 1993 tax bill was justified on the grounds that it was taking income from those who had profited (unfairly) from the 1980s tax cuts and giving the proceeds to the less fortunate. And finally, the greatest expansion in federal government expenditures over the last number of years was in entitlements, which exist primarily to give more income or services to the poor or unfortunate; that is, they owe their existence to the public's support of the goal of fairness.

. . . But What's Fairness?

Although policies seek to achieve fairness, there's a surprising lack of agreement among both economists and noneconomists on what fairness really means and on how important it is relative to other social goals. Yet most defenders of government interventions in the name of fairness do tend to hold some similar views. They typically agree that fairness does not require everyone to get the same size slice of the economic pie, but they argue that market outcomes are often unfair because some people get too little. Defenders also agree that fairness is not all that counts. They argue that efficiency, or the size of the pie, counts too. However, between two systems producing the same size economic pie, they agree that the one with slices of more equal size is better.

The Government's Growing Share of Spending in the U.S. Economy % of Gross Domestic Product Over the Last 3 Decades



Source: U.S. President 1994, pp. 268, 363

Costs Are Small Initially . . .

The defenders have a strong case. Under unfettered markets, individuals would be rewarded according to their contributions to the economic pie. The rewards for some, however, would be too small to afford them a minimal standard of living. Changes in the reward system under unfettered markets could also be very harsh. Since industries decline as they become obsolete or noncompetitive, workers in those industries would lose their jobs. Since the public appears to demand fairer outcomes, government intervention is seen as a desirable way to bolster the standard of living of low-income individuals and to protect the jobs of individuals in threatened industries.

But the defenders of this type of intervention recognize that interventions incur costs. As economist Arthur Okun (1975) put it many years ago, there is a trade-off between equity and efficiency. Efficiency is generally best served under unfettered markets. In a market system, prices signal how to allocate resources, and rewards provide individuals with the proper incentives. Government interference in markets alters the price and reward structure and causes inefficiencies.

The trade-off is easily seen in an extreme case. Suppose initially that a market economy generates a wide distribution of income. Suppose next that the government intervenes by taxing all individuals earning above the average (or mean) income and transferring the proceeds to those whose income is below the average—in essence making everyone's income the same. Individuals would then have little incentive to work because they would get the same income whether they worked or not. In this case, total income, or the size of the economic pie, would shrink considerably.

In actual practice, though, the loss of efficiency from interventions is typically seen as modest. That is a major reason for their proliferation. Okun likened government redistribution schemes to leaky buckets that carry water from the haves to the have-nots. Although some water is lost in transit, the task is still worthwhile because the unfortunate end up with more than they had before (1975, pp. 91–106). Empirical studies generally confirm that the costs of such interventions are small. For instance, a recent study done by the Congressional Budget Office

(CBO) finds that removing the barriers to trade with Mexico would lead to little gain in output in the United States (CBO 1993, p. 23). It follows that the existence of these barriers costs little in terms of lost efficiency. Similarly, another study finds that the tax distortion costs of the U.S. redistributive income tax system are no larger than the compliance and collection costs—a modest 5–10 percent of revenues collected (Slemrod 1992, p. 46).

. . . But Huge Over Time

Although I have no quarrel with the argument that some government interventions are necessary to provide adequate income or services to the poor and unfortunate, I do quarrel with the common assessment of their costs. If resources are being taken from one group and given to another based on the income of each, the redistributions necessarily distort. That is, these interventions necessarily alter the reward structure and thereby alter incentives.

The common view of the costs of these distortions to incentives, such as that in the two studies above, is based on an essentially static, or point-in-time, analysis. However, interventions based on fairness not only lead to static distortions, but they also can reduce growth—an effect that can only be measured over time. Such interventions typically reduce the rewards to innovation and investment in human and physical capital. The costs of underinvestment in developing new methods, new skills, and new equipment can become staggering. It is possible that the recipients of the government's redistribution schemes eventually would be better off without them: a small slice of a big pie could eventually exceed an equal slice of a small pie. That is essentially what happened under Eastern European socialism, leading to the fall of Communism. Although this brand of socialism was intended to promote fairness, the economic pie in this part of the world became relatively so small that the middle class there became worse off than the poor in capitalist countries.

Restraining government interventions made in the name of fairness could lead to more growth by encouraging more innovation and investment. More growth is desirable because it can provide larger slices of the economic pie for everyone in the society.

The ability to raise both efficiency at a point in time and growth over time by restraining government is not just a theoretical possibility. It's a real option. The next three sections illustrate how government interventions get started, how much damage they actually do, and how they could be scaled back.

Trade Protection

On many different occasions and in many different ways, the U.S. government has erected barriers to the free exchange of goods and services across its national borders. The government, for example, has placed explicit import quotas on textiles and voluntary import quotas on Japanese automobiles, collected tariffs on liquor and taxes on high-priced autos (the incidence of which falls predominantly on foreign imports), and enacted anti-dumping laws to limit Japanese computer chips. The primary reason these barriers exist is to maintain the jobs and incomes of those in the protected industries. For instance, Ross Perot [with Pat Choate (1993, p. 29)] argues against NAFTA because it "will accelerate the loss of manufacturing jobs in the United States Eventually, companies that choose to stay in the U.S. will need to reduce employee wages and benefits." Economists point out that Perot's argument is not balanced. He cites some of the costs but ignores all of the benefits to the U.S. economy from free trade with Mexico. Standard economic analysis suggests that although moving to freer trade may indeed cause some temporary job displacement, it leads to greater economic efficiency.

Standard economic analysis also suggests that only a minimal connection exists over time between a country's level of employment and the openness of its markets. A country can have full employment if it is an island economy that doesn't engage in any foreign trade or if it is an open economy that is completely free of barriers to foreign trade. The difference in employment between the economies would be not in the total number of jobs but in the types of work the jobholders do. This analysis suggests that moving to freer trade can have some temporary costs because workers will be relocated from industries that have become less

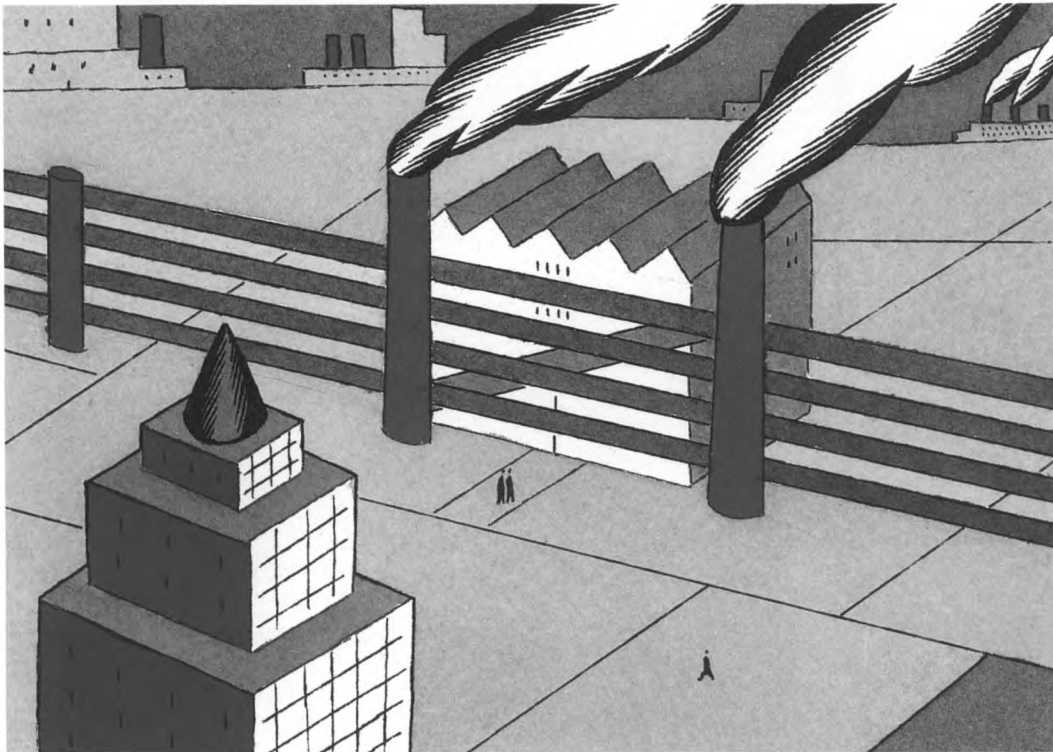
competitive in a global marketplace to industries that are experiencing a greater demand for their goods or services.

Against this temporary cost, standard economic analysis suggests the need to consider the benefits of a more efficient economy. The efficiency gain is thought to come from comparative advantage (Gould, Ruffin, and Woodbridge 1993, pp. 1-2). The idea of *comparative advantage* is that each country is relatively better than others at producing some goods or services and so should specialize in producing what it does best and then trading. For example, Canada is better off specializing in growing wheat, exporting it, and using the proceeds to purchase oranges rather than growing oranges at home.

Under standard analysis, the policy issue is this: Do the benefits of freer trade, in terms of more efficiency, outweigh the costs of temporary job displacement? Although economists using the standard analysis typically favor moving to freer trade, empirically it tends to be a close call. The costs of lost jobs and income in some vulnerable industries are readily apparent, while the comparative advantage gains are usually found to be fairly small.

Standard analysis, however, understates the costs of protectionism. It fails to consider how barriers to trade impede growth. Thus the standard approach will find only modest advantages to opening U.S. markets. Standard analysis considers comparative advantage, but sees only a once-and-for-all efficiency gain. After that is realized, standard analysis suggests there is no reason why economic growth should be affected. That is because standard analysis assumes that the rate of technological advance is unaffected by barriers to trade. New theory and new observations are not consistent with that assumption. They indicate that freer trade promotes technological advances and economic growth.

In recent years, macroeconomists have become increasingly interested in why some countries' economies grow faster than others. Their studies conclude that differences in economic growth across countries cannot be explained simply by differences in inputs



Barriers to trade can affect growth by slowing down the rate of technological innovation. Protected industries do not have to discard their outmoded technologies, and this resistance to change can reduce economic growth.

of labor and capital (Lucas 1988 and Schmitz 1993). But economists are not in agreement on what other factors explain differences in economic growth. Some cite varying degrees of resistance to adopting new technologies. Such resistance can come from capitalists or workers who have stakes in maintaining old technologies. (See, for example, Holmes and Schmitz 1994.) Others cite differences in *human capital*, that is, in the education, training, and experience of workers that affect their skills and competency (Lucas 1988).

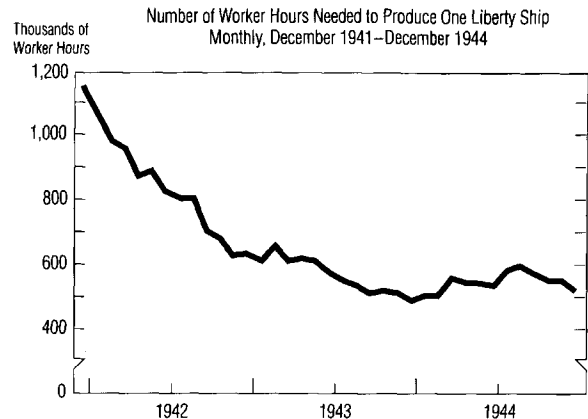
Recent work by economist Robert Lucas (1993) outlines a model that illustrates both of the above explanations. He begins by examining differences in human capital across countries and finds that they are not due just to disparities in formal education. Countries which are similar with respect to labor and capital inputs and formal education still can have significantly different growth rates. Lucas argues that the essential differences in human capital across countries are due to disparities in learning-by-doing on the job.

Lucas's theory suggests that economic growth is affected by the amount of learning-by-doing on the job. It also indicates a route by which trade barriers can lead to lower growth, and recent evidence confirms that this route exists.

It follows from learning-by-doing that a relationship should be observed between the productivity of workers and the length of their experience working with a given technology. Lucas examines how the number of worker hours to complete a given project varies as worker experience grows. In particular, he refers to a Labor Department study of worker hours needed to produce Liberty ships (cargo-carrying ships built for the United States and its allies during World War II). If that relationship (which is input per unit of output) is inverted, a picture emerges of how worker productivity (that is, output per unit of labor input) varies with worker experience. The pattern seems intuitive and general. When workers begin a new technology, their productivity is quite low. Everything is new to them. However, after a slow start, their productivity climbs rapidly as they become more familiar with their tasks and learn better ways of carrying them out. Eventually, productivity lev-

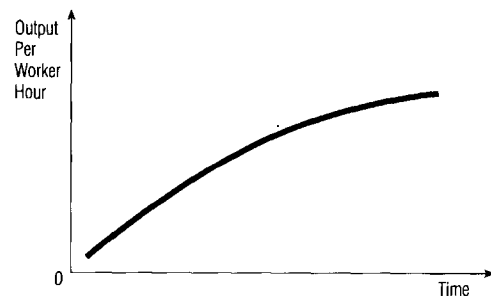
The Learning-By-Doing Pattern

Experience reduces the time workers need to do a job, . . .

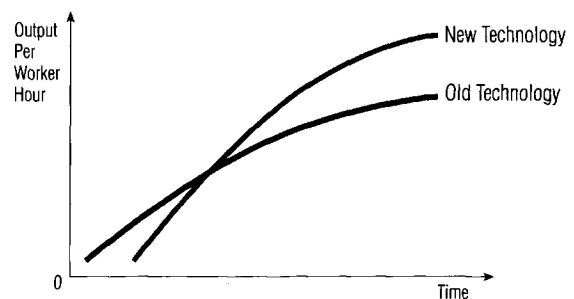


Source: Searle 1945, p.1135

. . . which means they become more productive.



A shift to a new technology reduces productivity —temporarily.



els off as workers master the bulk of the necessary skills and procedures.

It also seems intuitive that productivity will initially fall as a firm moves up the technology ladder. When a new technology is adopted, productivity initially falls because workers must learn new skills and procedures. However, with the new and improved technology, productivity will eventually surpass what it was with the old one.

This pattern of learning-by-doing suggests that economic growth depends on how fast old technologies are discarded and new ones adopted. If technologies are discarded too rapidly, economies absorb the initial costs of switching to new technologies but do not exploit the gains from rapidly rising productivity on existing technologies. This, in fact, seemed to be the experience of Singapore (Young 1992). However, if technologies are kept for too long, economies are faced with slow productivity growth because workers' learning-by-doing has plateaued. This, in fact, seemed to be the experience of Great Britain. Thus there is a rate of technological innovation that maximizes growth.

Barriers to trade, then, can affect growth by slowing down the rate of technological innovation. Protected industries do not have to discard their outmoded technologies. Theoretically, these barriers could promote growth if, without them, a country's rate of technological innovation were too fast. In contrast, they could lower growth if, without them, a country's rate were about right or too low.

Thus the relationship between growth and trade barriers becomes an empirical issue. The new observations and new statistical studies strongly suggest that freer trade promotes higher growth. The evidence comes from casual observation, careful historical review, and formal econometric analysis.

Since Friedman's *Capitalism and Freedom* was published in 1962, many new observations on the link between freer trade and economic growth have amassed. During the 1950s, 1960s, and 1970s economists persuaded developing countries to erect trade barriers to protect their infant industries (Edwards 1993). The economies of these countries generally stagnated.

In the 1980s and 1990s countries in East Asia and Latin America that opened their markets experienced rapid growth. A study done at the Dallas Federal Reserve finds that "outward-oriented policies are a much stronger conduit for economic growth and advancement than protectionist import substitution policies" (Gould, Ruffin, and Woodbridge 1993, p. 4). It cites an analysis of 29 episodes of trade liberalization which finds that growth increased in manufacturing and agriculture following the liberalizations (Papageorgiou, Michaely, and Choksi 1991).

Other empirical studies, both formal and informal, support the conclusion that freer trade promotes growth. One formal study finds a positive relationship between openness and growth and concludes that

when openness and the level of public infrastructure are taken into account, physical investment becomes quantitatively more important in the growth process, implying that a better quality of investment is encouraged by a more liberal international trade regime and by more government fixed investment. Particularly for the developing countries, investment in human capital also becomes more quantitatively important when a more open trading environment and a better public infrastructure are in place. (Knight, Loayza, and Villanueva 1993, p. 536)

Similarly, another recent study finds that economic growth was stimulated in France by a freeing of trade within the European Community (Coe and Moghadam 1993). Finally, an extensive survey of historical studies and econometric analyses relating growth and trade protection in developing countries was recently published (Edwards 1993). While critical of all of the studies cited, the survey finds a positive relationship between freer trade and growth in almost all of them.

The message from the new theory and evidence is clear: trade protection inhibits growth. Thus, in erecting or maintaining trade barriers, the fairness benefit of protecting workers should not be weighed against just the one-time cost of lower efficiency due to reduced comparative advantage. It also is necessary to include the cost of lower economic growth.

Redistributive Tax and Transfer Policies

Redistributive taxes and transfers is a second area where government interventions made in the name of fairness could be scaled back to promote higher growth. It is generally observed that in the 1980s the rich got richer and the poor got poorer (McKenzie 1992). The government responded with changes to federal income tax and transfer policies (beginning with the 1986 tax reform) to counter this increase in income disparity (CBO 1994, pp. 54–57). In 1993, for example, marginal tax rates were raised significantly on higher-income families and the earned income tax credit was greatly expanded for lower-income families. These changes were defended based on fairness arguments.

Standard economic analysis recognizes that these changes, especially to higher marginal tax rates, had costs in terms of lower efficiency. Higher marginal tax rates on the wealthy were seen as distorting investment decisions by encouraging the use of tax shelters. A more progressive tax system also was seen as reducing the supply of labor, primarily that of households' secondary income earners. However, these costs were seen by policymakers as low relative to the benefits of a fairer income distribution, and so the policy changes were enacted.

The standard measure of redistribution costs understate the true costs because they fail to include the cost of lower growth. The costs are measured under the assumption that the income distribution is static—the same individuals are either unemployed or working at the same jobs year after year. Costs to redistribution, then, are thought of in terms of how they affect individuals in given income classes. (These classes are usually defined by *quintiles*, which each contain one-fifth of the population.)

Recent research indicates that the static assumption is false and provides a new way to think about the income distribution. Suppose income quintiles are hotel rooms and individuals are the occupants (Sawhill and Condon 1992). Standard analysis assumes the same individuals are in the same rooms year after year. But, in fact, recent studies indicate that a significant amount of room-changing is occurring over time. It is reported that in both the 1970s and 1980s “some three out of five adults changed

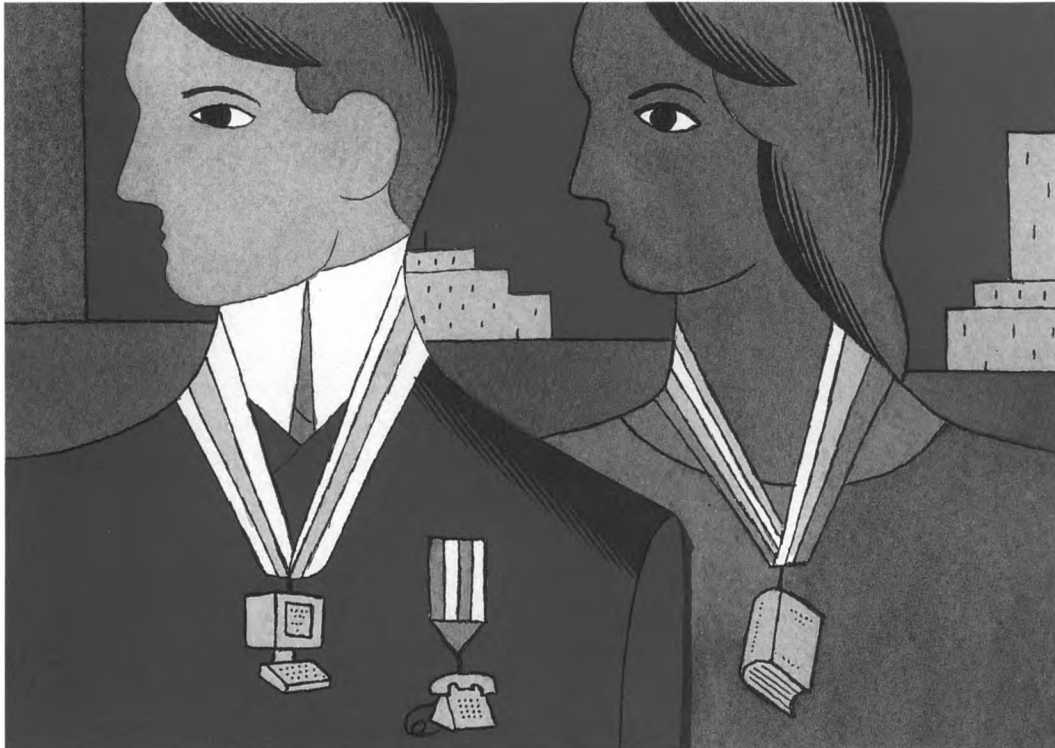
income quintiles. A little less than half the members of the bottom quintile moved up into a higher quintile, and about half the members of the top quintile fell out of that quintile” (Sawhill and Condon 1992, p. 3).

A U.S. Treasury Department study (1992) finds that a significant degree of household mobility over time is explained by the life cycle pattern of earnings. In their early years individuals typically invest in acquiring skills and furthering their education and thus earn low incomes. In their later years they earn progressively higher incomes as they realize the returns to their investment in human capital.

Thus, for many people, progressively higher marginal tax rates represent reductions in the rate of return to their human capital. In their early adult years they must sacrifice income to invest in their human capital by taking time to study and train. They are willing to invest because they foresee an adequate return in terms of higher future income. Progressively higher marginal tax rates reduce the return to their human capital investment by removing progressively larger chunks of their future income.

There is good reason to believe that people's career decisions are affected by changes in returns; that is, they go where the money is. For example, one study reports that in the 1980s there were large increases in the relative supplies of most of the types of workers whose relative wages increased (Bound and Johnson 1992). Another study finds a large enrollment response to a change in the return to higher education (Blackburn, Bloom, and Freeman 1991). These and other studies suggest people respond to rewards as theory and common sense suggest. Thus lowering the returns to investment in human capital will lower the amount of time and effort people put into training and education.

The argument that redistribution lowers growth depends on the existence of significant mobility across income classes, as is true in the United States. In the United States, progressive taxes are mainly just higher taxes on the same individuals as they move through their careers, causing them to invest less in their human capital. The argument need not hold for other countries which have little mobility across classes. For those countries, taking money from the few rich and giving it



The market is signaling higher returns to acquiring skills and education. When these signals are clearly received, individuals are encouraged to develop greater skills, such as computer training, and to acquire more schooling, such as a college degree. Higher progressive taxes mute those signals, however, and they decrease the incentives to invest in these types of human capital. This reduction in investment will slow growth.

to the many poor could allow the poor to invest more in their human capital, such as schooling, thus raising total human capital investment and growth. But, again, in the United States, where schooling is available to all and mobility is high, this possibility seems remote.

That there is a conflict between fairness, or equity, and growth can be seen clearly in the current U.S. environment. By almost all accounts the income distribution has widened, and that in itself has brought calls for a greater use of redistributive taxes and transfers. However, this widening in the income distribution can be traced primarily to changes in real, or technical, factors. Thus greater redistribution, which mutes the message of markets, limits individuals' response of either investing in the skills or going to the jobs where the returns are highest.

Most studies conclude that the major cause of the widening U.S. income distribution in the 1980s was a growing inequality in real earnings. Tax and other policy changes caused little of the widening. In fact, one study finds that most advanced industrialized countries showed increases, often large, in wage inequality during the 1980s (Davis 1992). Thus other industrial countries experienced similar income distribution changes as in the United States even though their policy courses were very different.

The changes in real earnings, meanwhile, are generally thought to be due to changes in technology (Bound and Johnson 1992). In the 1980s low-skilled jobs suffered a decline in real wages, while high-skilled jobs experienced a rise in real wages. The changes in real wages reflect a higher return to education, training, and experience. The most likely explanation for the changes in returns is the use of advanced technology that substitutes for the work of low-skilled workers and at the same time makes high-skilled workers more productive (Bound and Johnson 1992). One study finds that workers who do use more advanced technology get paid higher wages (Dunne and Schmitz 1992). Another study finds that the evolving use of the computer can explain much of the measured technological advance (Krueger 1993).

Since the changes in income distribution were largely technology-induced, the government's effort to dampen the associated changes in the reward structure certainly will slow growth. The market is signaling higher returns

to acquiring skills and education. When these signals are clearly received, individuals are encouraged to develop greater skills, such as computer training, and to acquire more schooling, such as a college degree. Higher progressive taxes mute those signals, however, and they decrease the incentives to invest in these types of human capital. This reduction in investment will slow growth.

Social Security

The social security system is the final example I use to illustrate my point that scaling back government interventions made in the name of fairness would promote growth.

Social security serves a valuable function in society by assuring that all older individuals have a modest amount of income when they retire. But flaws in the way the system is designed and administered make it both inefficient and growth-stifling. Correcting these flaws is feasible, and the result would be gains in economic efficiency and growth.

The government's social security program is financed differently than a private pension system. The program is financed pay-as-you-go: current workers are taxed, and the proceeds are distributed to current retirees. The federal government does not accumulate assets to meet its future obligations as a private pension system does. If it did, social security now would be recording a surplus as a trust fund, while the federal budget with the social security trust fund removed would be in rough balance on a present-value basis. However, current budget projections indicate that the federal budget deficit excluding social security will grow steadily from \$242 billion in fiscal 1995 to \$304 billion in fiscal 1999 (CBO 1994, p. 26). Presumably, this deficit will continue to grow into the next century. The implication is that instead of social security revenues net of expenditures being used to acquire assets, they are being used to finance other government expenditures. Thus future obligations under social security will have to be financed by taxes on future generations of workers.

Because of the way social security is financed, its future appears much less rosy than its past. In the past the program steadily increased payments to retirees and paid retirees many times what they put into the plan. This

expansion in benefits was financed by rising social security tax revenues fed by increases in the percentage of the workforce paying into the plan and in both the social security tax rate and tax base. However, in the future the return to retirees looks much less favorable. Since the program now applies to virtually all workers, no substantial increases in coverage are possible. Demographics are also turning less favorable. In the 1980s there were five workers supporting each retiree. By 2050 that 5-to-1 ratio will fall to 2-to-1. These facts suggest that in the future retirees will be getting less back from the plan than they put in (Goodman and Musgrave 1992, chap. 13).

This unsettling future gives good reason to consider reforms of the system. Two reforms are readily suggested: first, back future obligations with funds of assets, and second, turn over the management of those funds to the private sector. Because these reforms would make the system more market-oriented, they would likely lead to greater efficiency and higher growth.

Under this proposed privatization scheme, the government would still have a role in the social security system. That role is dictated on efficiency grounds. Due to adverse selection problems (which are explained in the sidebar), unfettered private annuity markets are unlikely to be able to provide adequate protection to workers. However, the government can address these problems without managing the system.

Thus the social security example is a little different from the previous two. The argument is not that unfettered annuity and pension markets are most efficient. In fact, some government intervention seems necessary for efficiency. However, it is not necessary that the government operate the system. The argument, then, is that changing the government-operated system to a privately run, funded system will increase both efficiency and growth.

The government, of course, could have opted for a privately run social security system at the outset, but instead it chose to operate the system itself. Since it could have addressed the adverse selection problems without managing the system, it must have had other reasons for doing so. It appears that the other reasons are based on fairness—fairness dictated a government-run, pay-as-you-go system.

The social security system aims for fairness through

income redistribution. It defines benefits for retirees, and those benefits are only loosely tied to contributions. This has allowed the system to redistribute income from the newer generations to the older generations and among individuals in the same generations.

The social security system, then, can be thought of as a mandatory, unfunded pension system and a complicated tax/transfer system. Because of the fairness aspects of the system, the government has chosen to operate it. I argue that the United States would be better off with pri-

How Adverse Selection Affects Annuity Markets

The adverse selection problem in annuity markets is easy to see. Suppose an insurance company offers an annuity which pays a fixed sum of money per month to individuals at age 60 for as long as they live and which charges a premium based on the population's average life expectancy. Then individuals who have sound, and in part private, information which suggests that they will live longer than average would have an incentive to buy the annuity. However, those who expect to live shorter than average would have an incentive not to buy the annuity. Thus those who buy the annuity would have life expectancies longer than the population average, costing the insurance company more than it had planned and forcing it to raise its premium. But then those with poorer health who were willing to buy before would no longer want to buy at the higher premium. This adverse selection process could continue until it becomes unprofitable for the insurance company to offer any annuity at all. This could occur even though the public were better off with active annuity markets. (See, for example, Eckstein, Eichenbaum, and Peled 1985.)

The government can help attenuate the adverse selection problem. It need only issue two simple edicts:

- Insurance companies cannot discriminate in their premiums based on the perceived health of the applicants.
- All individuals must buy some minimal amount of annuities.

Edicts of this type are common in other types of insurance. For instance, they are included in the administration's health care plan to address the similar adverse selection problems in health insurance markets.

vate operation of a funded pension system subject to government edicts addressing adverse selection and with an explicit tax/transfer policy targeting income to the older poor.

The government-run system is less efficient than the one I am advocating. Under the government-run system, workers view their social security contributions as a tax. In fact, this is a major reason why the CBO (1991, pp. 71–75) argues that social security payments and contributions should be consolidated with ordinary government expenditures and taxes. Workers view their contributions as taxes because their future benefits are not closely tied to those contributions. Their future benefits are promised, but the government at times changes them. In fact, those benefits depend not only on economic and demographic developments that affect future real income and the size of the future workforce, but also on the willingness of future workers to continue to participate in the plan.

In contrast, workers contributing to a private plan would own their pension/annuity and thus be less prone to view it as a tax. Benefits would depend on the amount they contribute and on the return to their investment. Their payoff would be uncertain only because the rate of return to their investment would be uncertain. There would be no uncertainty with respect to the willingness of future generations to participate.

Society might still want to redistribute income on fairness grounds even with a privately run system. But then the government would have to make explicit the taxes and transfers for carrying out the redistribution. Making the redistribution explicit would likely make it less pervasive and better targeted.

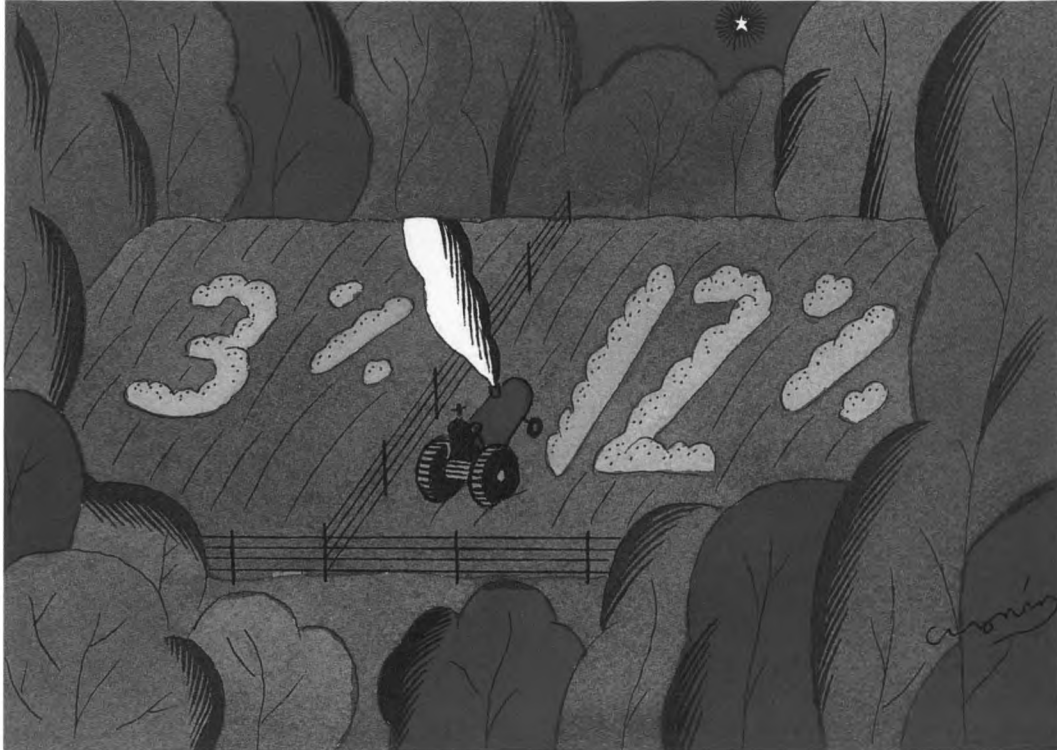
The privately run system is likely to lead to greater economic efficiency than a government-run system for two reasons. First, privately run funds would have to compete among themselves and would likely be more efficient than a monopolistic, government-run fund. Second, the redistribution scheme used with a privately run system would likely be more limited, which would lead to smaller disincentives to work and save.

Probably more important, though, a privately run system would lead to higher growth. That is because the rate of return to investment in a privately funded system

would be greater than the rate of return to contributions in a pay-as-you-go system. In a paper written well after Friedman's *Capitalism and Freedom*, economist Martin Feldstein (1987) examines the economic consequences of shifting dollars from an unfunded to a funded system. He finds that an extra dollar placed in a funded system would yield to retirees the pretax rate of return on private capital, which might be expected to lie in the 10–15 percent per year range, as it has in the last 40 years. However, an extra dollar contributed to the unfunded social security system would yield a rate of return equal to the rate of growth of the economy, which most analysts now expect to be around 3 percent per year. This suggests that growth would be increased if resources were shifted from the low-yielding social security system to a higher-yielding privately funded system.

Although shifting to a privately funded system would increase growth, it would not make every generation better off. The shift requires that society as a whole save more by paying less to current retirees. Thus the current old generation would be made worse off. Feldstein shows that under reasonable assumptions and using standard ways of weighting the welfare of different generations, the gains to the current young and future generations would greatly exceed the losses to the current old generation. Nevertheless, current retirees would be hurt by the shift. This suggests that if dollars are shifted out of social security, the shift should be made gradually, and the dollars should be taken from those most able to fend for themselves—the people with high incomes and wealth.

This proposal to shift to a privately run social security plan will strike many as unrealistic, if not ridiculous. However, it should be noted that such a shift is being made in other countries. Chile gave workers the option to put their money either in the state-run system or in private funds. Most workers have been choosing the private funds, so the state-run system is gradually being phased out. Moreover, the Chilean plan has proved so successful that other Latin American countries either have adopted similar programs (Mexico and Peru) or are in the process of doing so (Argentina, Bolivia, and Venezuela) (Survey 1993).



Growth would increase if resources were shifted from the low-yielding social security system to a higher-yielding privately funded system.



The task confronting society is to develop systems that target benefits to the poor while interfering as little as possible with the private markets' ability to foster efficiency and growth.

Public Attitudes Must Change

My argument that the costs of government interventions made in the name of fairness are costlier than commonly thought does not suggest that they should be eliminated. Rather, it suggests that they should be scaled back. Economically, restraining or scaling back government redistributions seems straightforward and easy to do. Politically, it seems difficult. That is why public attitudes toward government redistributions must change first.

Economically, all that is required is that programs to redistribute resources be better targeted. The economic rationale for these programs is to provide resources to the poor and needy. No economic rationale exists for providing resources to individuals in the middle- and upper-income classes. Yet that's where most of the money goes. A study of how federal benefits are distributed across income classes finds that the benefits scarcely redistribute income at all (Howe 1991). In fact, over 40 percent of the 1991 benefits went to households earning over the average (median) cash income, which was three to four times the poverty threshold for a family of two.

By making transfers to those who are not needy, the amount of redistribution is much larger than it has to be for fairness. This excess unnecessarily raises the costs to the economy in terms of inefficiency and slow growth. Economically, interventions made in the name of fairness can then be easily restrained by making all benefits *means-tested*, that is, making sure the benefits go only to people whose wealth and income are below some threshold levels.

Politically, this remedy may be hard to apply. The benefits of government redistributions tend to be spread widely because that is what the public wants. In order to get public support for such programs, politicians find it necessary to distribute their benefits far beyond just the truly needy. Many people have the attitude that if they pay for a program, they deserve some of the proceeds. As long as the public feels this way, there will be little support for reining in government programs and interventions.

The public, however, has it dead wrong. If the government is to intervene based on fairness, its role is to redistribute resources from the middle- and upper-income classes

to the poor. Period. People in the middle and upper classes would be much better off if the amount of taxes used for their own benefits was eliminated and they used the increase in their after-tax incomes to arrange privately for their benefits. In this way fairness could still be served, but the government's role and the resulting inefficiencies could be diminished.

Milton Friedman was right to stress the advantages of unfettered markets. Yet his critics also were right to point out that some individuals in society cannot attain an acceptable level of existence without help. The task confronting society is to develop systems that help the poor while interfering as little as possible with the private markets' ability to foster efficiency and growth. That means targeting redistributions carefully. It means the public must become aware of the high cost of extending benefits to those who do not truly need them. It also means that failure to change could cause society to pay an increasingly high cost as time goes by.

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Federal Reserve Bank of Minneapolis

Statement of Condition

Earnings and Expenses

Directors

Officers

Federal Reserve Bank of Minneapolis

Statement of Condition (in thousands)

| | December 31, 1993 | December 31, 1992 |
|---|----------------------|----------------------|
| Assets | | |
| Gold Certificate Account | \$ 243,000 | \$ 195,000 |
| Special Drawing Rights | 186,000 | 186,000 |
| Coin | 15,365 | 15,746 |
| Loans to Depository Institutions | 4,300 | 1,400 |
| Securities: | | |
| Federal Agency Obligations | 106,173 | 84,354 |
| U.S. Government Securities | 7,599,809 | 4,597,670 |
| Cash Items in Process of Collection | 465,435 | 414,847 |
| Bank Premises and Equipment | | |
| Less Depreciation of \$42,172 and \$39,475 | 43,626 | 42,374 |
| Foreign Currencies | 585,294 | 565,807 |
| Other Assets | 172,676 | 110,165 |
| Interdistrict Settlement Fund | (1,003,850) | 2,554,661 |
| Total Assets | \$8,417,828 | \$8,768,024 |
| Liabilities | | |
| Federal Reserve Notes ¹ | \$7,048,384 | \$7,458,324 |
| Deposits: | | |
| Depository Institutions | 676,876 | 721,109 |
| Foreign, Official Accounts | 3,642 | 3,656 |
| Other Deposits | 5,327 | 5,374 |
| Total Deposits | 685,845 | 730,139 |
| Deferred Credit Items | 435,376 | 390,367 |
| Other Liabilities | 66,535 | 29,256 |
| Total Liabilities | 8,236,140 | 8,608,086 |
| Capital Accounts | | |
| Capital Paid In | 90,844 | 79,969 |
| Surplus | 90,844 | 79,969 |
| Total Capital Accounts | 181,688 | 159,938 |
| Total Liabilities and Capital Accounts | \$8,417,828 | \$8,768,024 |

¹ Amount is net of notes held by the Bank of \$1,171 million in 1993 and \$733 million in 1992.

Earnings and Expenses (in thousands)

| For the Year Ended December 31, | 1993 | 1992 |
|--|-----------|-----------|
| Current Earnings | | |
| Interest on U.S. Government Securities and Federal Agency Obligations | \$347,125 | \$255,108 |
| Interest on Foreign Currency Investments | 32,740 | 56,066 |
| Interest on Loans to Depository Institutions | 1,749 | 1,301 |
| Revenue from Priced Services | 41,659 | 40,733 |
| All Other Earnings | 129 | 449 |
| Total Current Earnings | 423,402 | 353,657 |
| Current Expenses | | |
| Salaries and Other Personnel Expenses | 43,306 | 37,950 |
| Retirement and Other Benefits | 10,513 | 8,560 |
| Travel | 2,728 | 2,266 |
| Postage and Shipping | 5,814 | 5,738 |
| Communications | 500 | 458 |
| Software | 2,143 | 2,074 |
| Materials and Supplies | 2,431 | 2,161 |
| Building Expenses: | | |
| Real Estate Taxes | 866 | 923 |
| Depreciation—Bank Premises | 1,149 | 1,244 |
| Utilities | 1,046 | 939 |
| Rent and Other Building Expenses | 1,440 | 1,167 |
| Furniture and Operating Equipment: | | |
| Rentals | 970 | 687 |
| Depreciation and Miscellaneous Purchases | 5,130 | 5,108 |
| Repairs and Maintenance | 3,029 | 2,673 |
| Cost of Earnings Credits | 3,945 | 4,131 |
| Net Costs (Distributed)/Received from Other FR Banks | (870) | 429 |
| Other Operating Expenses | 2,048 | 1,752 |
| Total Current Expenses | 86,188 | 78,260 |
| Reimbursed Expenses ¹ | (6,893) | (4,899) |
| Net Expenses | 79,295 | 73,361 |
| Current Net Earnings | 344,107 | 280,296 |
| Net (Deductions) or Additions ² | (13,148) | (26,635) |
| Less: | | |
| Assessment by Board of Governors: | | |
| Board Expenditures | 3,739 | 3,431 |
| Federal Reserve Currency Costs | 8,021 | 6,643 |
| Dividends Paid | 5,321 | 4,682 |
| Payments to U.S. Treasury | 303,003 | 228,762 |
| Transferred to surplus | \$ 10,875 | \$ 10,143 |
| Surplus Account | | |
| Surplus, January 1 | \$ 79,969 | \$ 69,826 |
| Transferred to Surplus—as above | 10,875 | 10,143 |
| Surplus, December 31 | \$ 90,844 | \$ 79,969 |

¹ Reimbursements due from the U.S. Treasury and other Federal agencies; \$1,890 was unreimbursed in 1993 and \$1,958 in 1992.

² This item consists mainly of unrealized net gains or (losses) related to revaluation of assets denominated in foreign currencies to market rates.

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December 31, 1993

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