Tiemann
Investment Advisors, LLC

March 3, 2003

Do Deficits Matter?

Introduction

All of a sudden we have federal budget deficits again. By all accounts, they're going to be big – estimates vary, but they generally range from $300-$400 billion for this fiscal year, depending on the cost of proposed tax cuts and the war in Iraq. That would be a record, though it's important to point out that with Gross Domestic Product (GDP) now in excess of $10 trillion per year, a $300 billion deficit would be about 3% of GDP, comparable to levels in the 1980s and early 90s.

Talk of budget deficits calls to mind the 1970s, a time of economic weakness, inflation, and high unemployment. Deficits also add to the sense many have of just how much different our current economic situation is from that of three or four years ago, when we had peace, prosperity, low inflation, a booming economy – and federal budget surpluses.

But how bad *are* budget deficits, really?

Fed Chairman Alan Greenspan devoted a fair portion of his February testimony before Congress, designed by law to cover monetary (interest rates and liquidity) policy, to the subject of *fiscal* policy – the economic aspects of Government spending and taxation. He talked at length about deficits and the legislative process that produces them. While he declared that deficits matter, he raised more questions than he answered regarding their effects:

> It is not surprising, therefore, that much controversy over basic questions surrounds the current debate over budget policy. Do budget deficits and debt significantly affect interest rates and, hence, economic activity? . . . To what extent do tax increases inhibit investment and economic growth or, by raising national saving, have the opposite effect? And to what extent does government

spending raise the growth of GDP, or is its effect offset by a crowding out of private spending?[1]

In other words, even Mr. Greenspan doesn't actually know what the likely economic effects of the projected budget deficits will be. In the end, the question will be whether they provide fiscal stimulus or an economic drag. Government spending can stimulate the economy by creating jobs, which puts money into people's pockets, which increases spending, which in turn creates more jobs. During the Great Depression the economist John Maynard Keynes advocated this type of fiscal stimulus.[2] If nothing else, Keynesian reasoning gave us such great public works as the Golden Gate Bridge. But let Government deficits grow too large or persist too long, and the need for public borrowing could absorb too much of the available investment capital, reducing the ability of businesses and individuals to create new wealth. This is the "crowding out" effect Mr. Greenspan mentioned.

Possible short-term effects

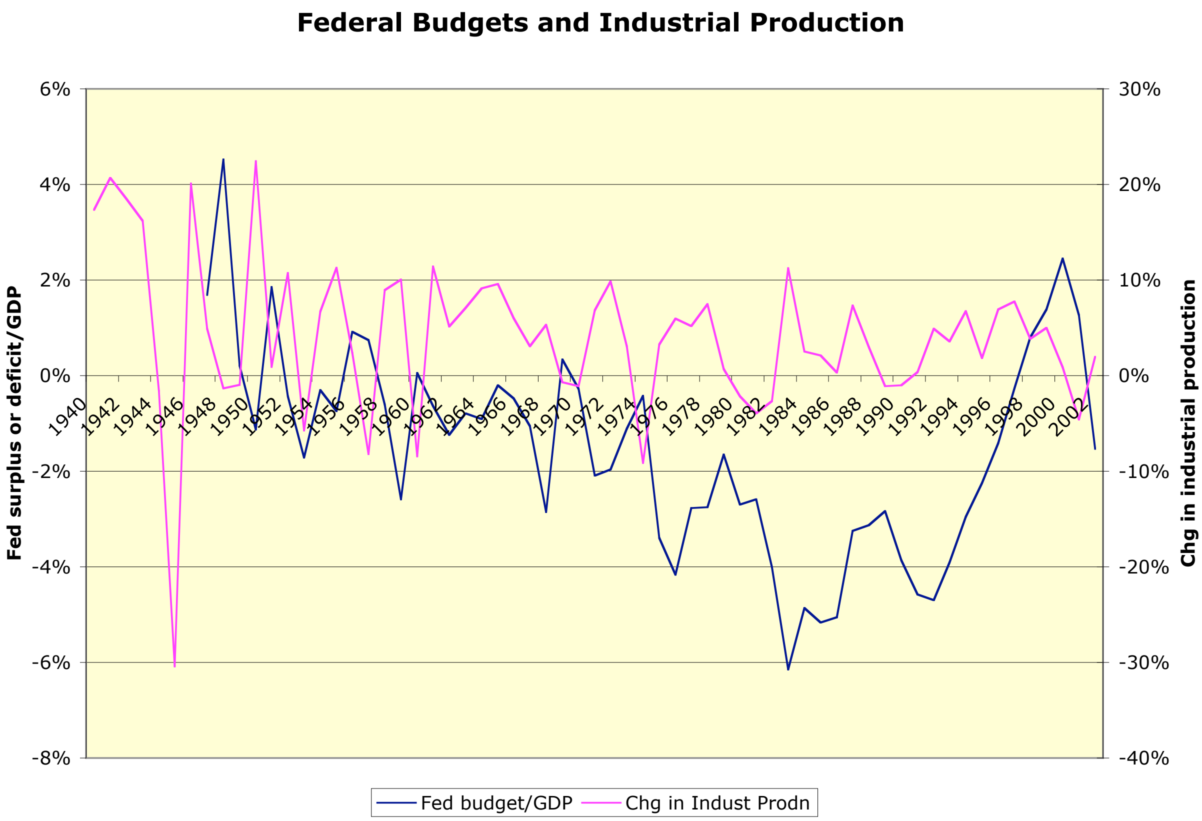
To the extent that increased federal spending and reduced taxes are stimulative, we can hope that they will exert a favorable influence on economic growth. The likely effect on the stock market is less clear, though modest deficits may be moderately favorable. A more likely effect of a period of continuing deficits may be to apply upward pressure on interest rates and inflation. In an odd way, perhaps, we should hope to see this effect – Japan, in spite of several years of aggressively stimulative fiscal policy and relatively large government deficits, still appears to have deflation, very low interest rates, and a stubborn economic malaise.

Economic growth. The first figure below indicates the historical effect of government deficits on economic growth, as measured through industrial production. I have plotted two series – federal budget surplus or deficit as a percentage of GDP on the left-hand scale, and year-on-year change in industrial production on the right-hand scale. These figures make no adjustment for inflation. Our economy is complex, making it impossible to give precise causal statements, but the data are suggestive. World War II created a huge increase in industrial output, which came sharply back to earth immediately after the war. The economy spent several years adjusting, but then in the 1950s settled into a pattern that persisted into the 1980s. The US government usually ran a modest deficit of up to 2% of GDP. When the deficit shrank or ran to surplus, as in 1957, 1960, and 1974, then the next year's industrial production figures showed a decline. In the 1980s and 1990s we had larger deficits, with similar, but less regular, effects on industrial production. And intriguingly, the most recent recession

[1] Testimony of Chairman Alan Greenspan, Federal Reserve Board's semiannual monetary policy report to the Congress, Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, February 11, 2003.

[2] John Maynard Keynes, *The General Theory of Employment, Interest and Money*, 1936. See particularly his discourse on gold mining in Chapter 10, No. VI. Keynes famously argues, perhaps with tongue in cheek, that while putting people to work mining gold does not produce anything as useful as would, say, putting them to work building houses, at least it puts them to work. So having them mine gold is better than nothing, and it's likely to add to the wealth of the community – because of the work, not the gold.

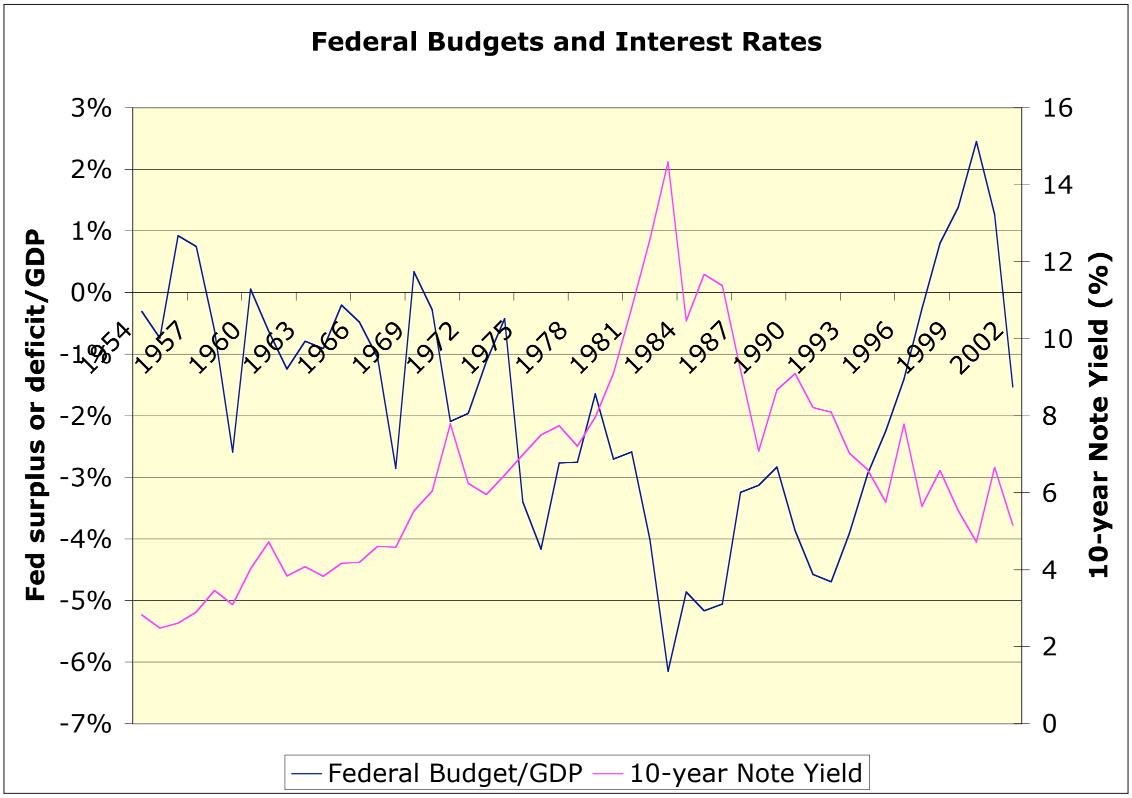
came on the heels of our largest (in GDP-relative terms) federal surplus in nearly half a century.



Source: Federal budget data: White House Office of Management and Budget; GDP data: US Department of Commerce, Bureau of Economic Analysis; Industrial production data: Board of Governors of the Federal Reserve System. Some calculations by TIA. Data are available from the St. Louis Fed FRED (Federal Reserve Economic Data) web site, http://research.stlouisfed.org/fred2/. FRED is a valuable public data source for historical economic data.

Thus, the coming budget deficits may help restart industrial production. This could ultimately shore up corporate earnings, and potentially the stock market. But while it's reasonable to hope for such an outcome, it's far from certain.

Interest rates. Large federal deficits may have a more telling effect on the bond market. Large deficits require the issuance of substantial quantities of government bonds, which increases supply in the bond market. Increases in supply, other things being equal, generally result in declines in prices, which translate to increases in yields. The next figure shows the yield on the 10-year US Treasury note on the right-hand scale, again against surplus or deficit as a percentage of GDP.

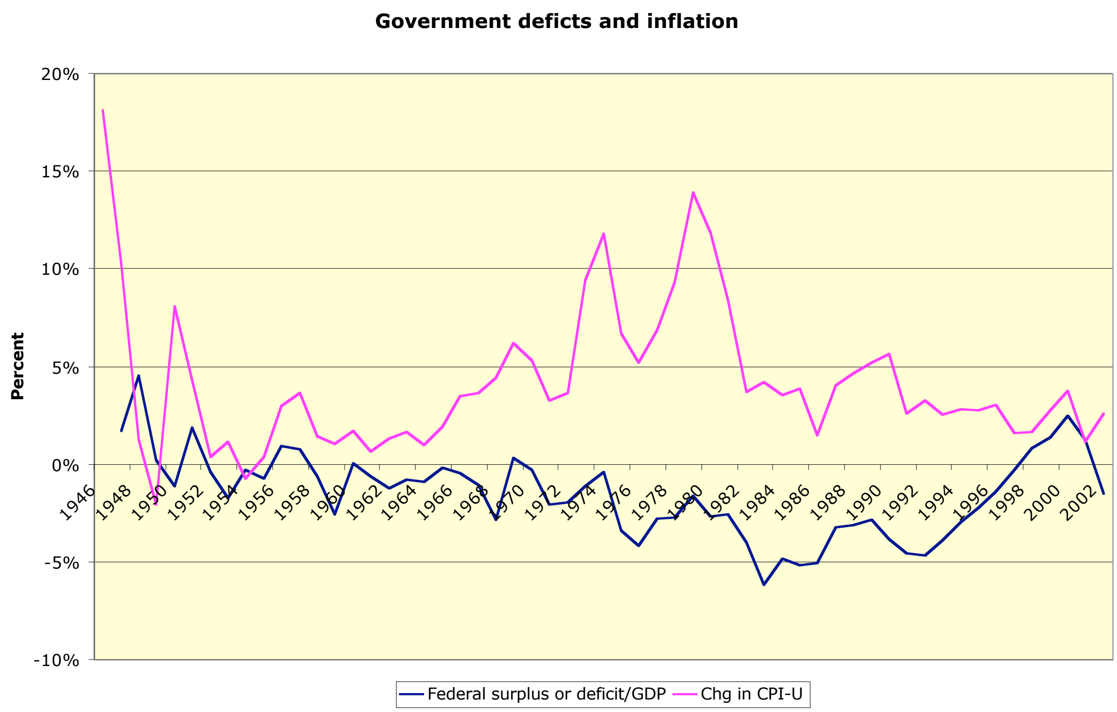


Source: Budget data, same as previous figure. Treasury data, Board of Governors of the Federal Reserve System, also FRED web site.

Like the previous figure, this one is purely suggestive, rather than predictive. Nevertheless, it is striking to see that in the thirty years from 1954 to 1984, the yield on the 10-year Treasury note rose rather steadily, while at the same time federal budget deficits generally increased. The last twenty years, with bond yields falling steadily, have been a great bull market in bonds, since bond prices rise as yields fall. That drop in yields has corresponded closely to a period of declining deficits, and finally surpluses. This is not to say that we should expect interest rates to shoot up as soon as the first big deficit is in the books. But it may say that a more aggressive fiscal policy could spell the end of the long bull market in bonds.

Inflation. The third area where deficits could have an impact is on inflation. Large deficits could fuel inflation because if bond yields do rise, then at some point the Fed is likely to inject liquidity into the financial system, in effect printing money to buy some of the government debt. (This is also the main mechanism through which the Fed manages the Fed Funds rate.) The increased liquidity means that more dollars would be chasing the same stock of goods and services, which is the basic impetus for inflation.

The next chart suggests an historical association between government deficits and inflation. It again plots federal surpluses or deficits as a percentage of GDP, this time comparing it to the year-on-year change in the basic Consumer Price Index (CPI-U, the index pertaining to urban consumers). Note that on this graph, the two series are on the same scale.



Source: Same source for budget and GDP data. CPI-U from US Department of Labor, Bureau of Labor Statistics. Available on FRED.

The figure shows the association between the relatively large deficits of the 1970s and 1980s and the high inflation of the same period. Interestingly, economic policy (largely a tight monetary policy) was able to lower inflation sharply in the early 1980s before the deficits began to shrink. Whether large deficits translate to resurgence in inflation may depend largely on the course of monetary policy over the next several years.

Longer-term worries

Mr. Greenspan pointed out in his Congressional testimony that for the past five years unified federal budget outlays have held steady at around 19% of the US's Gross Domestic Product, near the level of the 1960s and below the levels of the 1970s and 80s. But, he points out, today much more of that budget is in retirement, medical, and other entitlement programs. In the 1960s, two-thirds of the federal budget comprised "discretionary spending," subject to annual review by Congress. Today only one-third of the budget is discretionary. According to Mr. Greenspan, defense outlays account for nearly the entire decline.[3]

The longer-term issue that arises with large deficits is whether we are limiting the future policy options available to meet our social needs, our military needs, and needs for economic stimulus that may arise in the future. As the demographics driving public outlays on retirement and medical care programs worsen, Congress may have less and less leeway to make the types of policy choices that its members would like. Mr. Greenspan urged the members of Congress to preserve fiscal discipline if they would avoid serious problems in the future.

Conclusion

The United States faces a sudden increase in federal budget deficits. If financial history is a guide, then the short-term effects of this increase are likely to be modest. On balance – given the possibility that fiscal stimulus could lead to economic growth – the effects could be beneficial. For investors, the effects to watch for include a possible end to the long bull market in bonds, the chance of a revival of inflation, and perhaps some strengthening in the economy, which may or may not flow through to the stock market. The longer-term effects are more difficult to project, but if Mr. Greenspan is correct, the key will be the degree to which Congress is able to maintain fiscal discipline, keeping government spending in line with revenues over the long haul.

- Jonathan Tiemann
Palo Alto

[3] Greenspan testimony, *op. cit.*