

Research Department  
Federal Reserve  
Bank of  
San Francisco

October 1, 1976

---

## Fiscal 1777—and 1977

Today marks the beginning of fiscal year 1977, which ushers in a change in the timing of the fiscal year and also in the way Congress formally handles the budget. First, Congress has shifted to an October-September fiscal year from the July-June dating that had been in use since 1843. More importantly, Congress has adopted (after a dry run in 1976) a new budget procedure that treats the Federal budget as an integrated whole, rather than an unrelated mixture of tax and expenditure bills. For fiscal 1977, Congress has set a limit of \$413 billion on Federal expenditures, which with estimated revenues of \$365 billion will result in a deficit of nearly \$51 billion.

As we arrive at what may be a turning point in fiscal history, we should find it instructive to see how the Founding Fathers handled their fiscal and monetary problems. Fiscal 1777 was somewhat different from today, except (alas) for the sizable deficit occurring in that and every other year of the Revolutionary War period. The Continental Congress operated with a rather crude budgetary process, covering most expenditures simply by expanding the volume of money in circulation. Thus there arose an inflationary process that led to the rejection of paper currency as a medium of exchange—and to the coining of the phrase, “not worth a continental.”

**Borrowing instead of taxing. . .**  
The Founding Fathers financed the new government in a variety of ways, although notably not by taxa-

tion. Mindful of the role of English taxation in causing the Revolution, the Continental Congress failed to levy any direct taxes, and largely failed in its attempts to obtain tax money from the states—the one exception being requisitions for supplies, which accounted for about 7 percent of total war revenues. Another 12 percent came from foreign loans and subsidies, which flooded in after the Continentals had already won their war at Yorktown in 1781.

Altogether, Congress obtained about four-fifths of its funds simply by issuing domestic debt. Some of this represented interest-bearing bonds, including the forced investment of confiscated loyalists' estates, and some represented certificates issued by army quartermasters to pay for supplies. However, most of the war financing came from frequent new issues of paper money.

**. . .leads to money overexpansion**  
At the beginning of the Revolution, the total amount of money in circulation amounted to \$12 million—one-third in gold and silver, and the rest in paper notes issued by individual states or by the Crown. But then, after the Continental Congress authorized the issuance of continentals, the money supply rapidly expanded. Part of the problem was the proliferation of individual state currencies; indeed, there were in effect fourteen separate monetary authorities, all of them empowered to issue paper currency. With fourteen separate monetary authorities failing to coordinate

(continued on page 2)

# 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, nor of the Board of Governors of the Federal Reserve System.

their activities, and with fourteen separate fiscal authorities failing to levy taxes, the inevitable result was an overissue of currency to finance the war. In 1777, a year of relatively moderate monetary expansion, the combined national-state note issue increased 43 percent.

Following several years of such behavior, the Continental Congress tightened up in 1780, by calling in the heavily-depreciated old currency and making a 20-to-1 exchange for new notes. The currency-stabilization plan stipulated that the individual states would turn in all old notes, and would then receive new notes in return for a \$15-million payment, apportioned according to population. This attempt to fund the outstanding note issue succeeded in reducing by half the volume of continental currency in circulation.

Unfortunately, the individual states continued along their former path, so that new state issues in 1780-81 more than replaced the retirement of continental currency. The depreciation of the outstanding issues continued, and paper currency eventually became no longer acceptable as a medium of exchange. This paper had only a speculative value, deriving from the possibility of eventual redemption.

## . . . and thus to inflation

As might be expected, heavy reliance upon the printing press for war financing helped to drive up prices. Indeed, one of the more

striking features of the Revolutionary era was the rapid and fairly uniform response of prices to money-supply changes, with prices responding normally with a lag of one to two years. Between 1775 and 1779, the period of greatest note issue, wholesale prices rose three-fold (see table below).

But during the following half-decade, prices dropped sharply as paper money ceased to be accepted, and as commerce came to be conducted with a much smaller money supply consisting of gold and silver coin. (Because of its lack of general acceptability, the volume of paper currency outstanding during this period was not a reliable guide to the effective money stock.) Prices dropped by one-fourth between the 1779 peak and 1783, and they dropped by almost half in the 1783-85 period, when a sharp deterioration in the trade balance led to a significant outflow of hard money.

## Lessons for today

In most areas, it's hard to find parallels between 1777 and 1977. After all, the financial system of a highly industrialized nation of 215 million is vastly different from that of a farm-based economy of only 3 million people. But the relationships of deficit war-financing, monetary expansion and inflation are just as obvious today as they were two centuries ago. Within the past decade alone, we have seen the consequences of building a deficit-financed war economy atop a fully-

employed civilian economy. We have also witnessed the lagged response of prices to the monetary overexpansion generated by such deficit financing.

Perhaps the closest link to two centuries ago is our achievement of an objective of which the Founding Fathers dreamed—the treatment of the Federal budget as an integral document, which gives equal weight to both the expenditure and revenue columns. Up to now, the appropriations and revenue-raising

functions were handled by entirely separate groups of committees, so that the amount of deficit or surplus depended upon separate tax and revenue decisions. Henceforth, federal programs will not be funded independently, but instead will be considered within the context of an agreed-upon level of expenditures, in a process which permits a certain degree of control over aggregate Federal spending. The Founding Fathers would be pleased.

**Herbert Runyon**

**Note Issue and Prices During  
the American Revolution**

Year	Total Note Issue* (\$ Millions)	Annual Change (percent)	Wholesale Prices (1910-14=100)	Annual Change (percent)
1775	22.8	90.0	75	-1.3
1776	52.4	129.8	86	14.7
1777	75.0	43.1	123	43.0
1778	147.2	96.3	140	13.0
1779	303.8	106.4	226	61.4
1780	279.2	-8.1	225	-0.4
1781	367.8	33.2	216	-4.0
1782	367.6	-0.1	210	-3.0
1783	369.5	0.5	170	-19.1

\*Continental and state issues combined

Alaska • Arizona • California • Utah • Washington  
Idaho • Nevada • Oregon • Hawaii

**San Francisco**  
**Bank of**  
**Federal Reserve**  
**Research Department**

**BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT**  
(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 9/15/76	Change from 9/08/76	Change from year ago Dollar	Change from year ago Percent
Loans (gross, adjusted) and investments*	90,072	+ 683	+ 3,748	+ 4.34
Loans (gross, adjusted)—total	68,403	+ 657	+ 3,429	+ 5.28
Security loans	1,995	+ 380	+ 282	+ 16.46
Commercial and industrial	21,895	+ 194	- 824	- 3.63
Real estate	20,636	+ 29	+ 990	+ 5.04
Consumer instalment	11,457	+ 9	+ 1,254	+ 12.29
U.S. Treasury securities	9,176	+ 156	+ 492	+ 5.67
Other securities	12,493	- 130	- 173	- 1.37
Deposits (less cash items)—total*	89,212	+ 417	+ 2,690	+ 3.11
Demand deposits (adjusted)	25,636	+ 151	+ 1,258	+ 5.16
U.S. Government deposits	625	+ 237	+ 9	+ 1.46
Time deposits—total*	61,295	- 99	+ 1,120	+ 1.86
States and political subdivisions	5,328	- 44	- 496	- 8.52
Savings deposits	27,088	+ 4	+ 6,214	+ 29.77
Other time deposits‡	26,463	- 78	- 3,272	- 11.00
Large negotiable CD's	10,746	- 72	- 5,006	- 31.78
<b>Weekly Averages of Daily Figures</b>	<b>Week ended 9/15/76</b>	<b>Week ended 9/08/76</b>	<b>Comparable year-ago period</b>	
<b>Member Bank Reserve Position</b>				
Excess Reserves	26	- 16	20	
Borrowings	3	4	119	
Net free(+) / Net borrowed (-)	+ 23	- 20	- 99	
<b>Federal Funds—Seven Large Banks</b>				
Interbank Federal fund transactions				
Net purchases (+) / Net sales (-)	+ 280	- 730	+ 1,679	
Transactions of U.S. security dealers				
Net loans (+) / Net borrowings (-)	+ 1,255	+ 337	+ 965	

\*Includes items not shown separately. ‡Individuals, partnerships and corporations.

**Editorial comments may be addressed to the editor (William Burke) or to the author. . . .**  
**Information on this and other 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.**