A Personal Declaration
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September 18, 2010
[ In] [De] [Re] flation - and Conflagration

## Name your Poison

Based on the huge amount of commentary and the complete lack of consensus, it is impossible to have a clear view of what to expect in terms of future US price levels. While the various scenarios would produce differing types and amounts of economic pain to different groups, I don't see how we will avoid collective excruciating pain because I don't see how the United States government is going to avoid a disastrous debasement of its currency.

I believe that any adherent to any economic philosophy would agree that an increase in demand for something with supply held constant results in increasing prices, and that an increase in supply of something with demand held constant results in decreasing prices. Price controls, no matter how strict, rationing, no matter how effective, and government intervention, no matter how pervasive, cannot evade the basic law of supply and demand.

Common sense suggests to me that no matter what happens to the US economy, the supply of dollars must increase and demand for dollars must decrease, and the price (value) of a dollar, expressed in units of anything the least bit decoupled from the dollar, must fall. The price of any good or service the least bit decoupled from the dollar must rise.

## Research

I thought it a good idea to do some confirming research before making statements of fact regarding interest rates, national debt, etc., rather than rely on recollection or conventional wisdom. The first thing apparent is that the data and its interpretation are affected significantly by the agenda of the presenter. Specifically, data provided by the government is confusing, spun if not misleading, and infected with political objectives. President Obama's "The Budget Message of the President to The Congress of the United States" contains virtually no economic substance and consists almost entirely of partisan political statements. I've never read another, but I cannot imagine that President Obama's "Message" is any better or worse than those of his predecessors for at least 80 years.

Data presented below is based on a large number of sources and I believe it to be reasonably accurate. However, anyone serious about the subject should do his own research. In any event, the coming economic disaster is achievable with a very significant margin of error.

## Some Big Numbers

The fiscal federal 2010 budget was approximately $\$ 3.5$ trillion. Receipts were approximately $\$ 2.1$ trillion, resulting in a deficit of approximately $\$ 1.4$ trillion. At the end of the fiscal year, the federal debt was approximately $\$ 13.4$ trillion and the weighted average interest rate was approximately $2.2 \%$. Approximately $40 \%$ of the federal debt matures in less than one year and the weighted average maturity of the federal debt was under two years.

The federal budget is often broken down into discretionary (that with respect to which Congress must make annual appropriations) and mandatory (that which is automatic each with year with no congressional action, such as social security and Medicare). Discretionary is further broken down into defense and non-defense. For the most recent fiscal year, the budget was allocated approximately as follows:

| Defense | $20 \%$ |
| :--- | :--- |
| Non-defense Discretionary | $15 \%$ |
| Mandatory | $65 \%$ |

The following table shows the effect on the budget of an increase in the average interest on the federal debt from $2.2 \%$ to $4.0 \%$. The point is that a small absolute increase in the interest rate on the federal debt has a very large fiscal impact. For example, an increase in the rate of interest of 1.8 percentage points causes the interest on that debt to increase from $8 \%$ to $15 \%$ of a 3.5 trillion budget. The increased interest payments equal $7 \%$ of that budget and are equal to almost half of the constant budget non-defense discretionary spending.

|  |  |  | Interest cost @ |  | Delta |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Interest Rate = |  | 2.20\% | 4.00\% |  |
|  | Interest \$ = |  | 0.295 | 0.536 | 0.241 |
| Defense | 20\% | 0.704 | 42\% | 76\% | 34\% |
| Non-defense Discretionary | 15\% | 0.528 | 56\% | 102\% | 46\% |
| Mandatory | 65\% | $\underline{2.287}$ | 13\% | 23\% | 11\% |
|  | 100\% | 3.518 | 8\% | 15\% | 7\% |
| (All dollars are in TRILLIONS.) |  |  |  |  |  |

To illustrate the application of the table above, note that interest at $2.2 \%$ on the national debt of $\$ 13.4$ trillion equals $\$ 295$ billion, which is equal to $56 \%$ of 2010 non-defense discretionary spending. Interest at $4.0 \%$ on $\$ 13.4$ trillion equals $\$ 536$ billion, which is equal to $102 \%$ of 2010 non-defense discretionary spending, and the increase in interest cost ( $\$ 241$ billion) is equal to $34 \%$ of 2010 non-defense discretionary spending.

## Interest Rates Must Rise

Why might one think that interest rates will increase? Because they are at historic lows. I picked three years to compare to current treasury yields. I chose 2002 because the Fed lowered interest rates as part of an effort to mitigate the potential economic effects of the 9/11 attack. I picked 1990 somewhat at random and it turns out to be pretty high with a flat yield curve. I picked 1981because I remember it - I moved from Chicago to Denver and bought a house with a $16 \%$ first mortgage. I could have picked any modern era year and rates would be higher than today.

## Interest rates on Treasury Obligations

|  | Current | $\underline{2002}$ | $\frac{1990}{}$ | $\underline{1981}$ |
| :--- | ---: | ---: | ---: | ---: |
| 6 mos. | 0.20 | 1.85 | 7.89 | 13.81 |
| 1 yr | 0.26 | 2.28 | 7.81 | 13.16 |
| 5 yr | 1.46 | 4.52 | 7.87 | 14.25 |
| 10 yr | 2.75 | 5.20 | 7.94 | 13.92 |
| 30 yr | 3.90 | 5.56 | 8.00 | 13.45 |

Moreover, the US Department of the Treasury has stated an intent to increase the average maturity of outstanding federal debt, which will also increase interest rates given a normal upsloping yield curve.

## Inflationary Policy Bias

Much of the commentary suggests that it is deflation rather than inflation that is the real threat to Americans' quality of life. I cannot conceive that the government will permit deflation. The economic and political costs are too high. With deflation, each dollar of federal debt becomes more expensive to repay - the effective level of debt increases with no additional borrowing. The Fed target inflation rate is said to be $1.5 \%$ to $2.0 \%$, with $3 \%$ being tolerable but $4 \%$ being too high. Common sense demands a conclusion that the US economy is far too large (absolutely and as a percentage of the world economy) and far too complex for the government to manage inflation within such close tolerances. Given the life or death imperative that deflation be avoided, there inevitably will be inflation.

## Too Many Dollars

I also cannot conceive any economic future that doesn't include fantastic increases in the supply of US dollars and therefore a decrease in its value relative to other currencies and to non-dollar denominated goods and services. If economic growth declines or becomes economic contraction, the government will run higher deficits because there is no political will to reduce spending and perhaps no ability to decrease mandatory spending. Tax revenues will decrease with decreased economic activity. There is not enough aggregate income to increase income tax revenues without decreasing the taxed activity (creating income).

If growth resumes, interest rates will increase because demand for credit will increase.
Eventually, the US will have to pay higher interest rates to place treasury securities. That will increase deficits, which will cause more borrowing which will cause higher interest rates, which will increase deficits . . . into the abyss.

## Addendum

By the way, none of the above considers the effects of state debt or the absurd amount of unfunded state and federal government obligations.
[In] [De] [Re] - Do Re Mi. Government fiddles and the Republic burns.

