FRBSF Weekly Letter

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Impact of Current Fiscal Policy

The Economic Recovery and Tax Act of 1981 dramatically changed U.S. fiscal policy and had potentially large impacts on saving and investment. However, because its implementation coincided with a cyclical recovery, there is controversy over the actual size of its impacts. This *Letter* provides a summary of the effects of the shift in fiscal policy under the Reagan Administration as estimated from an econometric model developed at the Federal Reserve Bank of San Francisco.

In brief, we find that the shift in fiscal policy since 1980 is leaving investment in plant and equipment unchanged, but reducing other types of investment somewhat, and increasing consumption very substantially. Furthermore, this high level of consumption is being financed primarily by borrowing from abroad, with adverse consequences for future economic welfare.

Background

The 1981 Tax Act cut personal taxes over a three-year period and introduced accelerated depreciation provisions and a liberalization of the investment tax credit to reduce the cost of business fixed investment. The authors of the Act hoped that reductions in marginal tax rates —the rates imposed on the last dollar of taxable income — would boost private saving significantly by increasing after-tax rates of return, and that business tax cuts would direct most of this increased saving into business spending on plant and equipment.

In addition to tax cuts, the Administration proposed large reductions in expenditures to balance the budget by 1984. Most of these reductions were never enacted, however, and as a result the federal budget deficit, soared. The resulting absorption of saving by the federal deficit had the potential of nullifying the effects of the 1981 Tax Act on business capital formation by bidding up interest rates. Apparently this has not happened since business spending on plant and equipment has grown at a record rate during the current economic expansion. It is uncertain, however, whether the strength of business investment can really be attributed to the effects of the Tax Act. That strength also could be due to temporary cyclical factors, such as a recent surge in technological innovations, that mask the long-run impact of the shift in fiscal policy.

To resolve this issue, our econometric model simulates the long-run, or non-cyclical, effects of the change in fiscal policy on U.S. saving and investment. Even though this model is quite small, its key relationships are similar to those embodied in most large-scale structural econometric models. (A complete description of the model is available in the Federal Reserve Bank of San Francisco's *Working Paper in Applied Economic Theory and Econometrics,* No. 84-03.)

Impacts on financial variables

To measure only long-run effects, the econometric simulation forces real interest rates to absorb the full impact of the change in fiscal policy so that saving and investment are equated at the same level of real GNP as occurred before the change in policy. If a shift in fiscal policy were to raise the proportion of GNP devoted to investment in plant and equipment, it would enhance long-term economic growth. But if the opposite happens, it would retard growth. The simulation does not include the possible effect of changes in marginal tax rates on labor supply. However, even if this effect were significant (there is no convincing evidence it has been in the recent period), it would produce only a one-time increase in output rather than an increase in long-term growth.

The simulation we conducted compares the various components of the economy's saving and investment in the first half of 1984 with what they would have been if fiscal policy had remained unchanged after 1980. Two different dimensions of fiscal policy are taken into account: 1) total receipts and expenditures relative to high-employment GNP, and 2) effective marginal tax rates for individuals and corporations. For the simulation of an unchanged fiscal policy, the major categories of receipts and expenditures were kept at the same proportions to high-employment GNP as existed in 1980; and marginal tax rates on individuals and corporations were likewise held unchanged.

Simulation results indicate that the total long-run effect of the change in fiscal policy since 1980 on the U.S. demand for saving has exceeded its stimulus to the domestic supply of saving. The resulting excess demand for saving has raised real interest rates and, in the process, attracted funds from abroad to augment domestic saving. Real short-term interest rates are estimated to be 4 percentage points higher as a result of the change, and real long-term rates, 3 percentage points higher. Also, the net foreign capital inflows generated by higher real interest rates in the U.S. compared to those abroad are estimated to have boosted the real exchange value of the dollar by nearly 15 percent.

The stimulus to saving

The accompanying chart details the estimated impact of the shift in fiscal policy on the various components of U.S. saving and investment. These components are measured net of depreciation and expressed as a percent of GNP. The estimates indicate that the impact on the supply of domestic saving has been relatively modest. State and local government surpluses are not affected, but lower corporate taxes raise business saving by 0.2 percent of GNP. The overall effect of the personal tax cuts is to boost personal saving by 0.8 percent of GNP. About one-third of this increase in personal saving is estimated to be due to the effect of lower taxes and increased transfer payments (such as social security benefits) on household after-tax income. An increase in the personal saving rate in response to higher real after-tax interest rates accounts for the remaining two-thirds.

By far the largest boost to the total supply of saving comes from an increase in net capital inflows from abroad, equal to 1.4 percent of GNP. Net inflows of capital are highly responsive to international differentials in real interest rates. Higher real interest rates in the U.S. compared to those abroad attract greater net inflows, and these inflows keep U.S. real interest rates from rising even higher since they add to the total supply of saving. It is estimated that, in the absence of these added inflows, short-term interest rates would have risen an additional 3 percentage points.

Impact on investment

The total increase in saving generated by the change in fiscal policy since 1980 is estimated at 2.4 percent of GNP. Whether this increased saving has flowed into U.S. investment depends upon the size of the increase in the federal government's demand for saving, as measured by the size of the federal deficit. Since the changes in fiscal policy under the Reagan Administration are estimated to have raised the federal budget deficit by 2.6 percent of GNP, the increase in the federal government's absorption of saving has exceeded the stimulus to the total supply of saving. As a result, net private domestic investment has been reduced by 0.2 percent of GNP.

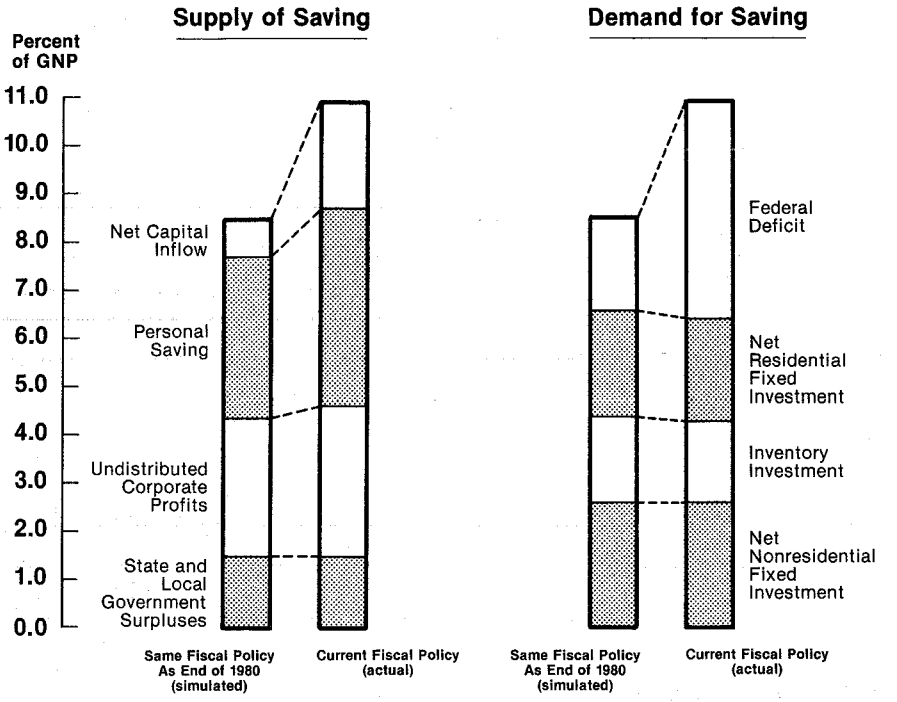
The two types of investment that have been reduced are additions to inventories and expenditures on new housing. Inventory investment is estimated to have been depressed by an amount equal to 0.1 percent of GNP because of higher real after-tax interest rates. In the case of residential investment, there are conflicting forces at work. On the one hand, lower marginal tax rates, which reduce tax savings from interest deductions, and higher market interest rates both tend to depress residential investment. On the other hand, lower taxes and increased transfer payments raise household after-tax income, and accelerated depreciation allowances lower the effective cost of capital for rental housing; together, they tend to raise investment in housing. As it turns out, the interest rate effects dominate, so residential investment is estimated to have been reduced by an amount equal to 0.1 percent of GNP.

The remaining component of investment is business spending on plant and equipment, or nonresidential fixed investment. The effects of current fiscal policy are estimated to be completely offsetting in this case. Investment in plant and equipment is stimulated by accelerated depreciation allowances and liberalized investment tax credits that reduce effective tax rates on the cost of capital for this type of investment. But the cost of capital is raised by higher real interest rates. The estimated effect of current fiscal policy on real interest rates happens to just equal the size of the reduction in taxes on the cost of capital for business investment. As a consequence, there is no change in investment in plant and equipment.

Conclusion

According to supply-side doctrine, the cuts in the marginal tax rates provided by the Economic Recovery and Tax Act of 1981 should have raised domestic saving and investment by changing relative returns. As our simulation indicates, however, a change in relative returns is not the only thing

Impact of Current Fiscal Policy On the Supply and Demand for Saving (as of first half of 1984)



that matters for total saving and investment. The amount of saving absorbed by federal budget deficits and the size of net inflows of saving from abroad also are important.

The increase in total supply of saving due to the change in fiscal policy has been slightly less than the expansion in the federal government's demand for saving. Therefore, domestic investment has been slightly reduced, with the entire impact falling on investment in housing and inventories. Business spending on plant and equipment has not been affected by the shift in fiscal policy because the benefits of the tax cuts for business have been exactly offset by the effect of higher real interest rates.

Although investment in plant and equipment — and thus long-term economic growth — is not being adversely affected, the long-term impact of the shift in fiscal policy on economic welfare is still unfavorable. The basic source of the rising federal budget deficit since 1980 has been lower taxes and higher transfer payments rather than increased federal spending on goods and services. Lower taxes and higher transfers generate either larger business saving, greater personal saving, or higher personal consumption. But any addition to domestic saving helps to finance the deficit itself. The largest effect of the budget deficit therefore has been to generate extra consumption that is being financed primarily by net borrowing from abroad.

Servicing this foreign debt will reduce the amount of GNP available for domestic use in future years. And because consumption rather than investment is being stimulated by current U.S. fiscal policy, the productive capacity of the economy in the future will be no greater than it would have been without the change in policy. Consequently, the overall impact of the shift in fiscal policy is to boost current consumption at the expense of future economic welfare.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 01/16/85	Change from 01/09/85	Change from 01/18/84 Dollar	Change from 01/18/84 Percent[7]
Loans, Leases and Investments[1] [2]	188,006	− 378	13,608	7.8
Loans and Leases[1] [6]	169,897	− 159	15,915	10.3
Commercial and Industrial	52,233	− 94	6,257	13.6
Real estate	61,886	45	2,724	4.6
Loans to Individuals	32,362	− 1	5,638	21.1
Leases	5,266	− 16	215	4.2
U.S. Treasury and Agency Securities[2]	11,027	− 157	− 1,279	− 10.4
Other Securities[2]	7,082	− 63	− 1,026	− 12.6
Total Deposits	195,365	303	10,802	5.8
Demand Deposits	46,103	961	2,892	6.7
Demand Deposits Adjusted[3]	29,784	−1,141	468	2.4
Other Transaction Balances[4]	13,060	− 215	987	8.2
Total Non-Transaction Balances[6]	136,202	− 442	6,923	5.3
Money Market Deposit Accounts—Total	42,903	310	3,266	8.2
Time Deposits in Amounts of $100,000 or more	39,827	− 660	1,417	3.7
Other Liabilities for Borrowed Money[5]	21,369	279	417	1.9

Two Week Averages of Daily Figures	Period ended 01/14/85	Period ended 12/31/84
Reserve Position, All Reporting Banks		
Excess Reserves (+)/Deficiency (−)	21	74
Borrowings	22	30
Net free reserves (+)/Net borrowed(−)	0	44

[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
[7] Annualized percent change