The current recession is not the common garden variety of economic recessions experienced by the United States since the end of World War II. The dip was not sharp, and the recovery has been slow, if indeed there has been any recovery. In our view, 1991 and 1992 are simply two years in the long, slow slide into economic mediocrity.

The overall economy appeared to cruise along in the 1980s with the Gross National Product (GNP), measured in current dollars, more than doubling between 1978 and 1988. But when we take account of inflation and population growth during that period the picture changes dramatically. GNP measured in constant 1982 dollars and computed on a per capita basis increased slightly less than 17 percent between 1978 and 1988. Stated differently, the increase in real income per person over that period amounted to only about 1.7 percent per year. In terms of the output of goods and services available to each person in the United States between 1978 and 1988, the economy was growing but very slowly.

Just how slowly the American economy grew in real terms over the even longer period, 1965-1989, becomes clear from the following comparison of U.S. per capita average annual growth rates of deflated gross national product with our two most important foreign industrial competitors:

<table>
<thead>
<tr>
<th>Average Annual Growth Rate</th>
<th>United States</th>
<th>West Germany</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.6 percent</td>
<td>2.4 percent</td>
<td>4.3 percent</td>
</tr>
</tbody>
</table>

In the 1980s the U.S. economy's poor performance was eclipsed by a rapid growth of GNP measured in current dollars. Fueled by large federal budget deficits and a huge expansion in consumer debt, the GNP of the nation in current dollars grew rapidly, and the money taken home pay of most Americans increased. Thus, for much of the 1980s prosperity reigned, employment was high (even though many of the employed were earning low hourly wages cooking hamburgers) and fortunes were made on Wall Street.

The Reagan and Bush administrations talked supply-side economics and tilted the tax structure in favor of the rich but, in fact, practiced a form of Keynesian economics, albeit a one-sided one—all budget deficits and no budget surpluses. Huge federal deficits maintained and expanded the aggregate demand for goods and services.

**Beneath The Dollar Camouflage**

But beneath this dollar camouflage, all was not well. Increases in nonfarm worker productivity were small and erratic in this period ranging from -0.9 percent in 1982 to +2.9 percent in 1983. Average hourly earnings of all nonfarm workers, adjusted for inflation, declined slowly but steadily through the 1980s. As Kevin Phillips points out, real family incomes in all but the top 20 percent declined between 1977 and 1988; stated differently, the real incomes of 80 percent of the population of the United States declined in this eleven-year period. Finally, the 1980s were years of hard-times for farmers as well, as the Federal Reserve tightened the money supply, eventually leading to a dramatic decline in land values. For working men and women in most sectors of the economy the decade of the 1980s was not a happy time, it was a time of false hopes and poor economic performance.

How did the bottom 80 percent of the U.S. population cope with an economic condition where their real family incomes were slipping downward while the affluent top 20 percent enjoyed increasing income and wealth? Two strategies dominated. Increasingly they became two income earner families, and increasingly they went into debt. Moving to two income families helped, but it could not keep real family incomes for 80 percent of the population from declining. Many families then tried to maintain their real standard of living by increasing their debt load. And many increased their debt to levels that they could no longer service without danger of defaulting.

The "recession" began in the fourth quarter of 1990 with a decline in industrial production and nonresidential investment and a rise in unemployment. This decline and the more recent sluggishness of the recovery is not, in our view, a part of the typical business cycle, but rather a settling of the economy to a level consistent with a low productivity economy, where the economy is not operating under the forced draft of expanding private and public debt.

The economy's deterioration became conspicuous in 1990 when two important things happened: the expansion in consumer credit came to an end and the government budget compromise signaled the end of the expansion in the federal debt. It is true the federal budget deficit increased in 1991, but that occurred from a decline...
in tax revenues in the “recession,” not from a planned expanded deficit.) Both of these developments had to occur because consumer debt had reached a point where it could no longer be serviced, and public debt had reached a point where it was feared that further expansion would lead to dire financial consequences. So planned debt expansion, private and public, came to an end in 1990, and with it the false prosperity of the 1980s. The national economy now reveals its true state: it is underway in the long, slow slide to economic mediocrity.

### Long, Slow Decline

Why is the American economy involved in such a long, slow decline? There are probably many reasons but two are central.

First, the treasure house of natural resources that Americans have lucked into are either used up or have become increasingly costly to acquire. Our best agricultural lands are already in production; our wonderful white pine and hardwood forests are gone—used up; the easy petroleum deposits have been exploited; supplies of clean, unpolluted water are becoming exceedingly scarce; and important minerals like iron ore and gold must be extracted through costly (and often environmentally damaging) processes.

Second, if the United States was to avoid long-term economic decline in the face of its declining natural resources, it would have to make significant investments to increase the productivity of its workforce. A functioning market economic system, maintaining and increasing the “Wealth of Nations” in the face of increasingly scarce natural resources requires an increase in workforce productivity. And this could be achieved only through heavy investments in four areas:

- Plant and equipment;
- Research, both basic and applied;
- Public goods (e.g., infrastructure); and
- Human capital of all members of society.

Since the end of World War II, investment in the first two areas, if not generous, has been minimally adequate. But investment in the last two areas has been a disaster as Terleckyj points out.

We have built the plants and done the research to enable us to produce marvelously sophisticated and productive farm equipment, even more marvelously sophisticated computers and productive communications equipment, and devastating weapons of war. In certain sectors of our economy technological developments have surpassed our wildest dreams. Still, over the long period, 1965-89, real per capita GNP grew at only 1.6 percent per year. After allowances are made for capital consumption and obsolescence, the allocation of goods and services to nonconsumption uses of the military, and the increased flow of income to the top 20 percent of the population, it is probably the case that the real standard of living of most Americans did not increase much, perhaps even declined, over the period 1965-89.

Certainly the quality of life in the big cities declined over this period with increased traffic congestion, air and water pollution, high crime and homicide rates and the increasing homelessness and poverty. In rural areas, poverty may be less visible, but it is just as widespread as in the big cities. Whole segments of the population have experienced a deterioration in quality of life as well as a reduced standard of living over the past 20 years. This long, slow slide into economic second-rateness can be reversed, if and only if, investment policies in the four areas noted above are changed dramatically.

However, private firms are unlikely to make the investments in plant and equipment necessary for sustainable growth until the federal government assures the private sector that it will pursue sane fiscal, monetary and other economic policies, thus assuring the long-term economic sustainability of investments (the opposite of policies pursued in the 1980s); and second, the federal government establishes an intelligent capital gains policy which encourages business investments but does not lead to windfall gains for the very rich.

With some prodding by the scientific and business communities we believe federal and state governments will respond with the needed investments in research. Americans have traditionally placed a high priority on research, and thus, our governments have done a reasonably good job funding it. They just require a little more prodding at the right time (such as now).

### Public Goods and Human Capital

A huge gap exists between investment needs and political reality with respect to the third and fourth investment areas. A revolution will have to occur in the thinking of the American electorate and its political leaders, if we are to meet the investment needs in human capital and the physical infrastructures of our country.

In the area of public goods, excluding the military, recent administrations have pursued a niggardly policy. Even for such conventional public goods as roads and highways, airport facilities and prisons, government has been stingy in the extreme. But when we came to those public goods essential to the welfare of society and the effective operation of the economy in a modern, high-tech context, recent administrations have drawn a complete blank. The federal government as well as many state and local governments have failed to take the lead in the development of rapid transit and other public transportation systems to reduce traffic congestion. They have failed to take the lead in protecting the environment by aggressively dealing with pollution. And they have failed to take the lead in developing a public health system to provide health coverage for everyone. These and other public goods must be provided by government, most likely the federal government, if Americans are to lead productive lives. Worker productivity is not going to be high and on the increase where workers are in poor health working in polluted, congested conditions. This is a set of facts that Americans must confront and deal with if they want to avoid economic mediocrity, if not ruin.

But the biggest and most difficult investment problem confronting Americans is the insufficient investment in human capital. How are Americans to go about enhancing the quality and capacity of the work force from top to bottom? Solving this investment problem requires more than money; it also involves figuring out how to build human capital in all the children and young people of America.

The obvious place to begin is to provide all children and young people with an excellent education. But that is easier said than done. We now have a public school system that ranges from very good to very bad, with the bad schools typically located in areas with a low tax base. A fifth of all American children now live in poverty and that percentage is growing. The family unit is breaking down; a high proportion of children live with a single parent, often a working mother; parental guidance for many children is weak to nonexistent; children spend endless hours loitering on the street or watching violence or fantasies on TV.

How then are all of these children and pre-adults to receive a good education? Obviously, they must be the beneficiaries of good educational practices and methods, but we must leave recommendations in this area to others, since we have no expertise in this direction. But we do have some common sense suggestions and some that are based on economics which can improve the public educational system.

The school year should be lengthened providing students with more class-days. The three-month summer vacation is an educational anachronism.
The quality of education should not be linked to the tax base of the school district. If state governments will not correct this policy failure, the federal government must.

Teachers in high schools need to be able to focus on teaching and learning. Other developed countries have managed to maintain curricula and a general atmosphere in high schools that foster learning and reward students academic accomplishments. One way to do this in the United States is to require all students graduating from high school to take and pass a nationally devised and administered examination.

Salaries of teachers in public schools must be competitive with other professions. This means salaries should be increased substantially, and they should reward excellence in teaching.

There should be no disincentives for parents to invest in the human capital of their children. It is an illusion that we can “undo” recent changes in family and household structure. But we can create incentives for each and every parent, including single parents, to invest in their children. An example would be social welfare payments that are a function of student attendance, efforts and performance in school.

We must create a safe learning place for those students whose domestic family environment thwarts learning. There now are several successful models to accomplish this (e.g., Minnesota’s Humphrey Job Corps Center). More programs of this type are needed, with strong support from the federal government. In fact the federal government should initiate a National Youth Training Program to assist young people complete high school, and continue on in some kind of job training.

**Beyond Good Schools**

But building human capital in children and young people requires more than conventional schooling at this stage of cultural and economic development in America. It requires that each and every child be raised in a healthy, productive environment. To achieve this objective the federal government must develop within the Social Security System sweeping “pro-children” policies similar in scope to the programs we provide senior citizens. Each pregnant mother, infant, child and teenager must be guaranteed adequate health care, a proper diet, and a decent place to live and a high quality education through high school. Within such a policy high school drop-out or loitering in street gangs would be uncommon. If a student drops out of the public school system he, or she, could be picked up under the National Youth Training Program discussed above.

After graduation from high school students should receive at least two more years of training. It is now generally agreed among economists that private markets for human capital investments have a tendency to fail. Thus, in the absence of appropriate government programs there is a tendency to underinvest in human capital.

In college education this market failure has long been recognized and many programs have been put in place that provide financial support to students based on economic needs and/or individual talent. But with college education becoming more and more expensive, existing programs provide even less support than in the past. This is aggravated by the fact that federal, state and local governments all too often find it easier to reduce the deficits of public budgets by cutting investment expenditures in college and university training and research rather than public consumption.

Government failure to support human capital investment is even more pronounced in the vocational and technical fields compared with the efforts of many of our competitors in Europe and Asia. The private sector does not provide sufficient training in vocational skills because it is caught in a “prisoners’ dilemma.” Obviously, training by a private firm results in costs and a firm needs to recov-