

Notes on Fiscal Policy in a Low-Interest Rate Environment:

The Historical Pattern of Interest Rates: As Seen from 2000 and as Seen from Today

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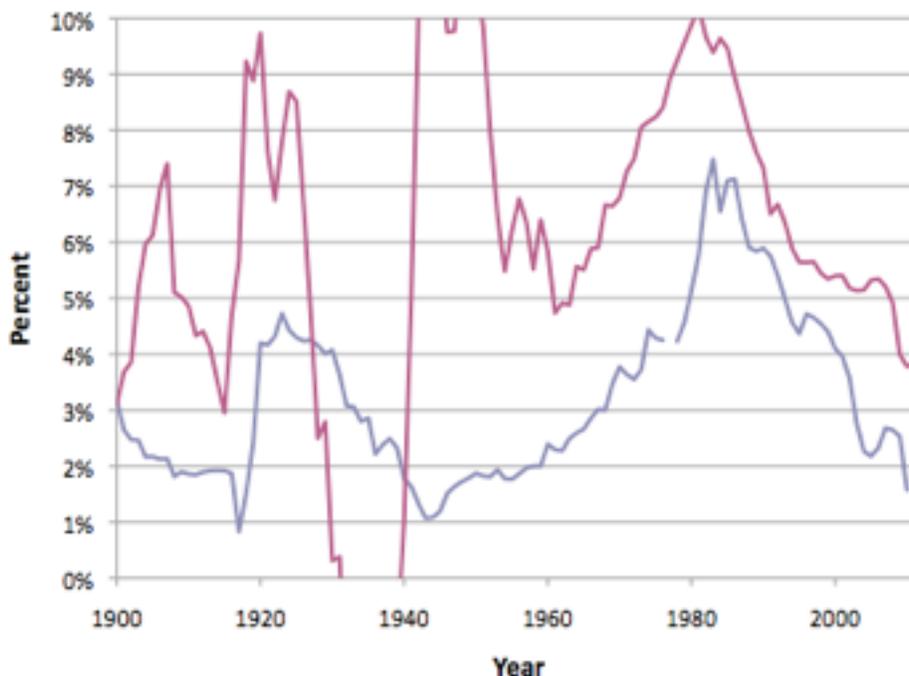
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Since 1900, with the exception of the Great Depression itself, the nominal interest paid by the U.S. government as a share of the face value of its debt has been consistently and substantially lower than the nominal growth rate of GDP.

Over all the years since 1900 the average gap, including the Great Depression, has been 2.8%/year. Since 1950 the average gap has been 3.1%/year. With a 3%/year gap between nominal GDP growth and the nominal interest rate on government debt, the relative burden of old debt—with no resources devoted to amortization whatsoever—halves with each generation.

Up until roughly 2000 or so, it was relatively straightforward to argue that, as far as the relationship between nominal GDP growth and interest rates on Treasury debt was concerned, past performance was no guarantee of future results. From the perspective of 2000, even though in recent past generations the economy's growth rate had outstripped the interest rate on Treasury debt, that was not thought likely to hold in the future.

Figure 1: Interest Rate Paid on US Debt and 10-Year Smoothed Nominal US GDP Growth



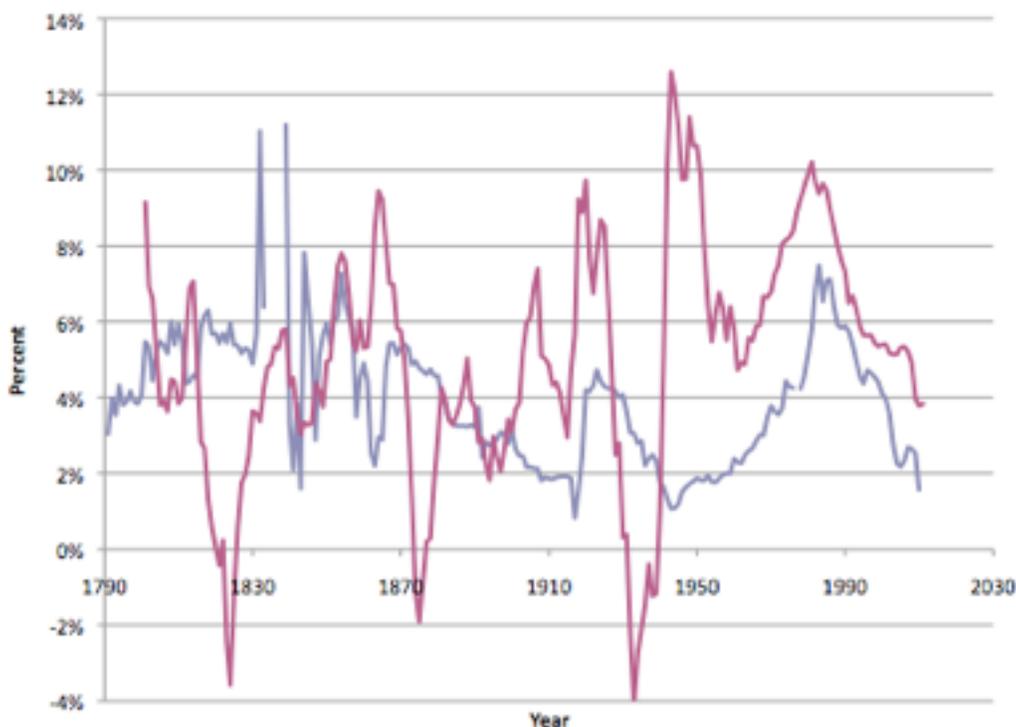
The pre-WWII twentieth century contained an extended episode—the Great Depression—during which the growth rate of nominal GDP was substantially lower than the interest rate on Treasury debt. The nineteenth century contained a forty-year period at its start during which the growth rate of nominal GDP was less than the interest rate on Treasury debt, the nominal GDP growth rate did not rise above the interest rate until the inflation of the Civil War, the post-Civil War deflation had pushed nominal GDP growth below the interest rate, and not until the application of the cyanide process to the South African gold fields began in 1896 and the price trend shifted from secular deflation to inflation did the nominal GDP rate rise above the interest rate on any consistent basis.

From the perspective of 2000, the positive gaps between nominal GDP growth and interest rates on Treasury debt were the consequences of three factors:

- The non-adjustment of nominal interest rates to the shift produced by the coming online of the South African gold fields,
- The inflation of World Wars I and II, and

- The structure of the post-WWII economy.

Figure 2: Interest Rate Paid on US Debt and 10-Year Smoothed Nominal US GDP Growth



From the perspective of 2000, the first two of these factors seemed to simply not be relevant to the twenty-first century economy. And the influences that had made for the third were ebbing rapidly. Savers were not about to be caught out again by an episode of peacetime inflation like the 1970s: in the future as seen from 2000 they would take steps much more rapidly to protect themselves from nominal erosion of their real principal. The high equity return premium of the post-WWII generations had both pushed stock returns up and had pushed bond returns down. This had been in large part a result the memory of the huge equity losses of the Great Depression, and as those who lived through that episode retired they were replaced by people who understood that never again would the Federal Reserve allow the economy to undergo any substantial deflation.

Figure 3: Gap Between 10-Year Smoothed Nominal GDP Growth Rate and Interest Rate



Thus, as of 2000, we saw that the gap between nominal GDP growth and interest rates on Treasury debt that had averaged 9%/year in the late 1940s and early 1950s and had averaged 4%/year from 1955 to 1980 was down to 1%/year by the 1990s. And it seemed not unreasonable to expect continued declines in the equity return premium that would make the twenty-first century a time in which the interest r on U.S. Treasury debt would be greater than the growth rate g for the U.S. economy.

Then with the start of the third millennium things changed.

First there came the emergence of the global savings glut. Real interest rates in the North Atlantic fell to levels that had not previously been thought likely. Then came the collapse of the North Atlantic economy in 2008-9. And with that collapse real interest rates in the North Atlantic fell to levels that had not previously been imagined. Meanwhile, all claims that the equity return premium was on a secular decline went out that window. The twin stock market crashes of 2001 and 2008-9

reinforced the knowledge that stocks could be extraordinarily risky for all but the most patient of investors, and increased the value that savers placed on the government's ability to credibly promise that its debt could serve as the safe-asset portion of a portfolio. This was reinforced by the daunting experience investors suffered in the late 2000s with AAA-rated securitized products originated by private investment banks. It seems likely that it may be a very long time indeed before private-sector securities originators will once again be able to credibly promise that the assets they are selling are in nominal terms as safe as or almost as safe as the debts of hard-money credit-worthy sovereigns backed by central banks which possess the "exorbitant privilege" of being able to print reserve currency liabilities at will.

As of this writing at least, a future in which the average gap between nominal GDP growth and Treasury interest rates is at its 3%/year post-1950 level seems somewhat more likely than one in which interest rates exceed growth rates. Should our future see a standard configuration of asset prices and returns in which, with high probability, $g > r$ for U.S. Treasury debt, what of the standard wisdom about optimal fiscal policy will need revision?

Economists should, as part of their diversified intellectual portfolio, think through the issues.

They should be ready to provide sensible policy advice, should that world turn out to be the one in which we will live...