OBSERVATIONS ON HR1: THE STIMULUS PACKAGE

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1 INTRODUCTION

The Stimulus Bill from the House, HR1, is discussed herein[1]. Whether it passes or not in the Senate it is worth an analysis because it shows the mindset of the Congress and perhaps the Administration. The precipitating problem has been poor and most likely illegal practices on the part of many banking and investment institutions as well as many buyers of homes which were fraudulently obtained. Homeowner complicity is frankly as large a part of the problem as is the bankers yet Congress in its wisdom will reject any of this for this presents the Democrats with an opportunity to create massive new programs and set the economy farther back than the Republicans did during their tenure.

Friedman wrote "**Capitalism and Freedom**" originally published in 1962. He opens the Introduction with the following:

"In a much quoted passage in his inaugural address, President Kennedy said "Ask not what your country can do for you-ask what you can do for your country" It is a striking temper of our times that the controversy about this passage centered on its origin and not its content....The paternalistic "what your country can do for you" implies that government is the patron....The organismic "what your can do for your country" implies that government is the master or the deity, the citizen, the servant or the votary..."

He goes on. But in today's voices over the Stimulus package all one hears if *"what am I going to get out of it*" from the voters and from Congress "*what can we pack in to get more votes*" A twist and turn on the old words but telling, things have just gotten worse!

The more one looks at this Stimulus package the more concerned one becomes. The expenditure of a dollar of government spending allegedly creates a slightly higher increase in GDP, however there is a delay from the time spent and decays after it is spent, and thus it is delayed gratification with a transitory response. But the current package is a massive one in that it displaced from today the hard decisions which will make the morrow worse.

We specifically have seen seven crises in the financial markets, some of which we are currently weathering and some yet to come. These seven crises are:

1. **Residential Real Estate Crisis**: This is the bubble and collapse of certain real estate properties focusing primarily on residential real estate. We have discussed this at length in earlier White Papers but the problem here was twofold. First there were mortgage brokers with no regulation who fraudulently sold mortgages to people who had no

[1] http://appropriations.house.gov/pdf/RecoveryBill01-15-09.pdf

possible chance or repaying. The second part was those people who conspired as willing participants to obtain these mortgages. Now the Democrats want those of us who have no debt to bail them out. Fair, no, necessary, we do not believe so. In fact we believe there is something almost immoral in this. But, well, it's a new Administration.

2. **Liquidity Crisis:** This is the failure of financial institutions to transact between each other. This was the result of two elements. First the GSEs allowed for the bundling of all of the junk and sell it off to the GSEs. Thus the greater fool theory was demonstrated again. No vetting of the quality of the debt was done. Again perhaps this is an illegal act. The second problem was the creation of non-insurance insurance. These were the vehicles which most likely led to the downfall of AIG and the likes. Behind this was the possible fraud on the part of the rating agencies, none of whom have had the slightest reprimand!

3. **Money Market Crisis:** This was the brief lack of faith in short term deposits collateralized by short term loans. Brief, but there is a lack of confidence. Here the Treasury and the FED intervened.

4. **Credit Crisis:** This is the general commercial and consumer credit crisis in the failure of the markets to extend credit at levels and with terms as had been done previously. This is where we are now. Junk, junk, and more junk, and money being pumped to balance sheets with total constipation. In addition people do not want more debt.

5. **Hedge Fund Crisis:** This is the dual crisis of Hedge fund having to cash out and secondly of Hedge funds dumping on the markets when such liquidity is demanded. This seems to have passed. The calls on the funds went for a few months but they seemed to manage to handle it. They are totally unregulated and Congress should be reminded of this!

6. **Commercial Real Estate Crisis:** This is the commercial side of the real estate crisis which involves the inability to rent major commercial new builds as well as the inability to obtain continuing construction and project financing. This is beginning.

7. **High Yield Debt Crisis:** This is the crisis of hundreds of companies having billions of high yield debt, which is coming due, and the inability to roll that debt over. As we have discussed this is still yet to come.

2 GDP PROBLEM

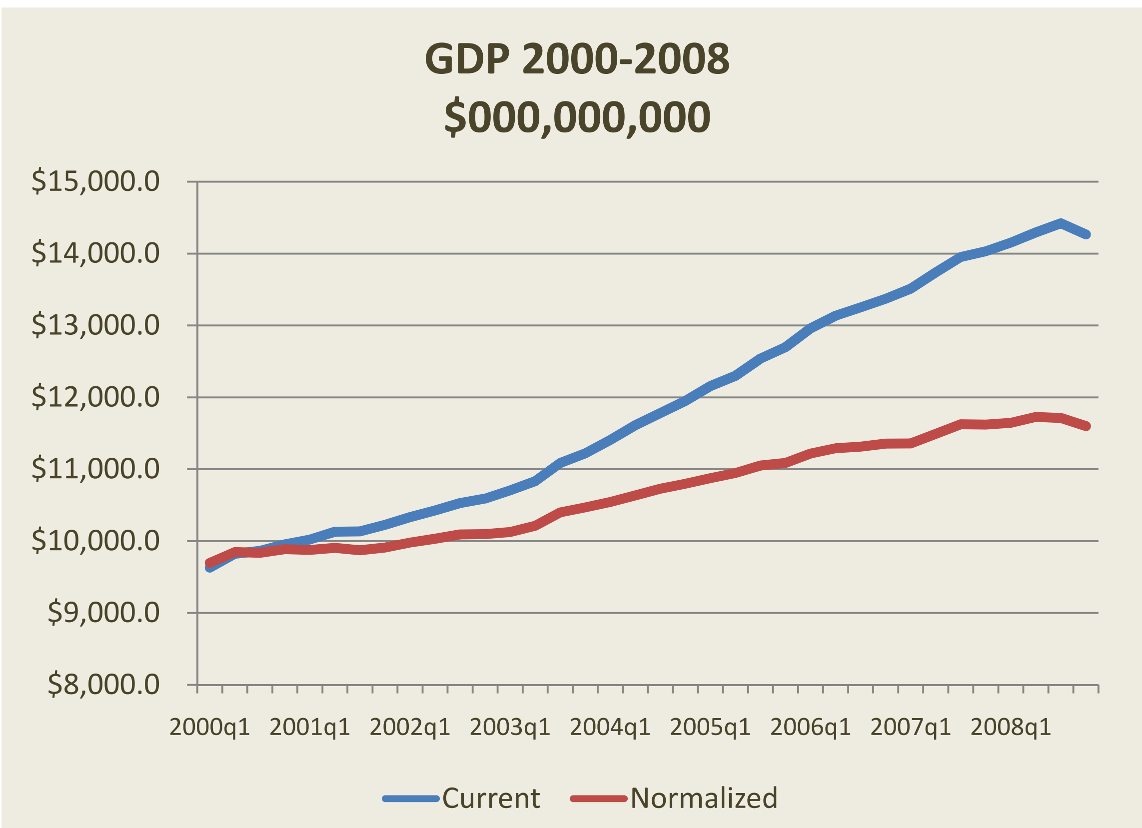
One of the major concerns if the GDP problem as well as the unemployment problem. The overall GDP is shown below. It has shown substantial growth over the prior Administration, despite the complaints of the Democrats that the Republicans were initially losing jobs after 9/11. Those jobs returned plus until the bank fiasco. We see the beginning of the drop here.

The Commerce Department came out with the Q4 GDP today and it is worth a look. The first chart is the GDP for the past few years, unadjusted and adjusted. The downturn is now quite evident. The question is could this have been anticipated.

Following this is the M2 numbers from the FED.

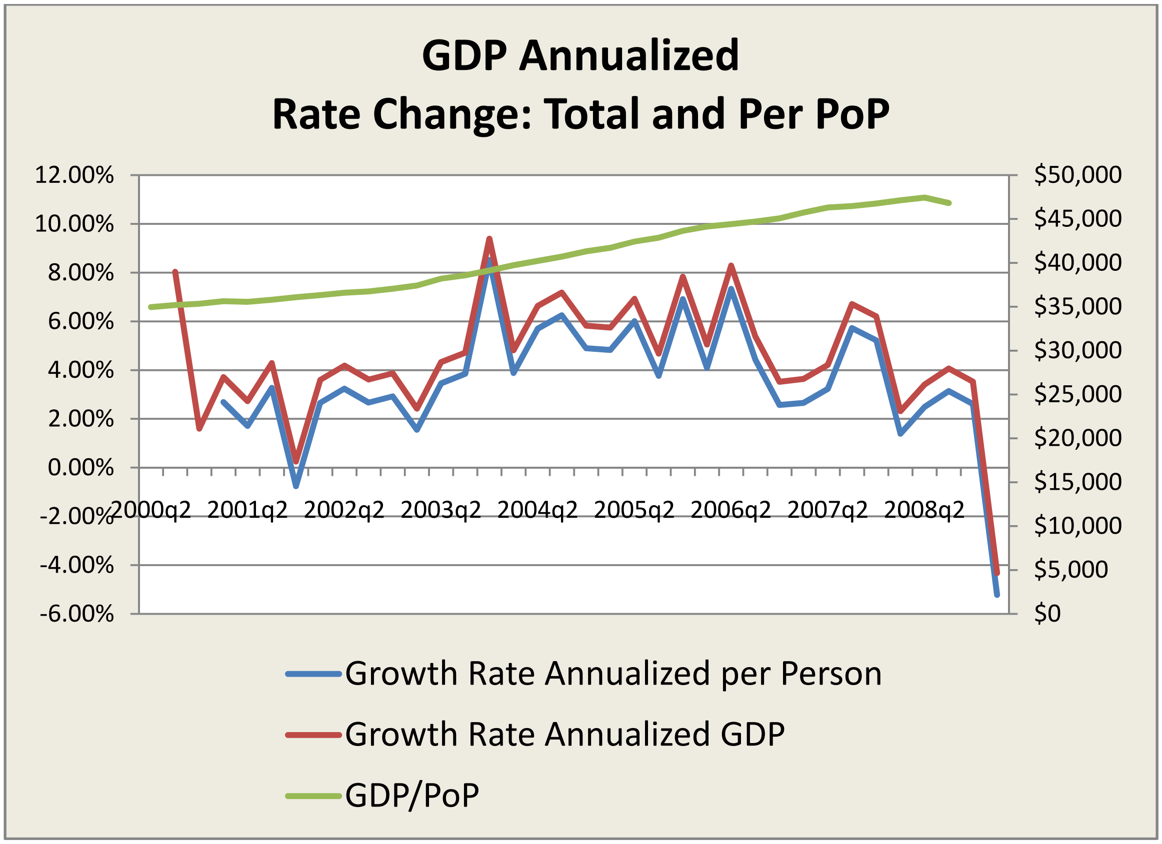
Note that the M@ numbers has continued to escalate as the FED has pumped more money into the economy. But that is still just part of the story.

Now look at the velocity, GDP/M2. It is falling off the cliff. No one is spending anything, the velocity is dropping quickly, and that is good since we are pumping the money in but the money is not turning around causing inflation. However it is like blowing air into a balloon, sooner or later it will burst.



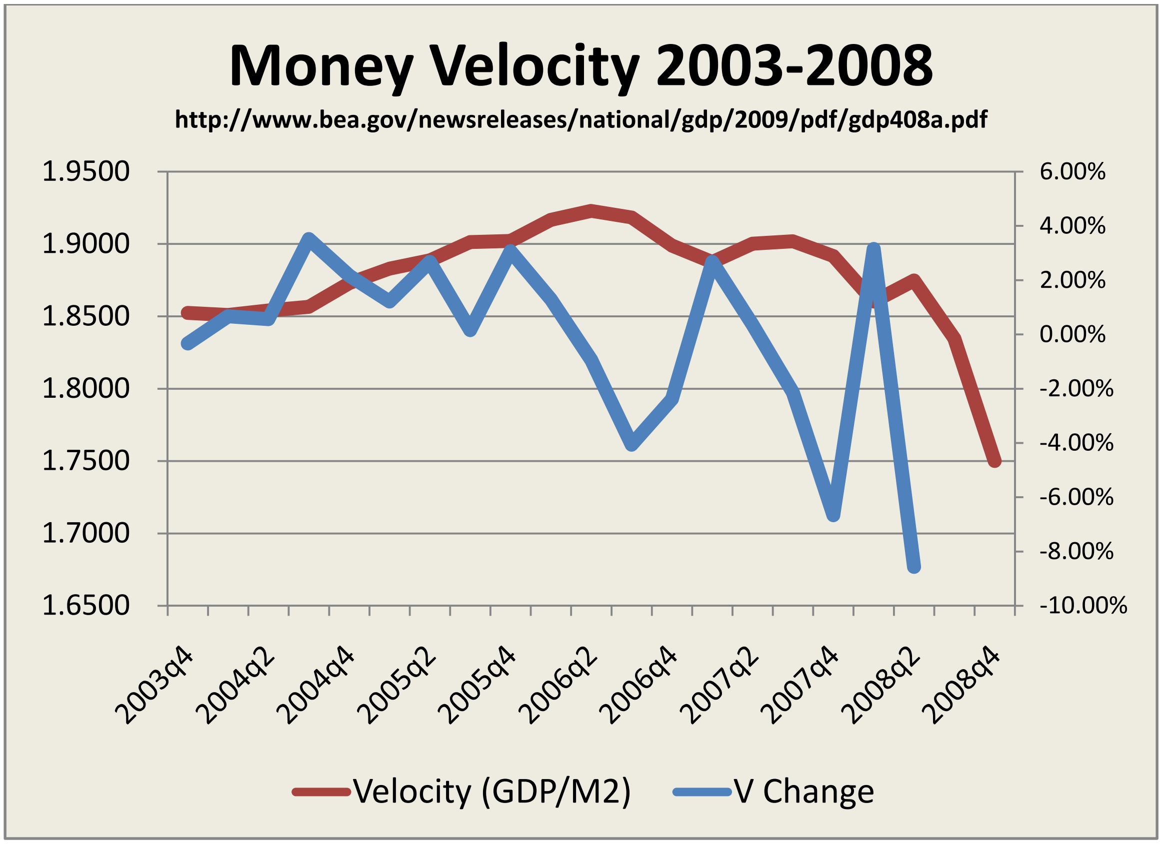
Now look at the impute inflation, this is what it will look like if we suddenly break this ice jam. We are looking at a 30% plus inflation rate and we have not even touched the Democrats spending spree. More on that latter. It really is worth looking at the CBO HR1 analysis of the proposal. Even better look at the details as to where all of this is going.

The Democrat House is going absolutely wild. This will make for a few thousand PhD theses in economics, if they don't go out and hunt every one of them down first!



The attached Figure is the GDP normalized by total population. There are several interesting facts. First it is almost never shown this way. Second, the GDP per PoP is still well above Q1 2006! Yes it is dropping but it is still well above three years ago. Hardly a Depression, yet. Third, the GDP per PoP change is much more than the GDP change in the Q4 2008 numbers. That may send a chill. It is -5.22 % down, annualized which is much more than the announced number for the total! Fourth, all of these numbers should be normalized for the total PoP in all cases.

Monday we will be doing a line by line analysis of the Stimulus Package, Just a quick heads-up. The School Lunch Program has been increased an additional $20 Billion. That is about $6 Billion per year over the period. There are 3 million unemployed extra. This means a $2,000 per unemployed person for school Lunch! Assume 2 children per unemployed, that is $1,000 per child and assume we have 200 days per school year, which is $5 per day for lunch at school. Must be a lot more than Peanut Butter sandwich and container of milk, Oh I forgot it is the Union Help and then their Pensions, not yet factored in, to pay for this. The Tail costs that are NOT included will raise their heads in the next ten years, that way we will all go bankrupt at once!



3 DETAILS

We now review the HR1 package using the CBO report as a guide[2].

3.1 Appropriations

The following Table presents the new Appropriations in HR1. They are $351 Billion. They are all new appropriations and are focused primarily on support and creating new Government support services. They also create tails of demanding infrastructures for services such as those in the School Lunch program where new staff are hired, resulting in new pension commitments on the parts of states and then driving up real estate taxes resulting from these new hires! The impact is highly regressionary since it hits real estate taxes in the long term. Not only does this create debt it creates these explosive tails of financial commitments that CBO and Congress fail to even consider.

[2] http://www.cbo.gov/ftpdocs/99xx/doc9968/hr1.pdf

Table 1. APPROPRIATIONS HR1

Item	*Details*	*Amounts*	*Totals*
Title I—General Provisions			**$0.248**
	appropriate $248 million for Inspectors General	$0.248	
Title II—Agriculture, Nutrition, and Rural Development			**$26.800**
	An estimated $20.0 billion over the next five years to temporarily increase the Nutrition ie Food Stamps	$20.000	
	$2.8 billion to expand broadband Internet service in rural areas	$2.800	
	About $4 billion for programs to develop rural communities and improve infrastructure	$4.000	
Title III—Commerce, Justice, and Science			**$14.200**
	$3.0 billion for grants to improve the criminal justice system,	$3.000	
	$3.0 billion for grants to fund science and technology research as well as	$3.000	
	$1.0 billion for periodic censuses and programs,	$1.000	
	$2.8 billion for grants to extend broadband Internet services;	$2.800	
	$1.0 billion for programs of the National Oceanic and Atmospheric Admin	$1.000	
	$1.0 billion for the Community Oriented Policing Services program; and	$1.000	
	$2.4 billion for other activities.	$2.400	
Title IV—Defense			**$4.500**
	$4.5 billion to the Department Defense Construction	$4.500	
Title V—Energy and Water			**$43.900**
	$18.5 billion for energy efficiency and renewable energy programs energy-related grants to states);	$18.500	
	$8.0 billion to cover the subsidy costs of federal loan guarantees for renewable energy systems and electric transmission projects;	$8.000	
	$6.5 billion for capital investments by certain federal power marketing administrations in electric power transmission systems;	$6.500	
	$4.5 billion to modernize the nation's electricity grid; and	$4.500	
	$6.4 billion for various other activities.	$6.400	
Title VI—Financial Services and General Government			**$8.700**

Item	Details	Amounts	Totals
	$8.7 billion to promote energy efficiency	$8.700	
Title VII—Homeland Security			**$1.100**
	$1.1 billion for a variety of programs	$1.100	
Title VIII—Interior and Environment			**$15.000**
	$15 billion, for safe drinking water	$15.000	
Title IX—Labor, Health and Human Services, and Education			**$91.700**
	$20.4 billion for programs administered by the Department of Health and Human	$20.400	
	Services;		
	$4.6 billion for employment and training programs	$4.600	
	$20.0 billion to renovate elementary and secondary schools;	$20.000	
	$17.6 billion for Pell grants and other student financial assistance and facilities at	$17.600	
	$29.1 billion for other education programs aimed particularly at elementary and secondary	$29.100	
Title X—Military Construction and Veterans Affairs			**$6.000**
	$6 billion budget authority for military construction	$6.000	
Title XI—Department of State			**$0.500**
	$500 million	$0.500	
Title XII—Transportation and Housing and Urban Development			**$59.400**
	$30.0 billion for highway construction;	$30.000	
	$13.1 billion for other transportation programs administered by DOT;	$13.100	
	$11.1 billion for housing assistance programs administered by HUD; and	$11.100	
	$5.2 billion for grants to states and cities for activities related to community	$5.200	
	Development.		

Item	*Details*	*Amounts*	*Totals*
Title XIII—State Fiscal Stabilization Fund			**$79.000**
	$39.5 billion available to states each year	$79.000	
Sub Total		**$351.048**	**$351.048**
Division B—Other Provisions "Direct Spending"			
	$248 billion over the 2009-2019	$248.000	
Total		**$599.048**	
Tax Change Impact		**$211.800**	
Total with Tax Impact		**$810.848**	

Consider the following programs and their ensuing problems. In the following Table we comment on many of the new Appropriations and their less that positive impacts. In looking at the details in the Bill itself it is truly packed with Pork, which actually makes it more problematic.

Table 2. COMMENTS ON APPROPRIATIONS ADDITIONS HR1

Details	*Problems*
appropriate $248 million for Inspectors General	**One would suppose this is for added investigations specifically against the Bush Members.**
An estimated $20.0 billion over the next five years to temporarily increase the Nutrition ie Food Stamps	**Food Stamps for unemployed children then requires school staff which then get pensions which then is added to real estate taxes which is then highly regressive especially to those on fixed incomes.**
$2.8 billion to expand broadband Internet service in rural areas	**We have shown that there are a miniscule number of people lacking service and this is a boondoggle of funding. The Bill mandates the States select the markets which mean States are now marketers and these further increases the chance of illegal dealing as is common in Illinois and other states.**
About $4 billion for programs to develop rural communities and improve infrastructure	**This is another broadband package.**
$3.0 billion for grants to improve the criminal justice system,	**Unknown, just another State handout.**
$3.0 billion for grants to fund science and technology research as well as	**A worthy addition but not one which will have immediate GDP impacts.**
$1.0 billion for periodic censuses and programs,	**The census is already funded.**
$2.8 billion for grants to extend broadband Internet services;	**Another broadband boondoggle.**
$1.0 billion for programs of the National Oceanic and Atmospheric Admin	**This is a Global Warming love fest.**
$1.0 billion for the Community Oriented Policing Services program; and	**This is community organizing to insure Democrats remain in power.**
$2.4 billion for other activities.	**Unknown**
$4.5 billion to the Department Defense Construction	**This is for "greening" DoD facilities.**

Details	Problems
$18.5 billion for energy efficiency and renewable energy programs energy-related grants to states);	**This is "greening" State facilities.**
$8.0 billion to cover the subsidy costs of federal loan guarantees for renewable energy systems and electric transmission projects;	**This is another "greening" project**
$6.5 billion for capital investments by certain federal power marketing administrations in electric power transmission systems;	**This is problematic. Who will decide where to build this grid and who will own it and what prices will be charged to use it. The problem is where will the sources of wind/solar etc be located and will this favor certain people and then how does it connect. This is NOT a TVA like project.**
$4.5 billion to modernize the nation's electricity grid; and	**Same as above.**
$6.4 billion for various other activities.	**Unknown**
$8.7 billion to promote energy efficiency	**This is some vague set of giveaways for "greening"**
$1.1 billion for a variety of programs	**Unknown**
$15 billion, for safe drinking water	**This is for projects related to drinking water. This is a massive amount of money for an ill defined program with no oversight.**
$20.4 billion for programs administered by the Department of Health and Human Services	**Unknown details.**
$4.6 billion for employment and training programs	**Some form of training programs.**
$20.0 billion to renovate elementary and secondary schools;	**New school construction. Will most likely be allocated to favored cities and states.**
$17.6 billion for Pell grants and other student financial assistance and facilities at	**This just puts more burdens on those already burdened. The problem is the Govt has forced so much overhead on education, especially higher education and this is what is driving costs up!**
$29.1 billion for other education programs aimed particularly at elementary and secondary	**This is just another vague set of handouts for local schools in favored districts. At least the No Child Left Behind had goals. This is goalless and no thought has been applied.**
$6 billion budget authority for military construction	**Greening buildings.**
$30.0 billion for highway construction;	**This may have some thought! They all should be like this. But it takes time!**
$13.1 billion for other transportation programs administered by DOT;	**Unknown. May be some FAA programs but they have generally been delayed disasters.**
$11.1 billion for housing assistance programs administered by HUD; and	**Unknown, may be mortgage assistance**
$5.2 billion for grants to states and cities for activities related to community development	**These are the State handout programs for California and those states whose legislators have been grossly incompetent. Now we all pay!**
$39.5 billion available to states each year	**As above!**

The greatest problem with the new Appropriations is that the details have not been discussed and there may very well be enormous time bombs in each and every one with costs pushed out into the future. There are many new entitlements created and massive Government expansion.

3.2 Direct Expenditures

The following Table lists the Direct expenditures, increases to existing Appropriations. These amounts to almost $250 billion, a massive increase.

Table 3. DIRECT EXPENDITURES HR1

Element	Summary		Total
Title I - Tax Provisions			
Estimated Outlays			**$79,964**
Title II - Assistance for Unemployed			
	Workers and Struggling Families		
	Extend Emergency		
	Unemployment Benefits		
Estimated Outlays			**$27,050**
	Other Unemployment Compensation		
Estimated Outlays			**$11,075**
	SSI, TANF, Child Support		
Estimated Outlays			**$7,534**
Title III - Health Insurance Assistance for the Unemployed			
Estimated Outlays			**$13,340**
Title IV - Health Information Technology			
Estimated Outlays			**$20,231**
Title V - Medicaid Provisions			
Estimated Outlays			**$88,851**
Total Direct Spending			**$248,045**

3.3 Revenue

Finally is the Revenue impact of $188 billion. There are a few elements all aimed at lower middle class and lower class citizens. There is an extension of unemployment, which is a simple and necessary step and a payout to SSI recipients who it appears would not be eligible for a tax rebate. Then the tax relief is in the form of time delayed reductions of withholding. The risk is that one may obtain a delayed withholding and then lose a job and end up on unemployment. The timing of the tax impact is very diffusive but still greater than the Appropriations.

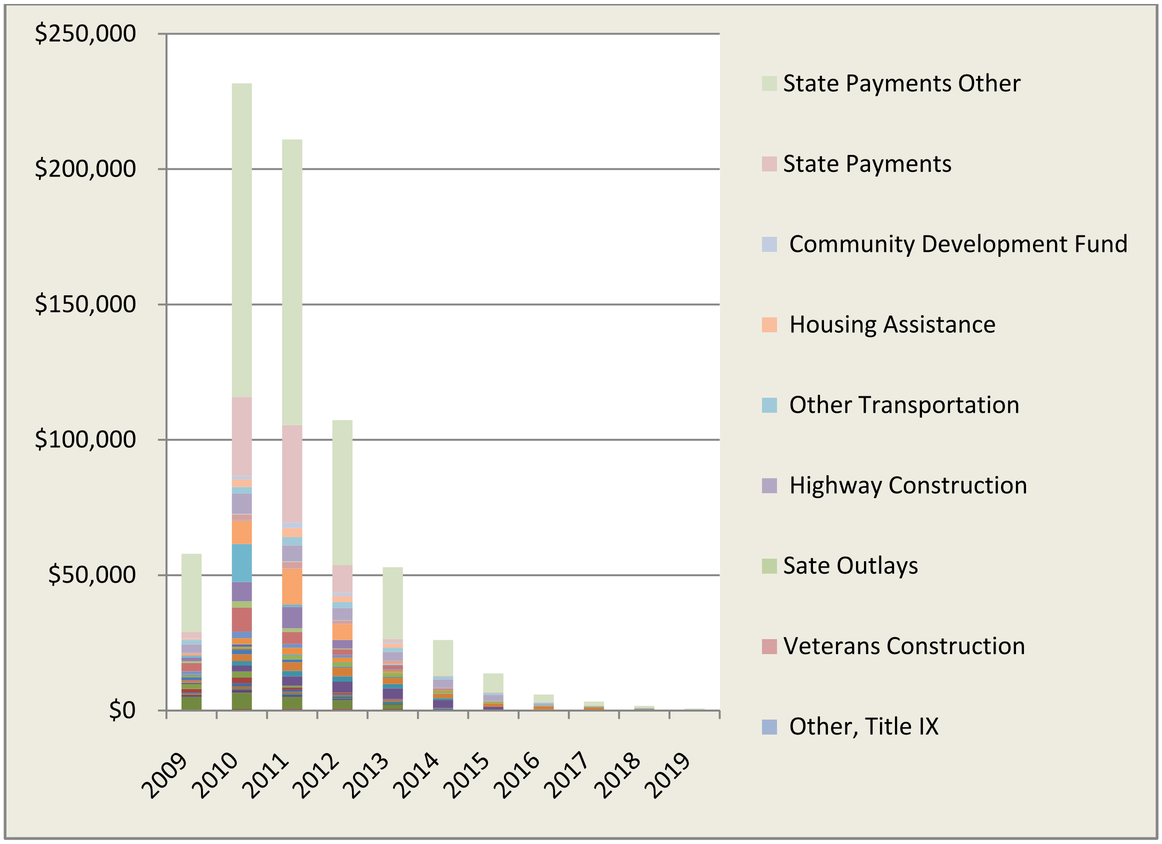
Table 4. REVENUE IMPLICATIONS HR1

Element	Detail		Total
Title I - Tax Provisions			**($187,702)**
	For tax years 2009 and 2010, create a refundable tax credit of up to $500 for a single taxpayer ($1,000 for joint filers), to be phased out for taxpayers with income above certain thresholds. It is anticipated that the credit would be partially reflected in reduced income-tax withholding from paychecks.		

Element	*Detail*		*Total*
	Extend through 2009 provisions that allow businesses to partially expense (immediately deduct from taxable income) a portion of their investment in most equipment and extend the period for which unprofitable firms,		
	Modify an existing nonrefundable tax credit for higher education expenses to increase the maximum credit allowed to $2,500, lengthen the period for which the credit may be claimed to four years, expand the list of qualifying expenses, and make up to 40 percent of the credit refundable.		
	Expand the opportunities for state and local governments to issue tax-credit bonds and allow state and local governments to receive a refundable tax credit for specified interest expenses. J		
	Extend by three years the tax credit for renewable energy production from various qualifying facilities, including wind, biomass, geothermal, and hydropower facilities.		
	For tax years 2009 and 2010, increase the earned-income tax credit for taxpayers with three or more qualifying children to 45 percent of their eligible earned income, and eliminate the limitation on the amount of earned income used to calculate the refundable portion of the $1,000 child tax credit.		
Title II - Assistance for Unemployed Workers and Struggling Families	Extend Unemployment		**($610)**
Title III - Health Insurance Assistance for the Unemployed	SSI One Time Payment		**($26,692)**
Title IV - Health Information Technology	Payback from Savings		**$3,185**
Total			**($211,819)**

4 ANALYSIS

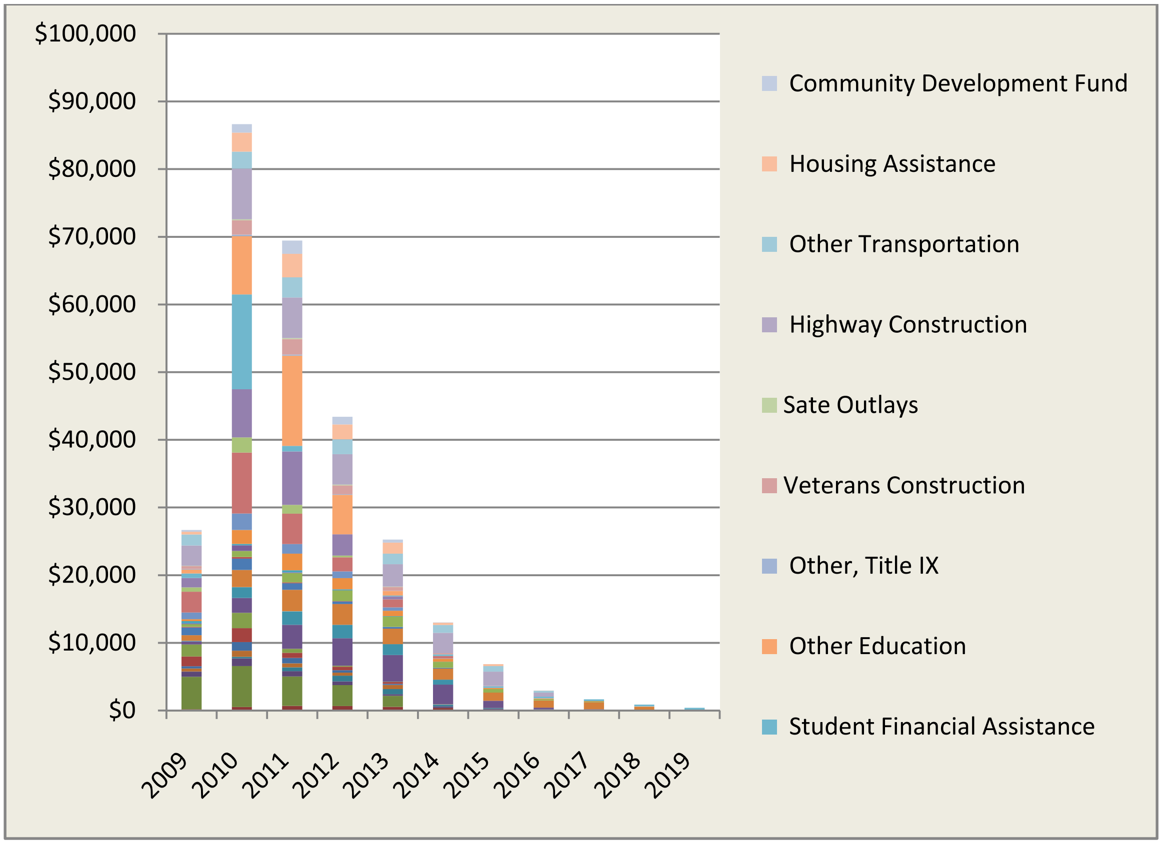
We now analyze these programs in a bit more detail. The following charts show their distribution in time. The CBO has taken the programs then demonstrated when they will impact. We have taken them and shown this graphically. The first is below and it included the State payments.



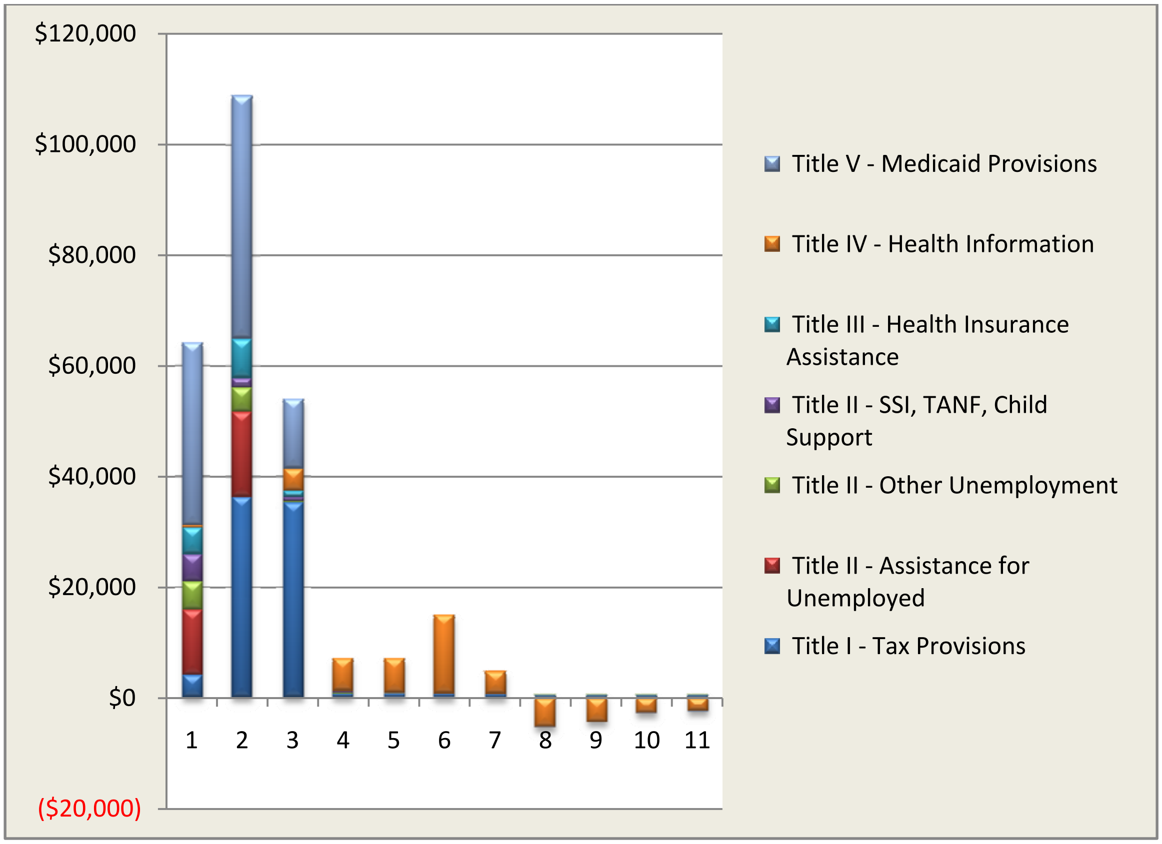
The chart shown here is a summary of the HR1 Budget for added spending to the amount of almost $900 billion. Several interesting observations. This does NOT include the $80 Billion going to the States! Those payments almost dwarf everything else. Instead of the States curtailing expenses this Budget which is atop of the already bloated budget sends almost half a Trillion to the States. Yet one may ask which States? California Yes, Texas NO! Fair, unlikely!

Also there is $250 Billion in Other which is mostly PORK and $210 billion in Tax impact most of which is income redistribution. Anyone who is interested in this MUST read through the CBO HR1 Report issued 25 January 2009. This will establish a tremendous potential for financial collapse of this country! Also just look at the timing. There is only $30 billion for infrastructure spread out over 10 years! As they say, you just can't make this up!

The following is with the State rebates removed. The change is massive.



The following Chart if for the Increased Expenses from previous Appropriations. The major portion is over three years and there is a continuing tail for the Health Record program. We have already argued why we believe that program has significant faults.



5 GDP IMPACT

The question then is what effect these costs will have on GDP. We briefly look at these and we believe they will have little if any. We look at two elements and then the effect. Firs we consider the multiplier factor and then the fact that spending in any period cannot be impulsive but is spread out and its effects are also diffusive.

5.1 The Multipliers

The first effects we will review are the multiplier effects. That is for every dollar of government spending or tax cuts what will be the result on the GDP. The following summarize those effects for these two in terms of the multiplier.

5.1.1 Government Multiplier

First we take a look at the change in g, government spending on these equations. We take the differentials to obtain:

$$dy = \frac{\partial c(y - t(y))}{\partial y}[dy - \frac{\partial t(y)}{\partial y}dy] + \frac{\partial i(r)}{\partial r}dr + dg$$
$$dy = c'(dy - t'dy) + i'dr + dg$$

The equation regarding the money balance can be written simply if we assume M and P are constant and exogenous to yield:

$$0 = d'dr + k'dy$$
$$dr = -\frac{k'}{d'}dy$$

Solving for dy we obtain:

$$dy = \frac{1}{1 - c'(1 - t') + \frac{i'k'}{d'}}dg$$

That is we have for the Government multiplier the following:

$$dy = M_{Govt}dg$$
$$where$$
$$M_{Govt} = \frac{1}{1 - c'(1 - t') + \frac{i'k'}{d'}}$$

This is the multiplier that takes a dollar of Government spending and turns it into y income increase. The key point is to note that this depends on some many variables which we have no knowledge of. Econometric studies have shown that this is 1.05 to 1.2 at best and even there we have serious doubts. There are some many other factors that must be eliminated as well as just plain noise. It is also possible that it is a less than one multiplier in certain circumstances. So much depends on the c derivative concept.

5.1.2 Tax Multiplier

In a similar manner we can obtain the tax multiplier. It is given by:

$$dy = M_{Tax}dt$$
$$where$$
$$M_{Tax} = \frac{-c'y}{1 - c'(1 - t') + \frac{i'k'}{d'}}$$

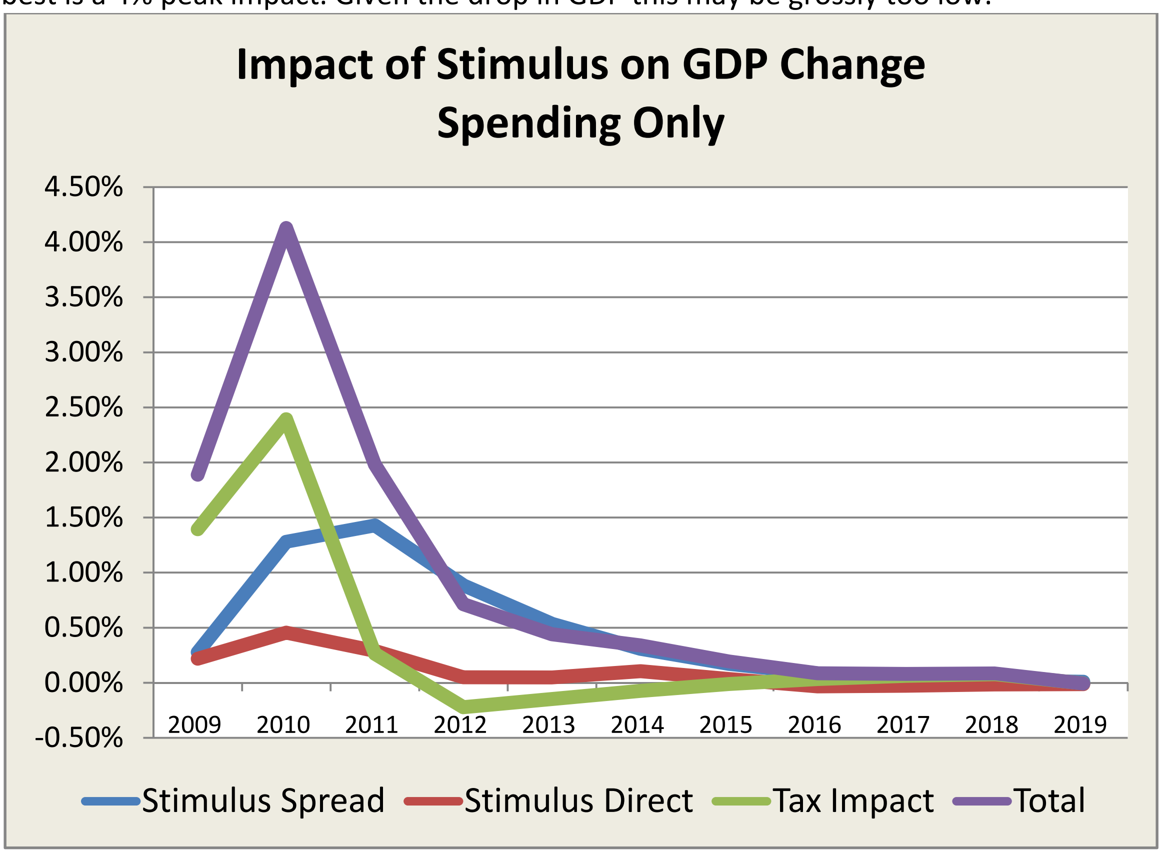
These multipliers have significant impact as we are seeing with the Obama Incentive packages for the current economy. If tax incentives are greater than government spending then we should do them. Yet after almost eighty years after Keynes we still do not have a clue which one is better. It becomes a political solution of who gets the most; the pigs feed at the trough.

5.2 Diffusion Effect

The next effect is the time effect of how long does it take to get the spending into the economy and then to actually take effect. There are many models of this diffusion phenomenon but we use the simple one of 20%, 40%, 30% and 10%. This means that the year of the spending results in a 20% impact and the other percentages are spread out over the next three years. One can play with the percentages and the time intervals, but this choice seems from past data to be reasonable.

5.3 Impact on GDP

By combining these factors we obtain the following impact on GDP with the proposed spending in this HR1 Bill. We include the effects of the three elements and the total effect. We see the tax impact is the greatest but of shortest duration and the total at best is a 4% peak impact. Given the drop in GDP this may be grossly too low.



A simple analysis of the proposed stimulus can reveal what its impact could be on the economy. We plot the percent change in GDP as a function of year for the three components. They are Discretionary, Direct and Revenue. This means new stuff, stuff there but more and tax relief. To do this correctly we must add two factors. First nothing happens instantly. Discretionary takes time to get out there, we assume three years with a burst, a peak and a drag. Then we use GDP multiplier of 1.1 to 1.3 for Discretionary and 1.2-1.4 for tax. This shows that the GDP from Q4 2008 may pop up 2% in 2009 and at best 4% in 2010 and then down to 2% and then flop. It is assumed that we have no more great endogenous drops in GDP, other than say 4% in 2009 so that the up 4% and down 4% means we stay even. However, if the money does not get out there and if the multiplier does not work, and if the economy keeps falling then this will make no difference other than getting further in debt.

We will continue watching this. I cannot see why others seem not to look at this impact. For us engineers this is a simple RC circuit follower by a gain adjusted amplifier. However there is some feedback in there which may go unstable yet!

5.4 The White House Plan

The following Table is the Romer and Bernstein estimates of the effects of having this package and if the package is not affected. The effect of Package Increase GDP by 3.7% Increase jobs by 3,675,000. However the increase in the GDP of $433 billion costs the taxpayers $775 billion, a somewhat unbalanced number.

Table 5. AGGREGATE EFFECT OS THE RECOVERY PACKAGE ON GDP AND JOBS IN Q4 2010

	Real GDP (billions of chained 2000 $)	*Payroll Employment*
Without Stimulus	$11,770	133,876,000
With Stimulus	$12,203	137,550,000

The following Table depicts, without any discussion of what the real efforts will be, of the impact per sector.

Table 6. EFFECTS OF THE COMPONENTS OF THE RECOVERY PACKAGE ON JOBS IN 2010Q4

Component	Total Effect	Direct Effect	Indirect Effect
Energy	459,000	305,000	153,000
Infrastructure	377,000	236,000	142,000
Health Care	244,000	166,000	78,000
Education	250,000	166,000	83,000
Protecting Vulnerable	549,000	140,000	409,000
State Relief	821,000	442,000	379,000
Making Work Pay Tax Cut	505,000	0	505,000
Business Tax Incentives	470,000	0	470,000
All Components	3,675,000	1,456,000	2,219,000

The above Table does have some major concerns. They are:

1. The Making Work Tax cuts are really low income give-aways and it is not at all clear what they will accomplish.

2. The Business Tax incentives include the $3,000 per new employee tax credit which experience has shown is problematic at best and takes a great deal of time to implement. The benefit can generally be found in large service business with low income per employee and at the end of the tax advantage period the employees may be let go. This is generally not a value creating or a sustainable plan.

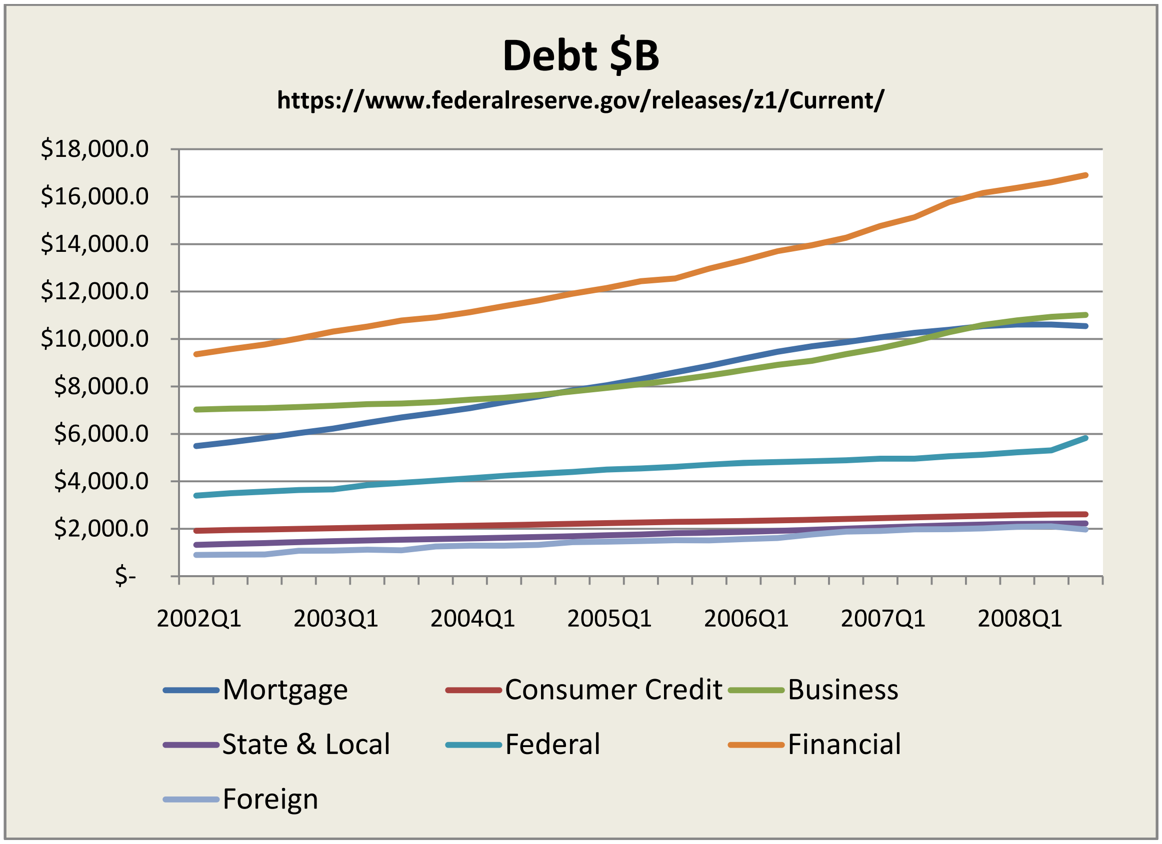
3. The Stat Relief plan is merely throwing good money after bad. It is bailing out California where the State has become dysfunctional. There is negative value created here yet it does keep State Union workers on the payroll.

4. Protecting the Vulnerable is increased unemployment and food stamps. Generally useful as a stop gap but it has de minimis effect on the GDP.

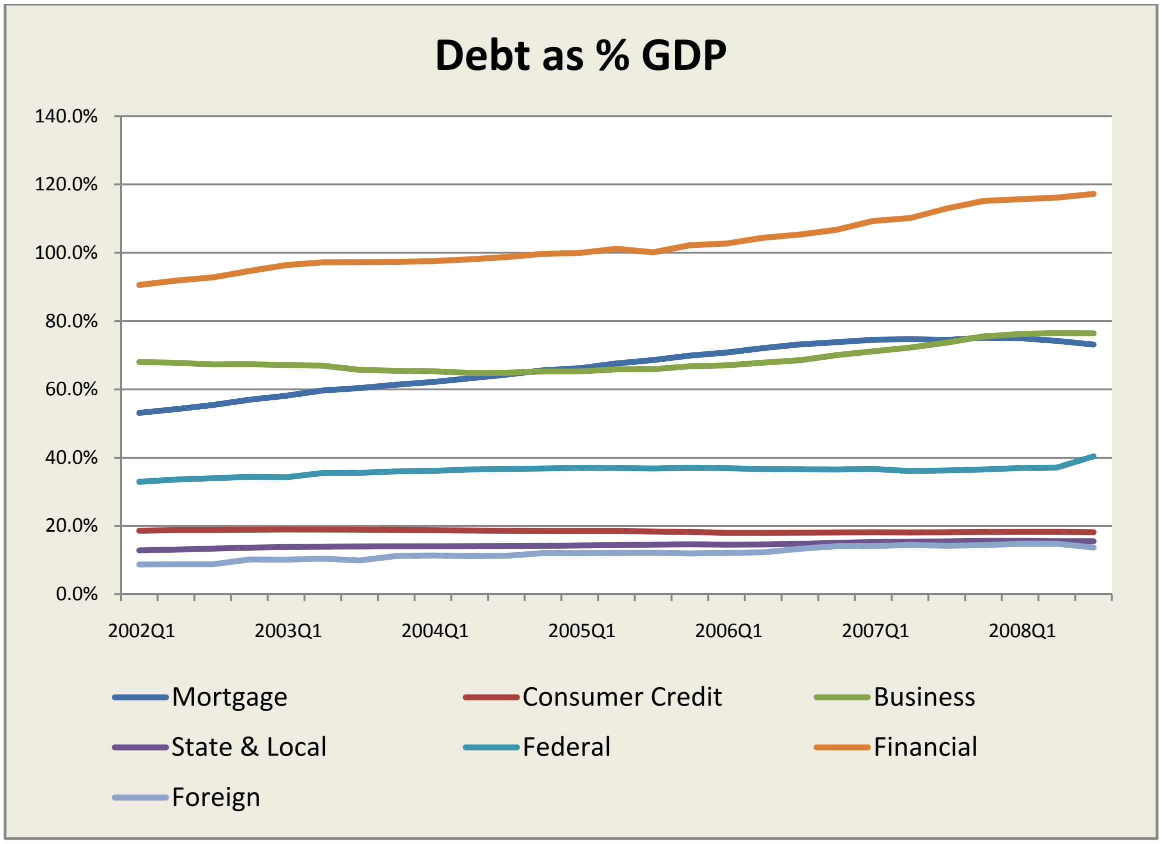
5. The Energy, Infrastructure, Healthcare and Education are all Government programs. We generally have commented on them in previous White Papers but they are what one would expect.

6 INFLATION AND DEBT

We now want to briefly want to determine what the impact will be on debt and inflation. The debt is shown in the following Figure. This is total debt.



Note in the following we have the debt elements as a percent of GDP. This is through Q3 2008. Federal Debt is somewhat stable from 2002 through 2008. Financial Debt and Housing Debt has increased with Financial being the greatest contributor. The problem, however, is that if we add 2-3 Trillion in Federal Debt this is a massive increase in debt, and then we have to consider what the effect on M2 will be. It may very well get absorbed, cause no change in the GDP and thus have no effect. Or it may cause massive inflation.



Now look at the impute inflation, this is what it will look like if we suddenly break this ice jam. We are looking at a potential of substantial inflation rate and we have not even touched the Democrats spending spree. More on that latter. It really is worth looking at the CBO HR1 analysis of the proposal. Even better look at the details as to where all of this is going. The Democrat House is going absolutely wild. This will make for a few thousand PhD theses in economics, if they don't go out and hunt every one of them down first!

The derivation of the inflation rate is based upon the Dornbusch analysis. Recall that we have the following identify of:

$$MV = PY$$

Where M is the M2 supply, V the velocity of money, Y the GDP and P the price index which is reflective of inflation. Now if we differentiate and divide each side we obtain[3]:

[3] See Dornbusch R., and S Fischer, Macroeconomics, 5th Ed, McGraw Hill (New York) 1990. pp 643-645.

$$\frac{\partial(MV)}{\partial t} = \frac{\partial M}{\partial t}V + M\,\frac{\partial V}{\partial t}$$

$$or\ \ defining$$

$$m = \frac{\partial M}{\partial t}, v = \frac{\partial V}{\partial t}$$

$$\frac{\partial(MV)}{\partial t} = mV + Mv$$

and dividing through on this side of the equality we have:

$$mV + Mv =$$

$$m\frac{V}{MV} + v\frac{M}{MV} = \frac{m}{M} + \frac{v}{V}$$

we can also state for the PY relationship side the following:

$$\frac{\partial PY}{\partial t} = pY + Py$$

$$where$$

$$p = \frac{\partial P}{\partial t}, y = \frac{\partial Y}{\partial t}$$

$$yielding$$

$$\frac{p}{P} + \frac{y}{Y} = \frac{m}{M} + \frac{v}{V}$$

this yields the relationship for which we can determine the implied inflation. Since p/P is the normalized inflation rate we readily obtain it from the above. Namely

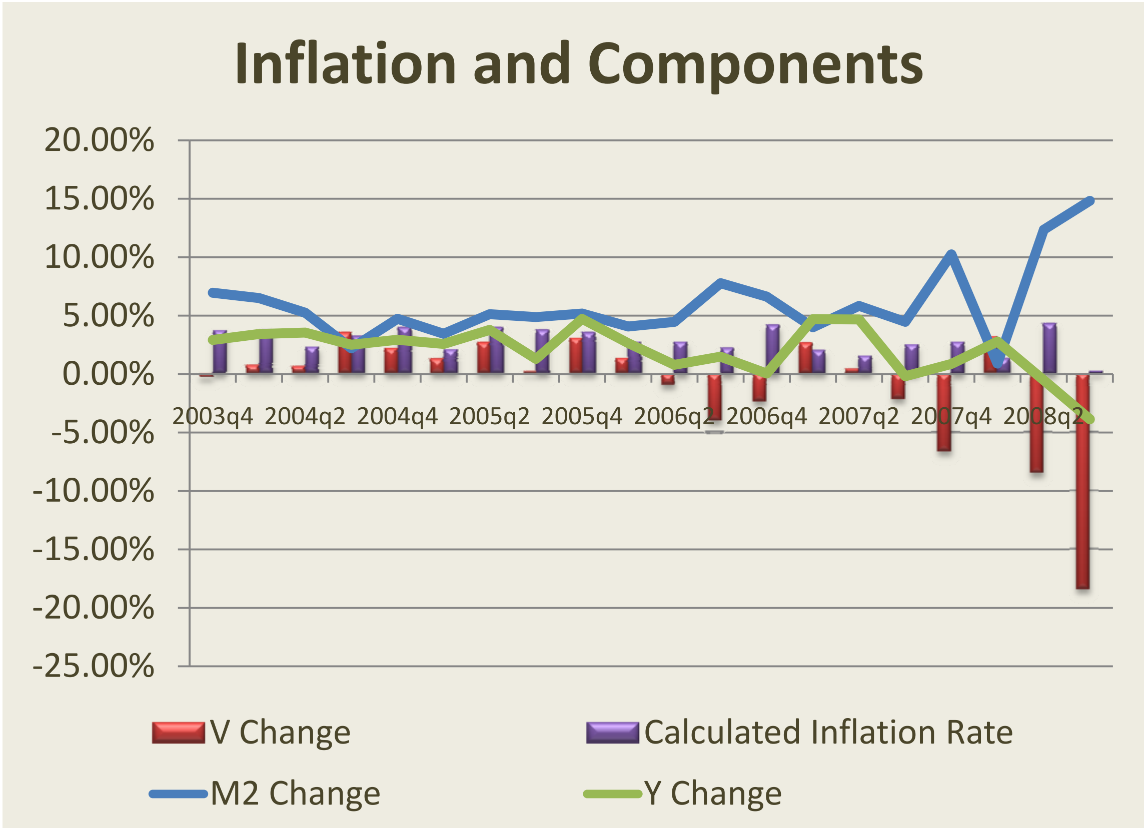
$$\frac{p}{P} = \frac{m}{M} + \frac{v}{V} - \frac{y}{Y}$$

$$or$$

$$Inflation = Change\ in\ Money\ Supply\ \% + Change\ in\ Velocity\ \%$$

$$\text{-}Change\ in\ GDP\ \%$$

We now use the data for M2, the GDP, and V as we have derived it from current data. This is shown in the following Figure.



Note that we have an inflation rate of 3-4% per annum in all of the quarters and then it suddenly drops despite the increase in M2.

7 CONCLUSIONS

After slogging through the various versions of the current economic stimulus proposals we have come to a slightly different one; after Jonathan Swift we will call it a "Modest Proposal". Since we are not seeking election, and since most likely if I ever ran I would not be elected anyhow, I can feel free not to seek to buy votes as those in our Congress seem to do with their current proposal. Let me begin:

1. Tax Reform: Simply the first step would be a Tax Reform, not spending, and a long term reform. We all know from the now famous Romer and Romer paper that long term tax reform has the largest multiplier on GDP so let's go for it.

i. Eliminate all Corporate Income Tax for all entities except Financial companies whose Tax should be increased to a minimum of 70%.

ii. Eliminate all Capital Gains Taxes except for Financial companies whose tax should be 90%.

iii. Eliminate all Estate Taxes

The result would be a swarming of companies to do business in the US from everywhere, we would become the corporate tax haven of the world.

2. Re-institute the Bank of the United States

This would be a new Bank of the US which would take all of the bad assets that are on the books of the banks and replace them with cash, and then the new bank would work out the problems with the mortgages. Obtain equity from the Banks in return and in addition use the equity to wipe out current shareholders! Control salaries to be pari passu with Federal salaries. After all they would become public utilities.

3. Avoid the Establishment of Gigantic Tails of Unfunded Mandates

This Bill is a massive thrust which creates non-sustainable ongoing mandates. The costs of those mandates may very well land on local taxpayers as massive long term increases in real estate taxes. That must be avoided at all costs.

Just a thought!