Research Department Federal Reserve Bank of San Francisco

January 16, 1981

Gauging Fiscal Policy: II

In the last Weekly Letter, we showed that with a more realistic "natural" rate of unemployment than the one actually used, the Federal budget would "crowd out" substantially more private investment than normally expected. With a 6.5-percent unemployment rate, the high-employment budget indicates \$29.5 billion of crowding out in 1980, according to the national-income accounts (NIA) concept. Judging by this measure, the new Administration would have to take strong steps to reduce expenditures and increase tax receipts if it wishes to eliminate crowding out and thus spur economic growth. But measurement of the natural rate of unemployment is not the only problem involved. In addition, we must consider conceptual problems which involve the choice of the items to include on both the expenditures and receipts sides of the budget.

Off-budget borrowing

The NIA budget includes only the goodsand-services expenditures and tax receipts that enter directly into the national-income accounts, and thus it excludes various Federal and federally assisted loans. This approach is legitimate for the purposes of national-income accounting, but it can be misleading if one is interested in the budget's impact on capital markets and aggregate spending. Thus, we should consider four general types of loans that are omitted from the high-employment budget.

First, there are the Federal government's loans to the private sector which are included in the government's unified (operating) budget but excluded from the NIA budget. These loans, amounting to \$3.7 billion in 1980, include credit extensions by such agencies as the Export-Import Bank and the Small Business Administration. Such loans must be financed by borrowing from the public if tax receipts are not sufficient to cover them.

The second major type of Federal loan activity consists of credit extended by Federallyowned but off-budget agencies. Until a few years ago, the unified-budget deficit comprised practically all Federal government borrowing, but in recent years, off-budget Federal borrowing has become very significant. Examples include the Federal Financing Bank and the Postal Service, which by law have been excluded from the unified budget even though they are parts of the Federal Government. Off-budget borrowing supports a wide range of programs through the Federal Financing Bank and other entitiesincluding rural housing and electrification programs, student loans, and foreign military-sales credits. The total of such borrowing amounted to \$16.6 billion in 1980.

Third is loan activity generated by privately owned but government sponsored agencies, including the Farm Credit Administration, the Federal Home Loan Bank System, the Federal National Mortgage Association, and the Federal Home Mortgage Corporation. Like Federally owned agencies, these sponsored agencies channel credit to specialized sectors of the economy, either through direct loans to individual borrowers or through purchases of loans initiated in the private sector. In 1980, borrowing by Federally sponsored agencies added up to \$22.7 billion. Despite the absence of Federal guarantees, the obligations of these agencies sell at interest rates only moderately above the rates on comparable Treasury issues.

The final category consists of loans for which the Federal Government (wholly or partly) guarantees or insures the payment of loan principal and/or interest. The best-known examples are FHA-insured and VA-guaranteed mortgages —although such guarantees have been increasingly used outside the housing field in recent years. In 1980, these agencies extended \$25.5 billion of federallyguaranteed loans.

The net stimulus to private borrowing from these activites is not equal dollar-for-dollar to



Research Department

Federal Reserve Bank of San Francisco

Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco not of the Board of Governors of the Federal Reserve System.

the amount of loan activity observed. Nevertheless, the average subsidy element over all programs is substantial. According to estimates prepared by the Office of Management and Budget, federally-subsidized borrowers will pay an 8.7-percent average interest rate in fiscal 1981, but would have had to pay a 13-percent average rate without such subsidies. Federal and federally-assisted credit activities have thus reduced interest costs by one-third from what the private market would otherwise require. The net stimulus to private borrowing and aggregate demand depends upon the public's response to this amount of interest subsidy. We may assume that the percentage increase in loan demand equals the percentage reduction in the interest rate due to the subsidy. Consequently, the net stimulus to private loan demand and spending equals one-third of the observed Federal and federally assisted loans omitted from the high-employment budget. Thus, we should add this stimulus to loan demand into the expenditures side of the budget to obtain a better measure of the Federal government's net impact on capital markets and aggregate spending.

Inflation premiums

The NIA high-employment budget not only omits a certain portion of federally-generated expenditures, but also includes other expenditures which should have no impact on either aggregate demand or the demand for credit. These payments consist of the inflation premiums in the interest on Federal debt. Like other interest rates, nominal returns on government securities reflect 1) a real component not directly affected by the rate of inflation, and 2) an inflation component that incorporates both borrowers' and lenders' expectations of inflation. The higher the expected rate of inflation, the higher the rate of interest that borrowers are willing to pay and that lenders require to protect the purchasing power of their sacrifice in current consumption. In recent years, interest rates have risen with inflation, and higher interest costs thus have swollen the NIA high employment budget deficit.

But inflation premiums in the interest on Federal debt should neither stimulate aggregate demand nor increase the demand for credit because they are simply compensation for a hidden tax --- in the form of an expected re-duction in the real value of Federal debt due to inflation. Although inflation premiums in interest on the Federal debt enter into the measured income of savers, they do not constitute an increase in permanent income that would boost consumption. All of the inflation premiums must be saved if the real value of Federal debt in private hands is not to decline because of inflation. Only if the real value of this wealth is kept intact can income and consumption be maintained in real terms. In theory then, inflation premiums should be saved and would not stimulate consumer spending in the way that other Federal payments to the public do. Unfortunately, whether this is true in fact is an empirical question on which we currently have little information.

Similarly, in theory, any Government borrowing for the payment of inflation premiums is self-financing. If the Government must borrow to pay inflation premiums in the interest on its debt, holders of debt should save this income in order to maintain the real value of their wealth. Since this added saving is returned to the capital markets, Government borrowing to pay for inflation premiums is self-financing and therefore would not bid away loanable funds from private borrowers. Consequently, to the extent that deficits are generated by borrowing to pay inflation premiums to holders of Government debt, there should be no crowding out.

Thus, the impact of Federal budget expenditures on aggregate demand and credit demands is overstated by the amount of the inflation premiums in interest payments. The solution is either to subtract these inflation premiums from expenditures or add them to receipts. The former procedure would include in expenditures only those items which truly add to the public's income as well as to demand in the credit market. The latter approach adds the receipts not already includ-



ed, or the hidden tax of the reduction in the real value of Federal debt due to inflation.

In recent years inflationary expectations have adjusted relatively rapidly to inflation actually experienced. It has been estimated that the inflation anticipated by borrowers and lenders in this country roughly equals the average actual inflation experienced over the previous two years. With an average maturity of Federal debt of about three years, higher inflation premiums are fairly quickly reflected in actual interest payments. We can calculate inflation premiums on newly issued debt by multiplying the average inflation rate (measured by the personal-consumption expenditures deflator) over previous two years by the portion of the outstanding Federal debt being rolled over-assumed to be one-third. Total inflation premiums are then obtained by summing this series over the last three years.

Inflation premiums in interest on the Federal debt have been larger than the estimated impact of the off-budget Federal and federally assisted borrowing in every year since 1973 (see chart). Therefore, the official (NIA) high employment deficit is too high because the impact of omitted (or hidden) taxes is greater than that of omitted expenditures. But this bias is currently more than offset by an opposite bias resulting from the unrealistically low assumption about the size of the natural rate of unemployment. Thus the official high-employment budget, which assumes a 5.1-percent unemployment rate, indicates a surplus of \$7.2 billion for 1980. At the more realistic 6.5-percent rate of unemployment, this high-employment budget shifts to a deficit of \$29.5 billion. And with the other adjustments indicated --- hidden taxes of \$45.7 billion and additional expenditures of \$22.7 billion from the impact of off-budget Federal and federally assisted borrowing-the high employment budget would register a deficit of \$6.5 billion in 1980.

These adjustments to the official highemployment budget ought to allow fiscal policy to be monitored more accurately. But where should this gauge normally be set? According to one view, since many Federal and federally assisted capital-goods purchases may yield returns as high as those purchased by the private sector, the government should run a high-employment budget deficit about equal to the size of this capital formation. But according to another view, taxes distort private decisions, and thus increase consumption and reduce saving artificially-which suggests that the government should offset private-saving shortfalls by generating a compensating amount of public saving through a high-employment budget surplus. Moreover, at higher rates of inflation the distortion to private saving decisions becomes more serious because the tax system is not indexed to inflation. In times of low inflation, these two effects might be roughly offsetting, so that the high employment budget could be roughly balanced. But when inflation is high, the distortion to saving decisions increases, and a significant surplus in the high-employment budget might be recommended.

Given a \$6.5-billion deficit in our measure of the high-employment budget for 1980, it would ordinarily make sense for the new Administration to make somewhat larger reductions in expenditures than taxes as it goes about the task of reducing the size of government. Moreover, in a period like the present, when fiscal policy is needed to supplement monetary policy in the anti-inflation fight and when high inflation may be seriously distorting saving decisions, budgetary discipline becomes all the more important. Only to the extent that proposed tax cuts (or indexation of taxes) show evidence of substantially boosting saving through improving incentives, could we make a reasonable case for not making larger reductions in expenditures than in receipts.

Adrian W. Throop

Research Department Federal Department Bank Of San Franz . California . Havaii Aaho . Nevada . Oregon . Utah. Washington Maho . Nevada . Oregon . Utah. Washington

BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

					• 、
11 101	175	2000110	tc in	mil	lionel
челон	a	<i>a</i> = = = = = = = = = = = = = = = = = = =		11111	11(11)
·					

Selected Assets and Liabilities	Amount	Change	Change C		Change from	
Large Commercial Banks	Outstanding	from		year ago		
	12/31/80	12/24/80	D	ollar	Percent	
Loans (gross, adjusted) and investments*	147,278	768		9,411	6.8	
Loans (gross, adjusted) — total#	124,658	435		9,539	8.3	
Commercial and industrial	37,563	604		3,701	10.9	
Real estate	50,066	81		6,513	15.0	
Loans to individuals	23,857	- 287	-	595	- 2.4	
Securities loans	1,381	- 115		206	17.5	
U.S. Treasury securities*	6,914	225	-	292	- 4.1	
Other securities*	15,706	108		164	1.1	
Demand deposits — total#	49,687	3,389		687	- 1.4	
Demand deposits — adjusted	33,129	876	-	2,478	- 7.0	
Savings deposits — total	27,842	223	-	997	- 3.5	
Time deposits — total#	74,382	764		16,041	27.5	
Individuals, part. & corp.	64,537	765		14,955	30.2	
(Large negotiable CD's)	29,635	184		7,967	36.8	
Weekly Averages	Week ended	Week ended		Comparable		
of Daily Figures	12/31/80	12/24/80		year-ago period		
Member Bank Reserve Position	***************************************	1				
Excess Reserves $(+)/Deficiency (-)$	n.a.	n.a.		- 12		
Borrowings	127	130			177	
Net free reserves $(+)/Net$ borrowed $(-)$	n.a.	n.a.		-	189	

* Excludes trading account securities.

Includes items not shown separately.

Editorial comments may be addressed to the editor (William Burke) or to the author Free copies of this and other Federal Reserve publications can be obtained by calling or writing the Public Information Section, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 544-2184.