DEFICIT THINKING

America Needs a New Economic Strategy for the Nineties

by Laurence J. Kotlikoff

Otis Kaye, A Fool and His Money, 1929

If there is a number that has ceased to be a statistic and become incarnate as a furry, corpulent ogre, it must be the federal deficit. The fearsome creature is said to be responsible not only for ravaging the legacy of one President, Ronald Reagan, who vowed to tame it, but also for menacing his successor, George Bush, who has promised both to feed the beast more federal funds and to starve it with less. And if the grave wisdom of most politicians and economists is correct, the deficit presents the foremost threat to the future of the American economy. Alan Greenspan, chairman of the Federal Reserve, the nation's central bank, told Congress last fall that the animal “has already begun to eat away at the foundation of our economic strength.”

Those who most dread the numerical monster are not concerned about a rampage this year, or next, but in decades ahead, when one shortfall after another will have been added to the nation’s debt—the cumulative total of annual deficits from the past. In borrowing funds from the public to meet governmental expenses, the U.S. Treasury issues billions of dollars in bonds, notes, and other instruments, many of which will pay interest for twenty or thirty years. Now the fastest-growing category in the budget, this interest will total roughly one hundred and seventy billion dollars in 1989, or one-seventh of all federal spending for the year.

According to clichés circulating among economists, politicians, and journalists, payments on such a monumental obligation could constrain future generations, which will be forced to forgo public spending for highways, aircraft carriers, and housing projects to pay off the debt their ancestors racked up. And since a sizable portion of this debt is held by foreigners, some pundits fear the nation could someday become vulnerable to the whims of Japanese and West German investors, who might suddenly unload their holdings during economic upheaval, devaluing the U.S. currency and making it difficult for our government to raise the money to pay its bills.

Because the likelihood of these dire events supposedly depends upon the amount borrowed each year, those who fret about the deficit seem obsessed with one aspect alone: its size. A federal law, sponsored in 1985 by Senators Phil Gramm, of Texas, and Warren Rudman, of New Hampshire, requires that Congress pare the deficit to a specified level each year and that the budget be balanced by 1993. In the current fiscal year, the deficit is officially
projected to be one hundred and sixty billion dollars, but
the forecasts vary by margins as large as seventy billion
dollars, depending upon the rossiness or gloominess of
estimates of inflation and economic growth, which affect
the amounts of money the government will gather from
corporations and individuals and pay out to the benefi-
ciaries of social security and other programs.

Considering the importance attached to the deficit (the
frenzy to reduce the sum permeates every federal deci-
sion), it is curious that economists never have been able
to agree upon a basic definition of it. For more than fifty
years, they have quarreled about whether deficits trigger
growth, inflation, or recession, but they have yet to arrive
at a rigorously understanding of what should go into its reck-
oning. Accordingly, most economists have abandoned the
matter to bookkeepers, who subtract whatever the gov-
ernment estimates to be its “expenditures” from its “rev-
 enues” and note the answer. When federal programs cost
more than the funds available to pay for them, the formula
produces a “deficit”—simply and automatically.

Surprising as it may seem, though, the nature of these
calculations is hardly straightforward. They rest, to a re-
markable degree, not upon equations but upon words—
the arbitrary labels given to various receipts and payments
in the federal ledgers. Suppose, by way of example, that
in 1990 a man earning twenty thousand dollars has nine-
eteen thousand dollars in living expenses. Imagine also
that he sends the U.S. government his remaining one
thousand dollars and that in 1991 the treasury reciprocates
by mailing him a check for eleven hundred dollars. If the
man’s payment is called “income tax,” and the govern-
ment’s check is designated “veteran’s benefits,” the gov-
ernment’s 1990 “deficit” shrinks by one thousand dollars,
since additional money is at hand, and then grows by
eleven hundred dollars, when the Veterans Administra-
tion issues its check. If, on the other hand, his check is
labeled “borrowing,” because the man supplied the
money by purchasing a U.S. Treasury bill, the “deficit”
remains unchanged in 1990, for the government has spent
nothing more than it usually would, then grows by one
hundred dollars in 1991, when the principal must be re-
turned and “interest” of ten percent paid. In each case,
the man has given and taken exactly the same sums from
his government. Hence the shifting “deficit” provides no
insight into the inflow or outflow of funds from the trea-
sury. The government’s fiscal position is precisely the
same in each case; only the slippery vocabulary attached
to various payments has changed.

Built on such vague definitions, the government’s ac-
counting is useless in any strict economic sense. Terms
such as deficit especially fail to illuminate fiscal policy, by
which the government tries to manage the economy
through collecting and dispersing money, and the grand
efforts to reduce the sum cannot be viewed as relating
necessarily to the future prosperity of the nation. Indeed,
the popular concern about the deficit—that it alone re-
flects the squandering of tomorrow’s wealth today—may
be unfounded, since the figure itself provides no indica-
tion of whether Americans alive now are obliging their
descendants to pay for a governmental spending spree.

To determine how current fiscal policy will affect future
generations, economists need a new method of account-
ing—one that reflects the actions of the government and
consumers through the years. And the need is urgent: if
the present notion of the deficit is allowed to live on, the
murdiness surrounding the term will both befuddle our
economic thinking and thwart well-intended fiscal poli-
cies far into the next century.

Our government always has accounted for its recei-
pt and expenses in an arbitrary fashion: when the states
were coalescing into a nation, they ran a string of what
they considered deficits, obtaining loans locally and abroad. “A national debt,” wrote Alexander
Hamilton in 1781, “if it is not excessive, will be to us a na-
tional blessing.” Most politicians, then as now, realized
that borrowed money, spent judiciously, could be used to
build ports, factories, schools, and other facilities that ul-
timately increase the productive capacity of a nation. In
1789, after the Constitution was ratified, the new Con-
gress imposed customs duties on imported goods and be-
gan to raise revenue nationally for the first time. Even so,
shortfalls were commonplace in the early days of the re-
public: the United States recorded twenty-two of them
before 1860.

For all the usefulness of such policies, classical econ-
omists, such as the Scotsman Adam Smith, also recognized
that they could signify profligacy. Revenues from the
public might easily be diverted to frivolous ends, such as
the creation of a vast bureaucracy, that did not add to a
nation’s wealth. In general, therefore, deficits were re-
garded with a measure of apprehension. In his Wealth of
Nations, published in 1776, Smith wrote that “the only
good budget is a balanced budget,” contending it showed
the public that its government could live within its means,
just as frugal households do. In economic terms, the
argument was not difficult to grasp: by absorbing and
squandering capital from its citizens, a government run-
ing a deficit could prevent businesses and individuals
from spending and investing on their own. In politics, for
most of the nation’s history, this was interpreted as mis-
management—as careless, spendthrift, and dangerous.

Not until the twentieth century, amid widespread un-
employment in England, did the flamboyant economist
John Maynard Keynes propose that massive deficits could
prove beneficial. In The General Theory of Employment,
Interest, and Money, published in 1935, Keynes argued
that governmental spending might actually stimulate eco-
nomic growth. The conventional economic theories of
the day were based on the law of supply and demand,
according to which the market’s desire to buy a particular
commodity and its desire to produce it reach equilibri-
ump (assuming that a society can spend an amount exactly
equal to what it earns). If patent leather shoes suddenly
are in demand, vendors raise their prices, discouraging
more and more consumers until the demand can be met
with the supply. Conversely, if there are too many black-
smiths—if their numbers exceed the demand for horse-
shoes—the market finds a point of balance at which some
go out of business. Thus, economists believed the world-
wide depressions of the 1920s and 1930s would end only
when the average wage fell low enough to allow busi-
nesses to employ millions of dejected workers. But in
fact, even when wages dropped precipitously, millions of
people still could not find jobs.

Keynes thought he had discovered why. Workers, he
reasoned, generally have some wage level below which they will not work. So if the government spent large amounts of money—putting dollars into the hands of businessmen, hiring the unemployed, and supporting public works—it could spark new demand for goods and services, ending the worldwide depression. This affinity for massive public spending found a following in England, where Keynes served prominently in the Treasury, in the Court of the Bank of England, and as a negotiator at the Breton Woods conference, which set economic policy for the postwar world. It also was influential in the United States, where Keynes advised President Franklin D. Roosevelt, and the governments of both nations—partly motivated by the political benefits of sponsoring popular work programs—soon began reporting large deficits.

Unfortunately, the Keynesian view linking deficits with economic rejuvenation was never proved: widespread unemployment eased but did not end until Europe and America began hiring workers to produce the tanks and planes needed for the Second World War. Yet despite the lack of evidence in its favor, the idea remained enticing to several generations of economists, who spent their lives interpreting and developing it and ultimately influencing the tax cuts advanced by Presidents John F. Kennedy and Lyndon B. Johnson in the 1960s.

I f the clearest legacy from Keynes and his disciples was deficit spending, their bequest to economic theory was rather inescapable. As the good-deficits model was gaining wide acceptance, scholars in the United States began to notice that the model's underlying assumptions were at odds with the modern view of how people actually consume. And since the amount of money available to a government is directly linked to the earnings and spending habits of individuals (because both wages and purchases are taxed), economists began to reconsider the foundation of Keynes's view.

In the Keynesian world, the advantages of a so-called deficit were based upon the belief that consumers decide whether to spend or to save after considering their incomes at any particular moment. If the government cuts taxes, consumers feel well-to-do and increase their spending; if, on the other hand, the government demands more in taxes, consumers cut back and stop buying cars.
from Detroit. Keynesian consumers do not think about putting resources aside for the years ahead. In effect, then, Keynesian theory can be interpreted as holding that most consumers are essentially irrational—that they ignore the possibility of future income and take any opportunity to spend whatever funds are currently available.

Suppose, for example, that the government gives a man one thousand dollars in “welfare benefits” one year, only to withdraw the same amount in “taxes” a year later. Even though his financial situation has not essentially changed, Keynesians would predict the man first would spend freely, in an ebullient mood, because of his windfall, and then, a year later, become miserly, curtailing his purchases, because of a perceived shortage of funds.

This assumption about human nature predicts starkly different effects upon whole economies, even when the fiscal policies and economic facts remain unchanged. Consider, again, the taxpayer with twenty thousand dollars in wages and nineteen thousand dollars in living expenses who invests his remaining thousand dollars in a one-year Treasury bill paying ten percent. Twelve months later, the government has had the use of one thousand dollars and has spent an additional hundred dollars in interest; the man commands eleven hundred dollars and feels richer. Most Keynesians would say he feels buoyant and optimistic and would perhaps treat himself to dinner at a fancy restaurant. When magnified millions of times, as uncounted individuals behave in similar fashion, this assumption suggests that such personal spending would invigorate the economy. In keeping with strict Keynesian principles, however, the same scenario might also lead to the opposite result. If the government treats the man’s thousand-dollar payment as “social security tax” and pays him eleven hundred dollars in “benefits” one year later, Keynesians would say the man felt poorer in the first year, and so might postpone a vacation, thus helping send the economy into a recession. As with the calculation of the “deficit,” identical financial exchanges, described with different words, seem to have contrary fiscal consequences.

In fact, according to neoclassical economics, espoused by a broad group of economists ill disposed toward Keynesian theory, consumers behave more rationally. People take into account both current and future income; they understand that the timing of the imposition of a tax or the receipt of a benefit is irrelevant if their overall financial situation remains unchanged. Facing a choice between spending or investing one thousand dollars, some decide to spend it, whereas for others, considering future expenses, the inclination to invest and increase their assets is more appealing. Neoclassical economists also differ from Keynesians in assuming that most people are not cash constrained: they have no difficulty finding a way of financing most purchases and thus are not bedazzled by the prospect of an influx of cash. This clarity is true in the American economy, where nearly all consumers have ready access to credit cards or bank loans.

In the neoclassical world, moreover, fiscal policies should have the same effects regardless of the words a government uses to describe them and regardless of the balance of receipts and payments at any particular moment. By raising funds and bestowing benefits, a government should be able to effect real changes in the economy: by adjusting the rate at which stock market profits are taxed, it may dampen the general incentive to invest, or, by instituting such benefit programs as social security, it may transfer money from the young, who pay into the system, to the old, who do not. The government’s present deficit-based accounting system, in contrast, has no relation to any such measures, for it fails to reckon the total amounts of moneys collected and dispersed over the years.

Charting any fiscal policy through the decades always has vexed economists, who, being human, have had as much difficulty as other forecasters in predicting exactly what the future holds. So, for hundreds of years, the discipline found it convenient to discount the passage of time. Adam Smith focused upon the short-term preoccupations of buyers and sellers in the marketplace; Keynes conceived his fiscal recommendations as having nearly instantaneous consequences; and a budget “deficit” is nothing more than a snapshot of a government’s fiscal position at the end of one fiscal year, after income and expenses have been tallied. The neglect of time meant that economists’ calculations could not incorporate the manner in which most people and most governments make a variety of financial decisions, ranging from the household that saves for a new car to the Pentagon general who projects the final price of a missile system.

Economists finally began to stress time in the 1920s, when a contemporary of Keynes’s, Irving Fisher, of Yale University, devised a series of formulas to explain consumers’ behavior over a period of years. The key factor, for Fisher, was the rate of interest: at low levels there is no incentive to save, but as rates rise, saving becomes increasingly attractive. The so-called present value of any particular sum of money—the value today of funds to be received in the future—is in large part determined by the interest rate. Fisher’s model was, alas, mostly a microeconomic paradigm, meaning that its relevance was primarily confined to how individual consumers behave; thus it provided little insight into how a government’s policies can affect the economy.

But Franco Modigliani, an Italian Nobel laureate now at the Massachusetts Institute of Technology, has designed an economic model that considers both a government’s fiscal policy and an individual’s reckoning of present value over the years. In a series of papers, during the 1950s and early 1960s, Modigliani and his colleagues proposed a life-cycle model of the economy, in which the collective actions of individuals of differing ages have broad ramifications, or macroeconomic consequences, for the economy as a whole. The model’s central assumption is not that individuals spend whatever they have but that, on a net basis, younger, working generations tend to save in anticipation of retirement, whereas older, retired generations dissave their wealth by spending it. In contrast with the Keynesian paradigm, in which an individual’s income at any moment is the cornerstone of a variety of assumptions about the nation’s entire economy, Modigliani’s model has since been refined to predict how one generation shifts income to another over the years. Thus, its treatment of the collective behavior of individuals can
Awaiting the News from Washington.

Joseph Keppler, Jr., Awaiting the News from Washington, 1893
shed light on the wide-ranging effects of governmental fiscal policy.

Suppose, for example, that Congress announces a tax cut that results, over the short run, in a budget deficit and, later, in higher taxes to pay interest on the accumulated debt. Older generations receive a financial lift; their taxes fall, and they will not live long enough to pay higher taxes later. Middle generations also benefit, for they, too, will pay lower taxes now; then, during retirement, when the government asks for more revenue, their income will likely be lower and hence shielded from the brunt of taxes. Younger generations, however, fare badly. Whatever they gain from the tax cut, those in their twenties or thirties will more than pay back in higher taxes over their lifetimes. In this example, the youngest individuals, over their lifetimes, are moving money—in the form of the present value of all future payments and receipts—into the pockets of society’s older segments.

While the life-cycle model unravels the mysteries of how different generations spend and save, it is less valuable when applied to the problem of how to consider governmental budget terminology, because the vagaries of federal accounting never were incorporated into Modigliani’s work. But it is possible to adapt his neoclassical model to reconcile the quagmire of Keynesian deficits and the economic behavior of whole generations, by using a new system of bookkeeping, one that might be called generational accounting.

In aggregate, the generational accounts for all members of society can be imagined as two equal piles of gold coins: one represents everything the government will receive from its citizens; the other, what it will pay back. Every dollar of anticipated revenue over a period of years—taxes, fees, penalties, and other moneys—will have to match future obligations for welfare payments, military programs, medical research, and all other governmental spending. Different generations are responsible for contributing or claiming different amounts of the coins in either pile. At present, for example, older generations contribute a small share of the income pile but collect a large portion of coins from the expense pile, in the form of Medicare benefits and Social Security checks.

Each generational account can be imagined as a ledger that records the coins in either pile: one column might constitute payments by, say, forty-year-olds; another would tally up the same generation’s total income from the government over the same period. The balance in each account will reflect the net present value of that generation’s transactions with Washington, and the lifelong effects of a redistribution of income from thirty-year-olds to ninety-year-olds would be visible to young and old alike. Indeed, from the standpoint of the individual taxpayer, generational accounts would allow anyone to estimate the painful effects of an income tax increase or the more pleasant benefits of the allotment of a few hundred dollars in additional Medicare payments. To take a specific case, it seems clear that members of the generation to be born in 1990 stand to lose at least sixty thousand dollars over their lifetimes to the social security program; older Americans should break even or, perhaps, make a small net profit, as they replenish, then deplete the nation’s treasury over the years. The accounts would reduce the tangle of exchanges that citizens now have with different bureaucracies into a single, easily grasped number.

Another virtue of these accounts is that they never would be affected by the slippery vocabulary of federal budgets. Indeed, generational accounts would be immune to the words that so confound our understanding of the “deficit”—taxes, bonds, welfare payments—because the only determination necessary is whether the amount in question is a payment to or from the government. Income taxes and Social Security taxes, liquor taxes and gasoline taxes—all would be considered federal income. Every governmental payment, on the other hand, would be transferred into the accounts’ expense column: everything from urban housing projects to disability payments. Since the important factor is how much money is being routed to and from each generation, the accounts make consistent predictions about fiscal policy regardless of how federal payments and income are labeled.

More important, from a national perspective, economists would gain a tool of much greater value than their vague notion of the “deficit.” In contrast with the present focus on governmental taxing and spending programs, some of which are included in calculations of the budget and some of which are not, present value generational accounts would free economists from their fixation on the short-term analysis of federal cash flow. By projecting the present value of benefits to be paid to different genera-
tions, officials could begin to anticipate the government's redistribution of wealth across generations. Federal planners would thus be able to assess far better than they do now, with deficit accounting, exactly what effect current policies will have on current and future generations.

When applied to the Reagan tax cut of 1981, generational accounting offers surprising insights. According to conventional wisdom, the fiscal policies of the era were loose, meaning that from 1981 to 1985, when the nation's debt almost doubled, from nearly eight hundred billion dollars to more than one and a half trillion dollars, an enormous burden was lifted from present taxpayers. But an analysis of generational accounts shows no such bonanza for today's citizenry, largely because of concurrent changes in the social security laws. Over the decades, those changes will counterbalance the effects of the tax cut by extracting more money in net social security payments, since Congress required younger individuals to retire later in life, forcing them to pay into the system longer and to receive fewer benefits.

On balance, to consider one generation, the Reagan tax cut will reduce the lifetime income tax obligations of a typical thirty-year-old by about twelve thousand dollars. Yet, that individual will receive between ten and fifteen thousand dollars less in social security benefits, expressed in present value, than he or she might have before the retirement laws were changed. Despite the appearance of a huge burden's being shifted from one generation, the net effect was surprisingly small: the tax cut and the changes in social security cancel out each other, and the present value of the generational account remains roughly the same. This is true of future generations, as well. While those not yet born will be required to make the interest payments on the debt accumulated by previous generations, their transfer to those alive today—because of the changes in social security—will be far less.

Just as generational accounts would allow economists to appreciate the impact of alternative fiscal policies, they could help governmental planners avoid one of the most dangerous pitfalls in the decades ahead: the temptation to trim the "deficit" by dipping into social security trust funds. Today, the system's reserves are growing at the rate of forty-six billion dollars annually—even with allowance for payments to current retirees—and could hold as much as twelve trillion dollars by the middle of the next century. Most economists prefer holding the money to meet the needs of future beneficiaries, but there are those who propose using some of the cash to pay other governmental expenses, on the theory that the very size of the surplus is proof of adequate provisions for the future.

If there is no better gauge of the government's fiscal position than the "deficit"—if too many economists remain wedded to the idea of a balanced budget—both the economy and the lives of individuals may ultimately be disrupted. If social security funds are diverted to balance the budget, the benefits of future recipients will be imperiled; on the other hand, if the moneys are excluded from all budget considerations, as some editorialists have urged, a massive deficit will result, triggering severe and unnecessary cuts in federal spending. (Though the government is prohibited from using such funds for any purpose, Congress nevertheless places the money in the income column in its calculation of the "deficit").

In general, excessively tight fiscal policy, in which the young are taxed to balance the budget, may disable the economy over the short run as citizens scrimp on purchases to pay the IRS. Loose fiscal policy, in which the generations of the future are subjected to whole lifetimes of higher taxes, could have even more deleterious consequences. If the government orchestrates a generational transfer of economic obligations from the young to the unborn, those of us alive today will be free to spend a high percentage of our incomes. Then, as the nation's saving rate drops, money will be in short supply, and interest rates will rise accordingly. When businesses find it prohibitively expensive to borrow money to replace capital assets, wages will fall, as factories and offices around the nation become obsolete.

Generational accounts would allow politicians to steer a course between these twin dangers, as well as to face other difficult fiscal questions with the future in mind. For the first time in the nation's history, the government and citizens of all ages might have the means to understand the fiscal perils and opportunities ahead.

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