FRBSF Weekly Letter

October 12, 1984

Fairness in Economics

Economic policies have two broad classes of effects—those on total output and those on the distribution of output. A policy has positive effects on output if, for a given level of resources and technological endowments, the marketplace responds by providing more goods and services. How those goods and services are distributed among different groups of people is a decision society must make. Conceivably, an economic policy may have unambiguously positive effects on economic efficiency, but have distributional effects that are undesirable from a social point of view.

Such considerations are at the heart of the current debate over the reforms of federal tax and budget policy that began in 1981. Although proponents of those policies argue that they have contributed to a significant resurgence in economic activity, in addition to suppressing inflation and increasing employment, opponents argue that the benefits were achieved at the expense of creating a society that is considerably less "fair" in its distribution of the rewards.

This *Weekly Letter* examines the available data on the effects of the recent policy reforms on the distribution of the tax burden and on the distribution of income and employment. Isolating the effects of these changes in economic policy proves to be very difficult because the changes occurred as the economy was slipping into its deepest recession in nearly fifty years. There is very little evidence, however, that these reforms have altered significantly the underlying "fairness" of the distribution of economic burdens and rewards.

The tax reform

Let us turn first to the effects of the federal individual income tax cuts that were initiated in 1981. The basic features of those tax cuts included a 25-percent reduction in the marginal tax rate applied to all income brackets, to be phased in over a period of three years, and indexing of marginal tax rates to avoid inflation-generated increases in effective tax rates ("bracket creep"). These tax reform features together were to be phased in over a four-year period. In addition, there was an immediate reduction in the top marginal rate from seventy to fifty percent. Finally, there were a variety of other tax policy changes, including reduction of the "marriage tax" bias introduced by different tax schedules for single and married taxpayers, liberalization of Individual Retirement Account (IRA) deductions, and reductions in medical expense deductions.

Two broad criticisms have been directed at the tax reforms. The first is that the tax cuts altered the distribution of the tax burden among households to the disadvantage of the poor and to the advantage of the rich. This alleged effect cannot be due to the across-the-board reduction in marginal tax rates. It can be shown with simple mathematics that such a cut, by itself, leaves the tax share paid by each income bracket unaltered. We, therefore, do not expect to see a major impact on the shares of taxes paid although there may be some effect generated by the other provisions of the tax reforms, such as the change in the "marriage tax."

The data available thus far on tax shares is consistent with this expectation. As Chart 1 illustrates, the share of federal individual income taxes paid by each income quintile in 1982 was virtually identical to that paid by the same quintile in 1980.

The second criticism of the reforms is that they redistributed income to the rich. It is true that because of the progressive nature of our tax system, the cut in marginal rates will alter the after-tax income distribution. In the extreme, for example, a cut in tax rates has no effect on the after-tax income of a household already paying no tax, whereas it would increase the after-tax income of a tax-paying household. The change in the distribution of after-tax income that would follow, however, is not achieved at the "expense" of lower income households. Indeed, all households would be at least as well off as they were before the cuts.

Moreover, the resultant after-tax income distribution is unlikely to depart radically from historical distributional outcomes. In some sense, the tax reforms initiated in 1981 represent only a partial unravelling of the upward "creep" in all marginal tax rates that occurred since the 1960s mostly as the result of inflation. (Between 1970 and 1980,

the "average" marginal individual tax rate rose by almost 50 percent to 30.5 percent, according to economist Robert Barro.) A reversal of this process thus cannot be viewed as a dramatic reversal of distributional policy.

The available data on after-tax income as of 1982, suggests that the distribution of income has not been altered regressively. In fact, if anything, the richest 20 percent of taxpayers appear to have suffered a decrease in their share of after-tax income, with middle quintile taxpayers gaining and the lowest income taxpayers remaining largely unaffected.

A major qualification that must be applied to these results, of course, is the fact that not all of the features of the tax cuts were in place by tax year 1982 (the last year for which detailed tax receipts data exists). It seems unlikely, however, that further major changes in the distributions will occur to alter these conclusions since 1982 was a year in which the tax cuts were skewed most heavily in favor of the well-to-do. This was because the reduction in the top marginal tax rate to 50 percent was put in place before cuts in the rates applying to other brackets. It is possible, therefore, that the share of taxes paid in 1982 represents a close estimate of the share that would be paid by the wealthiest taxpayers after the full cuts become available to other taxpayers.

Families in poverty

Other sources of potential distributional unfairness are the budgetary and social welfare program policy changes that were instituted along with the tax cuts. At the risk of oversimplifying the nature of the budgetary changes that have occurred, there appear to have been two major purposes behind the recent budgetary reforms. First, there was a desire to increase the relative share of the budget devoted to defense as opposed to civilian expenditure programs. In 1981, defense expenditures were approximately 22 percent of total federal expenditures. These were programmed to rise to 35 percent by 1989.

The second apparent aim of the budget reforms was to restrain the growth of social programs. Between 1960 and 1980, for example, the so-called "safety-net" programs—programs such as Aid to Families with Dependent Children (AFDC), Medicaid and Food Stamps—grew in real terms by over 700 percent.

The budget reforms instituted in 1981 were varied and complex. However, the three program changes that are most frequently viewed as introducing new "unfairness" into the economic system involve the AFDC and Food Stamp programs and the elimination of public service employment programs under the Comprehensive Employment Training Act (CETA). Critics charge that these program changes were inherently regressive in their effect on income distribution. In fact, it is not possible to extrapolate directly from the program changes their effects on income distribution in the economy.

Let us examine, for example, the changes made in the AFDC program, the cornerstone of the U.S. "welfare" system. The major program change was to increase the "payback" rate—the rate at which welfare support payments are reduced as earned income increases—to 100 percent. Theory suggests that this change could induce either an increase or a decrease in the income of affected families. The higher take-back rate would discourage additional work on the margin, but the reduction in welfare support above a certain earned income could induce additional work and *increase* income.

A similar comment could be made about the changes that tightened eligibility criteria for receiving food stamp subsidies. Although the implicit increase in the price of food that results for the disenfranchised food stamp recipients has the effect of reducing their in-kind income, it may induce an offsetting increase in labor supply and, hence, earned income.

Finally, critics of the elimination of CETA argued that doing away with most public service employment (job creation) programs of the federal government would put low income households at a further disadvantage. For important theoretical reasons (see *Weekly Letter,* May 22, 1981), the ability of job creation programs to improve the long-term earnings or employment prospects of targeted households has been called into question. The ineffectiveness of these programs now appears to be supported by a large-scale study of the comparative work histories of 3,000 individuals who gained public service employment under CETA and 3,000 matched "controls" who did not. The study, by economist Terry Johnson of Battelle, finds no significant enhancement of job prospects as the result of CETA programs. In fact, adult male work-

Chart 1
Tax Share by Income Class 1980-1982

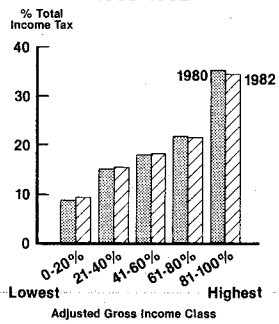
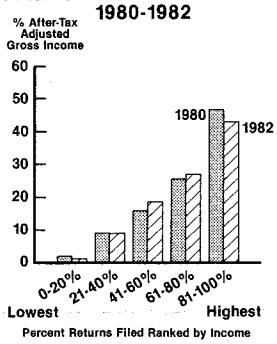


Chart 2
After-Tax Income Distribution 1980-1982



ers associated with CETA jobs programs had a 15 percent *lower* wage after returning to market employment than a matched control group without CETA experience. Johnson also found that on-the-job training and work experience programs (support for which remained in the federal budget) also had insignificant or negative effects on post-program earnings.

Overall effects

What then *were* the effects of the budget changes on the economic well-being of various segments of our society? One widely reported study by The Urban Institute found that between 1980 and 1984, the lowest income quintile families had suffered a decrease in real after-tax income of about eight percent while the richest quintile had enjoyed an increase of a similar magnitude. This study suffers from the serious disadvantage, however, that it simulated the impact of the various tax and program reforms instead of using actual data. It thus necessarily makes assumptions about the response of individuals to the reforms that may or may not be consistent with actual behavior.

Other critics of the policy changes use data on the number of families living under officially defined conditions of poverty in our economy. They point out that the number of families living under the poverty line increased between 1979 and 1983 by over 2 million. However, it is hazardous to ascribe this increase to the recent budget reforms because the economy was in its deepest recession in nearly fifty years at the time. Increases in poverty are a common effect of recessions quite apart from budget changes, as was the case in 1969–70 and 1974–75. In addition, a large portion of the increase in poverty occurred during 1980, before any of the budgetary reforms were in place.

At the request of Congress, investigators from the Congressional Research Service (CRS) attempted to distinguish the effects of the recession from the effects of the budgetary reforms on the increase in poverty. They concluded that only about 25 percent of the increase was attributable directly to changes in key social welfare programs. It is important to point out, however, that the methodology employed in this study, too, was a "simulation" of the effects of the budgetary reforms and does not incorporate the possibility, emphasized above, that there would be offsetting responses by those affected by the program changes.

The effects of earlier recessions on poverty also suggest that the CRS findings overstate the effects of budget reforms on the poor. Examining the statistical relationship between changes in the overall unemployment rate and the economy and changes in the incidence of poverty indicate that an unusually large increase in poverty associated with the unusually large recent recession should not have been surprising. In particular, if the statistical relationship between unemployment rates and the incidence of poverty that held in the past were extrapolated to the 1980 to 1983 period, poverty should have increased by exactly the amount that actually has been observed. In any case, it seems clear that whatever the effects of the budgetary reforms on distributional equity, they are dwarfed by the effects of general economic conditions.

Conclusions

The continuing challenge of modern economic policymaking is to devise policies that can achieve desirable effects on overall economic well-being with compatible distributional effects. The recent income tax and budgetary reforms will continue to be evaluated in these terms. At the present time, there is little evidence beyond simulations to suggest that these policies have altered significantly the distribution of the burdens and rewards of our economy.

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Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, or of the Board of Governors of the Federal Reserve System.
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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 9/26/84	Change from 9/16/84	Change from 12/28/83 Dollar	Change from 12/28/83 Percent Annualized
Loans, Leases and Investments[1] [2]	182,833	− 100	6,808	5.1
Loans and Leases[1] [6]	163,828	− 143	8,473	7.2
Commercial and Industrial	49,097	158	3,134	09.0
Real estate	60,954	7	2,055	4.6
Loans to Individuals	30,089	178	3,438	17.2
Leases	5,046	− 4	− 17	− 0.4
U.S. Treasury and Agency Securities[2]	11,807	20	− 700	− 7.4
Other Securities[2]	7,198	23	− 965	− 15.7
Total Deposits	187,801	−1,185	− 3,196	− 2.2
Demand Deposits	43,223	− 784	− 6,014	− 16.2
Demand Deposits Adjusted[3]	28,492	− 636	− 2,839	− 12.0
Other Transaction Balances[4]	11,899	− 268	− 876	− 9.1
Total Non-Transaction Balances[6]	132,679	− 132	3,694	3.8
Money Market Deposit Accounts—Total	37,527	− 144	− 2,070	− 6.9
Time Deposits in Amounts of $100,000 or more	41,111	200	2,946	10.2
Other Liabilities for Borrowed Money[5]	22,905	990	− 102	− 0.5

Weekly Averages of Daily Figures	Period ended 9/24/84	Period ended 9/10/84
Reserve Position, All Reporting Banks		
Excess Reserves (+)/Deficiency (−)	105	23
Borrowings	47	39
Net free reserves (+)/Net borrowed(−)	58	− 15

[1] Includes loss reserves, unearned income, excludes interbank loans
[2] Excludes trading account securities
[3] Excludes U.S. government and depository institution deposits and cash items
[4] ATS, NOW, Super NOW and savings accounts with telephone transfers
[5] Includes borrowing via FRB, TT&L notes, Fed Funds, RPs and other sources
[6] Includes items not shown separately