



ATLANTIC CAPITAL MANAGEMENT

AN OVERBURDENED RECOVERY

Monetary and Fiscal Inaccuracy Are Set to Force Another Contraction

SPECIAL INVESTMENT RESEARCH REPORT
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Pages 1 & 2	<p>Introduction</p> <p>During the Great Inflation the US Economy became monetized. Mistaken credit and interest rate policies encouraged household savings and credit manufacturing, directly leading to the runaway inflation of the 1970's. Those savings have never been reconciled with the real economy. The result has been asset bubbles and undesirable household activities: adding debt while spending well above income. The Federal Reserve and US Government have combined to encourage and amplify these destructive behaviors, and now threaten the recovery.</p>
Page 3	<p>Part 1 – The Inventory Economy</p> <p>The Federal Reserve uses “output gap” calculations to set monetary policy, including interest rates.</p>
Page 4	<p>At the heart of the “output gap” is the traditional inflation/wage tradeoff of the Phillips Curve, and it worked in the inventory economies of the 1950's and early 1960's – before the savings bubble.</p>
Page 5	<p>Figure 1 – Postwar US economic history showing how monetization has affected the post-1984 economy, severing the strict Phillips Curve relationship.</p>
Page 6	<p>Interest income rose significantly with savings accumulation so that by 1968 the Phillips Curve tradeoff was being overtaken by a new marginal spending factor.</p>
Page 7	<p>Chart 1-1, Interest Rates. Chart 1-2, Household Savings Rate vs. Household Deficit Spending. Chart 1-3 Interest, Dividends and Government Transfers as % of GDP.</p>
Page 8	<p>Part 2 – Monetization</p> <p>Interest Rate policy begins to invert.</p>
Page 9	<p>Rate policy is a primary culprit in inflation-building, and inflation itself was the proximate cause of 1970's contractions.</p>
Page 10	<p>The overdone interest rates of the early 1980's fundamentally altered marginal economic factors that the Fed never recognized. Chart 2-1, Profits and Wages as a % of GDP.</p>
Page 11	<p>Chart 2-2, Total Inventories as % of Total Goods GDP. Chart 2-3, Total Inventory and Inflation. Chart 2-4, Inventory Growth vs. Corporate Credit and Trades Payables.</p>
Page 12	<p>Chart 2-5, Total Goods Spending, Inflation vs. Volume. Chart 2-6, CPI over PPI. Chart 2-7, Corporate Rate Spreads.</p>
Page 13	<p>Part 3 – The High Cost of Savings</p> <p>Monetary authorities never addressed credit capacity issues, instead expanded the mismatch. The recovery in 1983 and 1984 initially looked like traditional recoveries.</p>
Page 14	<p>Credit overproduction began to flow into equity asset prices, hiding inflation from the “output gap”.</p>
Page 15	<p>Net worth growth allowed the savings rate decline post-1984 when rates did not finance deficit spending (which was rising dramatically). Upside down rate policy played a huge role in the 1990 recession.</p>
Page 16	<p>The recovery after the 1990 recession was the first “jobless” recovery because of low interest rates. The final growth recovery stage came from net worth growth due to asset price action in stocks.</p>

Page 17	Fed policy throughout the 1990's distorted household spending and saving, while adding to the credit overcapacity problem with its mistaken calculation of a positive output gap.
Page 18	Chart 3-1, Equity Flows. Chart 3-2, Credit Growth Breakown.
Page 19	Part 4 – Changing Face of Credit The S&L collapse of the early 1990's (beside being predicated on risky activities due to inaccurate rate policy) allowed GSE's to dominate mortgages.
Page 20	GSE's crowded out traditional intermediaries, and they began to seek alternate uses of funds. The 2001 recession and the second jobless recovery.
Page 21	The affects of the stock bubbles allowed households to begin to add debt and start the housing bubble. The scope of the current contraction is a function of the distorted recovery of 2003.
Page 22	Chart 4-1, GSE Role in Mortgage Market. Chart 4-2, Household Balance Sheet.
Page 23	Part 5 – The Point of No Return Savings vehicles changed to search for lost yield as the Fed slowly decreased rates but never accounted for deficit spending or asset inflation. This led to a mismatch between net worth generation through equities, and deficit spending needs. The low rates encouraged broad debt usage by households to make up the "maturity" mismatch.
Page 24	GSE's scandals could have reduced credit capacity but shadow credit market filled in. Fed action taken during the 2008 crisis is keeping household spending weak while creating no positive parameters.
Page 25	The Fed has signaled a willingness to keep rates low for the long haul, capping marginal asset income. Meanwhile fiscal policymakers will allow 2003 "Bush" tax cuts to expire, affecting a massive tax increase for the beginning of 2011, affecting expectations in 2010.
Page 26	Consumers are restrained by negative wage growth and extremely low marginal asset income. As a result, spending on goods has disproportionately declined, leading to inventory declines.
Page 27	Government spending is trying to make up the difference in lost "demand", but is creating more problems by distorting the reallocation process of the contraction, and confiscating private capital.
Page 28	Fiscal and monetary policies are distorting inflation expectations.
Page 29	Distorted expectations are already beginning to produce affects in bond rates, including large central bank (foreign and Fed) purchases of US sovereign debt to keep interest rates from accelerating.
Page 30	Low US Treasury rates are a function of foreign purchases and money market fund allocations. These are a result of fear, and have been reversing as rates rise.
Page 31	Commercial paper is an alternate investment vehicle for money funds, and may be turning around at the expense of US Treasury rates. Regulatory changes to QSPE's are limiting credit growth.
Page 32	Almost half of credit growth since 2007 has been in anticipation of accounting changes, and the Fed's balance sheet activities. But the US Treasury is going to need much more credit growth just to finance its huge 2010 deficit.
Page 33	Without solid credit expansion there will be a competition for funds, meaning rising interest rates across all maturities and borrowers. Rising rates will confirm inflation expectations adding to negative pressures.

Page 34 Chart 5-1, Home Equity Loans. Chart 5-2, Corporate vs. Treasury Rates.
Chart 5-3, Foreign Purchases of US Treasury Debt.

Page 35 Chart 5-4, Current Accounts and Foreign Acquisition of US Assets.

Part 6 – Federal Depression

Policy changes in Healthcare, energy, labor and taxation could mimic deflationary pressures, leading to a worse contraction.

Page 36 Healthcare reform, as proposed, will act as an employment tax while simultaneously expanding health costs, and therefore government confiscation of private capital.

Page 37 Energy, cap and trade bill as proposed, will lead to dramatically higher electricity rates, acting as a tax on consumer and business energy users (everyone).

Page 38 Labor reform, card check as proposed, will create pressure for more universal unionization while causing labor market inflexibility – similar to Japan’s lost decade and wage pressures here in the 1970’s.

Rules changes to business offshore profit sheltering will endanger the profit-led recovery, and create pressures to further cut costs. A national VAT will destroy consumer spending.

Page 39 Corporate rent seeking to stifle competition reduces the efficiency of the economy. Longer-term job growth has already been stifled by growing inefficiency from the union overhang of the 1970’s, environmental regulation, and entitlements via government transfers.

Page 40 Chart 6-1, Employment Taxes vs. Retirement Burdens. Figure 6-2, Job Growth Struggles and Labor Market Dispersions.

Pages 41 - 43 **Conclusions**

Pages 43 - 45 **Endnotes**

INTRODUCTION

AN OVERBURDENED RECOVERY

Monetary and Fiscal Inaccuracy Are Set to Force Another Contraction

We wrote in our January 2009 Special Report that we expected a recovery to begin forming in March or April. The economy is moving as we thought with the first stage of the recovery nearly finished – the cost cutting. The second stage of the recovery is now underway as consumers and businesses begin to resume spending that was suspended during the worst of the downturn. But those two stages are not enough to return an economy to stable growth. The final stage, the growth phase, has been the trickiest part, at least since 1982.

That is why we took an extra two months to analyze a lot of primary data (under normal circumstances we would have issued a report in June). Knowing how, or if, an economy can make it into that third stage is the million dollar question.

Our analysis shows that the economy of today does not operate as it did before the Great Inflation. That may not seem a very profound statement, but the reality behind it is (and it is not at all like the academic version passing as conventional wisdom). During the late 1970's, as inflation spiraled out of control, the economy became monetized. This report will spell out in detail exactly how a monetized economy functions differently. In those details lie the clues to the growth stage of the current recovery, and ultimately whether or not that stage will even emerge.

In the postwar period up to 1960, there were four recessions, including a double-dip recession in 1957 and 1960. Those contractions were short, deep and featured quick recoveries. The recessions of the 1970's also looked a lot like their earlier counterparts, but by the double dip recession of 1980 and 1982 something had changed. The recessions of 1990 and 2001 were shallower and had much slower recoveries, and had trouble transitioning to the growth stage.

The role of manufacturing has declined over the past three decades while the service economy has become a dominant force, but that in itself is not the cause of the changes. The early recessions of the 1950's were mostly products of inventory corrections. Since manufacturing accounted for more than 50% of the economy, cutting production to work through overdone inventory stock would be enough to cause the economy to contract. As inventories were worked through, employment fell, which caused incomes and spending to fall.



And inflation would follow both the booms and the busts (the world of the Phillips curve).

Since the majority of households had little savings, income through employment was the largest factor in marginal spending. But the Great Inflation was, at its core, a period of massive savings. It had to be since that inflation was a direct result of too much credit (as we detailed in our June 2008 report). Credit growth would never have occurred without a predicate growth in savings.

As inflation receded during the worst of the 1982 contraction, the savings did not. Perhaps this is the most misunderstood part of late 20th century economics. The Fed took credit for defeating inflation, but what it really did was cause a shift in savings instruments, producing the monetized economy. The Fed's distortions of interest rates fundamentally altered the business of financial intermediation, while pushing households into deficit spending and businesses into trading ownership.

These changes, along with Federal Reserve hubris and mistaken calculations, produced the asset bubbles. By retracing the history of the monetized economy the prospects for a full recovery becomes clear. Monetary and fiscal policy enacted as a result of the last year's financial panic and deep economic contraction are old-time strategies appropriate for the **non-monetized** economy of the 1950's. In fact, misaligned interest rate policy is the biggest factor in the longer, shallower recoveries of the early 1990's and 2000's.

Universal to all recoveries are favorable profit and spending environments. The conditions necessary for both of those in a monetized economy are explicitly different than in a non-monetized, inventory-based economy.

The application of that monetary and fiscal misalignment has tracked the economy away from a final, growth recovery. More worrisome, the proposed fiscal redistribution is poised to mimic the worst policies of the 1930's.



Part 1 The Inventory Economy

The Federal Reserve sets monetary policy based, in large part, on its calculation of the economy's "output gap". It measures what it sees as the economy's potential vs. how fast the economy is actually growing. Using inflation as the central mechanism, if economic growth is below its potential the economy will have a positive output gap – economic and employment growth are not stimulating inflation so the Fed can be more "accommodative" in bringing the economy toward full employment. It does so by keeping interest rates low, discouraging bank reserve balances, and keeping credit conditions loose. The opposite condition, known as a negative output gap, shows rising inflation and employment, requiring tighter monetary conditions to slow the economy and inflation.

Monetary conditions in the 2001 – 2003 period were a perfect example of the Fed's output gap calculations. Inflation was extremely low during the recession of 2001 (the short-term Phillips Curve tradeoff we showed in our June 2008 Special Report) giving the Fed room to reduce short-term rates below 2% by December 2001¹. Inflation began rising in the middle of 2002 but the Fed was still reducing interest rates and implementing an accommodative credit policy. Rates were kept near 1% until April 2004, a move that is now widely criticized as the birth of the housing bubble (it wasn't the birth, it was another shift in the savings bubble).

Why would the Fed be so accommodative for so long?

The answer is its calculation and interpretation of the output gap. While inflation was rising in 2002 and early 2003 unemployment was also rising. Because of its Phillips Curve-based economic view, accelerating inflation not caused by wage inflation is nothing to be concerned about. There is a lot of writing and testimony by Mr. Bernanke and other Fed officials from the period that document their belief in wage-only inflation. From 2003²:

"...even very large movements of raw materials prices -- which are quite common by the way -- appear to have muted effects on intermediate goods prices and, most important, no discernible effects at all on final goods inflation. Presumably this lack of inflationary impact reflects the fact that raw materials are only a small part of total costs. As another figure in the briefing showed, unit labor costs -- which, of course, have been falling rapidly as productivity has surged and wage growth has slowed -- are far more important in inflation determination than are materials prices."

So they were accommodative in their monetary policy as long as their model of inflation was not wage-related, so consumers would be left to feel the brunt of commodity inflation. He went on to add:

"Finally, although output gaps are of course very hard to measure, the weight of the evidence continues to support those who believe that considerable slack remains in the economy."

Compensation of employees started to rise in 2003 relative to GDP, so that by 2004 it was steady enough to provoke a negative output gap movement and Chairman Greenspan's belated rate hikes. Those rate increases did nothing to curb inflation nor slow the economy. What did happen was an asset bubble (the second in six years) that the Fed helped engineer but never accounted for as the above statements vividly detail.

We spent a good portion of the June 2008 Special Report on why Fed policy was ineffective from a monetary standpoint. This report will break down the affects on the real economy.



Belief in the Phillips Curve comes from actual data, not just academic theory. Looking back at the early postwar period you can see why it became so ingrained in economics. There was no such thing as commodity inflation. The natural arrestors of the economy functioned quite well, and nearly unambiguously. If commodity prices rose too quickly businesses passing along the increases to their customers found, absent wage increases, a decrease in marginal demand for their products. That decrease in demand meant lower production, and lower demand for the commodity. The price rise is checked by a closed-loop system, and worked well as an arrestor with the modified gold standard physically limiting money and credit growth.

If, however, the economy reached full employment, the competition for labor meant a bidding war for those marginal workers. Wage increases allowed consumers to continue spending marginal income on price increases, allowing inflation to continue and spread. Since savings were a small part of household wealth, and debt for spending was exceedingly rare, wages functioned as the lynchpin of inflation. As long as wage growth and full employment were present, inflation could take hold, and the Fed could rectify the imbalance through a one-factor rate adjustment.

Rate policy has been the preferred tool of the Federal Reserve. It takes three stances with regard to rates, accommodative, restrictive, and neutral. When the output gap is positive then the Fed will be accommodative with rates, keeping them low to stimulate the real economy through borrowing. Conversely, a negative output gap requires restrictive rates, higher interest costs, which can deter marginal spending by consumers, but more importantly, marginal production by businesses.

Affecting the marginal production costs of business through interest rates comes as a necessary function of inventories. Inventories need to be financed either through direct loans from banks, bond or commercial paper offerings, or trade payables to other businesses. Trade payables shrink during periods of high interest rates as businesses have less balance sheet flexibility to offer more direct credit to

business customers. So as a matter of monetary policy, interest rates served to curb inventory growth as the primary method of controlling the economy. Less inventory building meant less employment, which meant less marginal spending, and so on. The mechanism for transferring any monetary policy is the inventory cost affect on business profitability. Our January 2009 Special Report detailed the relationship between marginal economic activity and business profitability.

All of the pre-inflationary recessions and near recessions (1948 – 1967, Figure 1) were really a function of inventory corrections. Each correction ended when inventories were allowed to decline beyond any shrinking demand. That overcorrection stimulated production and each contraction ended with an inventory buildup that was so substantial and fast-paced unemployment stopped rising within three to six months of the end of each recession.

Inflation was relatively mild through most of the period, with the notable exception of the Korean War buildup³. The high inflation of 1951 provoked a near recession in late 1951 and early 1952 that was completely inventory-driven. The Office of Price Stabilization was formed and kept inflation under wraps for the rest of the war period, but instead of a stable economy a contraction took place in 1953. Since price growth was limited this meant that businesses were no longer passing price increases to customers, leading to a period of unprofitability. So the inventory weakness beginning in 1951 lasted until 1955.

Fed policy in the 1950's alternated between accommodative and restrictive, often changing very quickly between the two. The bitter, deep contraction of 1957-58, a 10.4% annual rate of decline in the first quarter of 1958, was a product of inflation and Fed restrictions. Wage and inflation pressures were nearly non-existent coming out of the 1953-54 recession, allowing the Fed to be accommodative. In early 1955 wage pressures began to build as unemployment fell to 4.2% by the end of 1955. The Fed's accommodative stance continued though 1956, but by that time inflation was pushing above 4%, and wage growth was impacting profitability.

REAL GDP	1947-1	1947-2	1947-3	1947-4	1948-1	1948-2	1948-3	1948-4	1949-1	1949-2	1949-3	1949-4	1950-1	1950-2	1950-3	1950-4	1951-1	1951-2	1951-3	1951-4	1952-1	1952-2	1952-3	1952-4	1953-1	1953-2	1953-3	1953-4	1954-1	1954-2	1954-3	1954-4	1955-1	1955-2	1955-3	1955-4	1956-1	
Real GDP	4.5	-0.2	6	6.8	7.3	2.3	1	-0.8	-1.2	4.6	4.9	17.4	12.5	16.6	7.5	4.9	19.1	7	9.1	6.7	4.2	16.3	1.2	2.6	13.8	7.7	3.1	-2.4	-6.2	-2	15.4	15.4	15.4	15.4	15.4	15.4		
Business Operating Profit	17.62%	0.44%	6.14%	14.88%	5.04%	-2.74%	4.23%	-5.07%	-7.83%	5.02%	-11.40%	13.69%	13.50%	18.83%	8.47%	-2.60%	-0.53%	1.34%	2.12%	-6.49%	-6.11%	-1.18%	12.28%	2.40%	-2.08%	-3.19%	-18.96%	7.80%	3.46%	5.78%	9.48%	13.99%	3.01%	0.90%	2.23%	-4.79%		
PCE - Motor vehicles and parts	0.2	-0.55	1.4	0.75	0.86	0.33	0.7	0.54	2.8	0.55	0.07	1.33	0.82	4.23	-0.79	-1.34	-0.85	0.21	-1.48	-0.85	0.21	-1.48	-0.85	0.21	-1.48	-0.85	0.21	-1.48	-0.85	0.21	-1.48	-0.85	0.21	-1.48	-0.85	0.21	-1.48	-0.85
PCE - Furniture and household	0.51	0.06	0.93	-0.1	0.97	0.29	-0.27	-0.07	0.21	1.21	1.14	-0.21	-0.89	5.71	4.27	2.28	-3.24	0.4	0.46	0.05	-0.11	0.11	0.87	-0.16	0.17	-0.06	-0.02	-0.18	-0.06	-0.23	0.75	0.78	0.22	0.63	-0.08	0.11		
PCE - Nondurable goods	2.70	0.97	1.59	2.31	1.59	0.66	0.19	1.59	0.66	0.19	1.59	0.66	0.19	1.59	0.66	0.19	1.59	0.66	0.19	1.59	0.66	0.19	1.59	0.66	0.19	1.59	0.66	0.19	1.59	0.66	0.19	1.59	0.66	0.19	1.59	0.66	0.19	1.59
PCE - Services	1.09	-0.14	-0.37	1.57	1.16	0.96	0.54	0.34	0.41	0.3	0.24	1.43	2.71	1.28	0.97	1.4	0.52	0.67	0.18	0.91	0.96	1.04	1.33	0.77	1.15	0.46	-0.56	-1	1.9	1.58	1.02	1.54	0.6	0.9	1.75	0.93		
GPDI - Structures	-0.07	0.09	-0.19	0.31	0.4	0.46	0.27	-0.22	-0.29	-0.59	-0.36	0.69	0.71	0.81	0.35	0.04	0.49	-0.08	-0.53	0.04	0.11	0.12	0.35	0.41	0.27	0.09	0.28	0.18	0.12	-0.03	-0.06	0.45	0.35	0.47	0.35	0.48		
GPDI - Equipment and software	-0.15	-0.82	1.51	2.31	1.8	0.83	0.81	-1.82	-1.25	-1.27	-0.25	0.43	2.7	2.72	-0.44	-0.98	0.05	0.53	-0.23	0.16	0.33	-0.36	2.54	1.54	0.09	0.75	-0.69	-0.39	0.65	1.07	-0.03	0.23	1.36	1.46	0.11	0.19		
GPDI - Change in private invent.	-3.24	-3.7	5.57	2.26	4.26	1.56	2.3	-6.9	-6.08	-5.08	-5.02	10.72	14.7	13.2	11.32	-6.55	-6.65	-4.85	-5.17	0.71	-5.97	6.58	0.01	-1.11	-1.13	-1.34	-3.77	-0.58	-1.03	0.6	1.43	1.43	1.44	-0.45	1.39	0.49		
GPDI - Residential	-0.84	2.78	4.2	-0.27	1.36	0.74	1.74	-1.78	-3.4	1.75	2.07	3.1	2.76	1.66	-1.36	-1.46	-1.38	1.18	0.59	0.37	-0.21	1.17	0.34	0.06	-0.78	-0.16	-0.21	1.31	1.36	1.49	1.86	0.35	-0.55	-1.05	-0.57			
Consumer Credit	7.63%	6.51%	8.39%	8.29%	6.14%	5.01%	1.86%	1.83%	4.77%	4.95%	6.09%	5.13%	7.01%	9.72%	0.25%	4.53%	-1.81%	1.08%	2.20%	2.30%	6.23%	4.14%	6.52%	6.88%	2.73%	2.32%	1.33%	-0.56%	0.92%	0.95%	2.61%	4.29%	5.49%	4.82%	3.65%	3.97%		
Disposable Pers Income	-1.33%	1.69%	2.26%	2.78%	4.53%	3.6	-0.05%	2.81%	-0.26%	0.00%	0.67%	7.22%	-0.10%	3.74	2.73	3.21	2.06	0.78%	1.46%	0.38%	1.23%	2.67%	2.11	1.75%	1.56%	0.12%	-0.19%	1.08%	-0.08%	0.76%	1.89%	1.82%	2.08%	2.32%	1.43%	1.44		
Unemployment Rate	4.5	5.1	5.7	5.7	5.8	5.7	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3		

FIGURE 1
This figure shows the economic datapoints of several key inputs and outputs. The yellow datapoints are declining trends, the lavender are growth trends, with the white as steady or baseline trends.

The recessions before the Great Inflation show up as shorter periods of solid yellow, and the recoveries are nearly universal blocks of lavender. The pattern remains after the 1971 and 1974 contractions, but includes more sporadic weakness in business spending. The recovery of 1983-84 shows another solid block of lavender.

After 1984, there is much more yellow than the growth period of the 1960's. The recovery of 1991 is almost as solid yellow as the recession, and the lavender recovery never fully emerges (the closest is 1994 when interest rates are rising).

The same is seen in 2002 and 2003, the solid lavender recovery is absent until 2003-III. In both cases, there is significantly more yellow (weakness) than the recoveries of the pre-inflationary period.



Unemployment doubled as a result of the 1957-58 contraction, and for a time it was thought a rerun of the Great Depression was near.

In 1958 the Fed aggressively responded to the severity of the recession by reducing the Fed funds rate below 1% and lowering reserve requirements for banks. But in the third and fourth quarters of 1958 GDP expanded by an annual rate of almost 9.5%, 7.9% in the first quarter of 1959 and by almost 11% in the second quarter⁴. Not wanting to repeat what it thought was mistaken policy of 1955-56, the Fed abruptly increased interest rates and tried to restrict credit growth (also as a result of sharp gold outflows in 1958⁵). The result was another inventory recession, the double dip of 1960.

Coming out of the 1960 recession, inventory growth was significant but not overdone. From April 1961 through March 1962 GDP averaged 7.5% annual growth. Steady but stable inventory expansion led to steady but stable employment and earned income growth. By the mid 1960's the economy was in a period of steady growth with low inflation, and the Fed had adopted a neutral policy position that saw rates rise slightly as unemployment fell slowly. It wasn't until 1965 that unemployment fell back to 4%, and inflation began to rise. Sensing a negative output gap, the Fed moved to restrictive policy in 1966, provoking a near recession (another inventory event) in 1967. When the economy weakened in the beginning of 1966, the Fed switched back to accommodative policies, beginning the pattern it would follow throughout the rest of the Great Inflation (discussed in depth in our June 2008 Special Report).

Inventory growth was only slightly impacted by the restrictive actions of 1965-66, a marked change from previous economic precedence. It was enough to cause zero real GDP growth in the second quarter of 1967, but overall growth resumed in 1968. The weakness that had forced a quick change to accommodative policy in 1967 was just as quickly abandoned in late 1967 and early 1968 – Fed funds rates rising from 4% to 6.14% (Chart 1-1). Deposit rates anticipated the increase in Fed rate policy and began rising in April 1967. By early 1968 deposit rates were above 6%.

Increasing rates did not slow the economy; rather, they had the opposite affect. The slow steady growth of the early and mid-1960s saw an increase in household savings. Those increased savings led to a noticeable increase in interest income – by 1969 interest income was 7% of GDP⁶. That flexibility allowed for two additional marginal spending factors: investment income and personal deficit spending (spending above earned income minus taxes, or disposable personal income before asset income). While earned income remains the only significant factor in spending for lower income earners, interest income (dividend income was not significant until the late 1980's) was becoming *the* marginal factor for a growing portion of the population.

In 1968, for the first time, households responded to wage income weakness with a significant increase in deficit spending (Chart 1-2⁷). The increase in deposit rates from “restrictive” Fed rate policy meant more interest income for the household sector (Chart 1-3). So the restrictive policy of the Fed was actually producing the opposite of what was intended – it was helping the economy continue growing, allowing inflation to continue accelerating. By the middle of 1969, deposit rates had moved above 8% - high enough to provoke a spending vs. saving tradeoff, households began to save more and spend less. That tradeoff, far more than any affect of borrowing costs, led to the contraction of 1969-70.

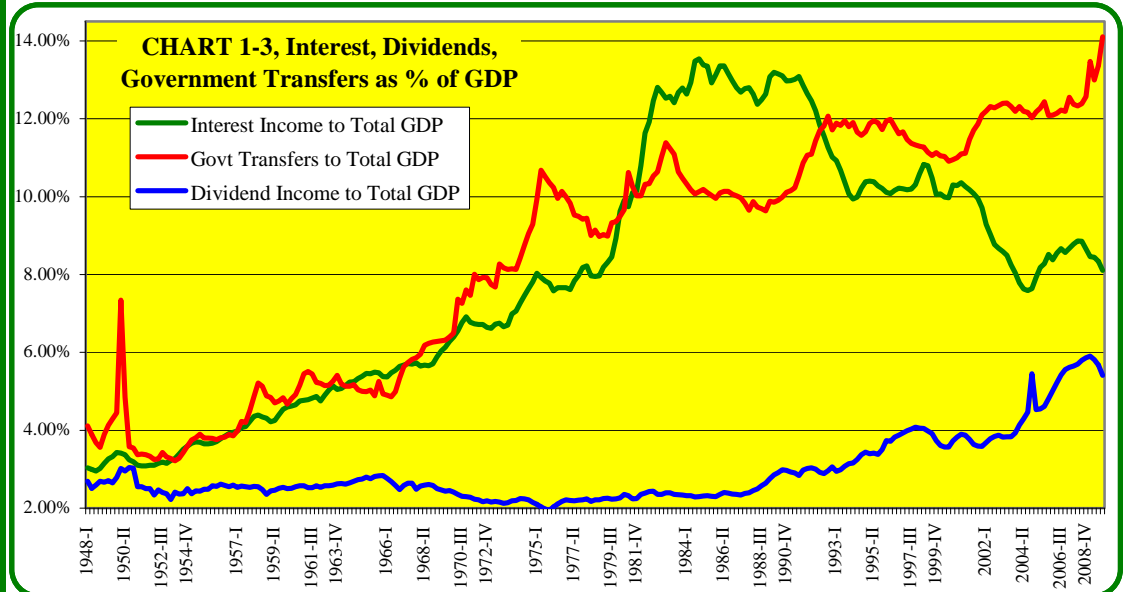
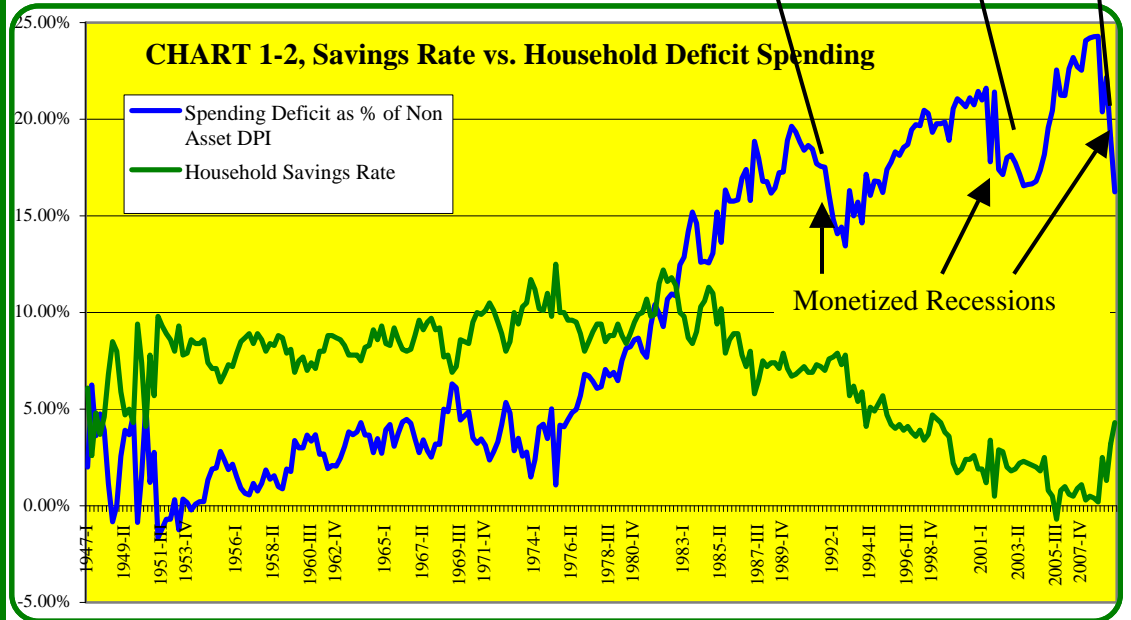
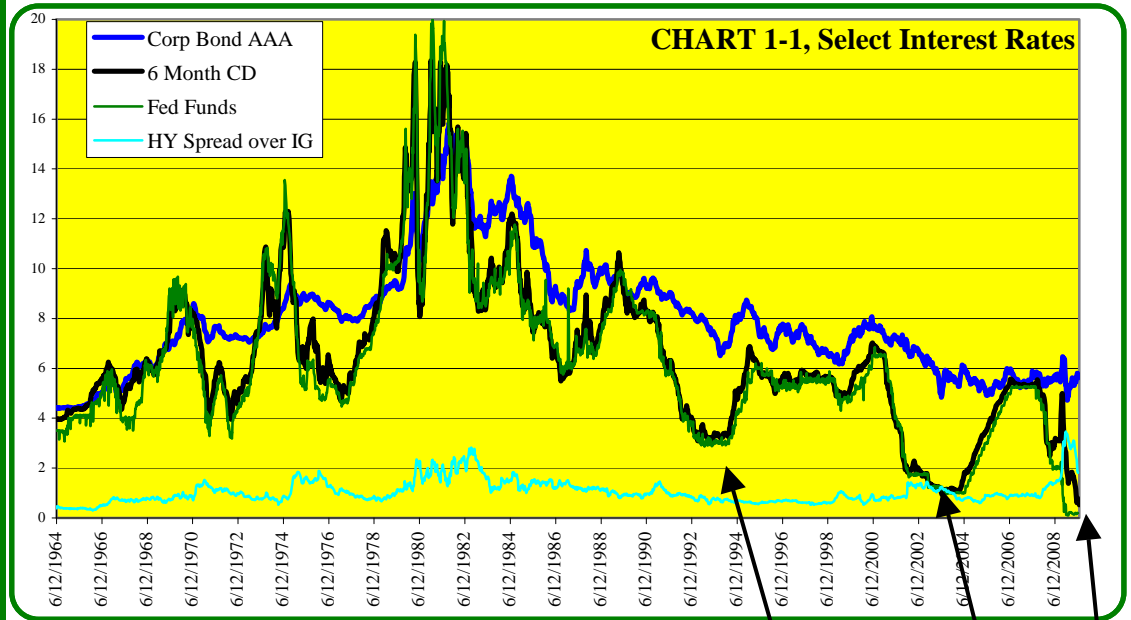
Inventories were still growing as rates were rising, attracting enough savings assets to maintain corporate credit growth until mid-1970. This recession was the first demand-driven recession. Fed rate policy was working to override traditional arrestor equilibriums by encouraging the savings/credit growth dynamic that allowed inflation to begin. The higher rates went, the more money was saved and reinvested, the more credit was produced finding its way to finance growing inventories while simultaneously allowing more marginal income to be spent on price increases passed on to consumers. Instead of being a self-contained feedback loop, it was a Fed controlled feedback loop that had/has little to do with any “output gap”.



The rising interest rates meant to stop inflation actually helped create more inflationary pressures. After the savings bubble had been created through these interest rate distortions, the declining rates post-1984 pushed asset holders, including intermediaries to seek riskier alternatives to try to recreate the highs of the Great Inflation.

The Savings Rate was stable throughout the 1950's and 1960's leading to the very beginnings of credit expansion. Deficit Spending rose slightly after the severe recession of 1958, more noticeably in 1969-70. The extremely high rates of 1974-75 show the peak savings rate, but at the expense of spending. Post-1975, deficit spending begins to increase steadily from the savings bubble. Post-1984, the savings rate begins to fall steadily as interest rates begin their steady decline.

Interest income from those savings build as more money is saved (high savings rate in the early 1970's) then reinvested (high interest rates of the later 1970's). By 1990 the changing interest environment began to affect spending and created the imperative search for alternate investments. Equity assets allowed the savings rate to reach zero while interest income continued to fall. "Accommodative" rate policy is unhelpful because of the affects on interest income as the marginal source of deficit spending.





Part 2 Monetization

The increase in household wealth in the 1960's began the trend toward monetization of the economy, and the rise of the importance of financial intermediation. What emerged from the Great Inflation was a dual system – inventory growth was the mechanism for business dynamics and consumer inflation, while investment income was increasingly responsible for marginal consumption demand.

Output gap, and Phillips Curve analysis, hold wage inflation as the only source of sustained inflation. Between 1966 and 1971 wage inflation played a major role in starting the Great Inflation (Chart 2-1⁸). But by 1971 wages (and supplements to wages) as a percentage of GDP were relatively constant all the way to 1981. Business profits, however, were falling during that same period. This suggests that wages were not the primary source of weakness, and not the primary source of inflation.

Looking at Chart 2-2⁹, the primary source of weakness comes from inventory financing. As a percentage of the entire goods economy (which was still 35% of the all economic activity in 1970) inventories rose from 42% to 52% in the two year period of 1973-74. After falling somewhat in 1975, inventories again rose from 47% of total goods GDP to 57% by 1980. Not coincidentally, inflation spiked dramatically during those exact same time periods (Chart 2-3¹⁰).

That should not have happened since unemployment was rising in both periods as well. Somehow the natural Phillips Curve relationship had been short-circuited. Commodity price inflation driven by inventory building (inventory growth above baseline growth is really overproduction in anticipation of future demand, essentially adding future demand to current demand) should be arrested when companies have to compete for limited credit. Credit competition forces real interest rates high enough to reduce marginal production

of inventories, allowing for a natural deceleration of inflation.

Growth in savings coming out of the mid-1960's, pushed further by the higher, "restrictive" interest rates, overrode the traditional arrestor process. There was a growing supply of credit to nearly match that growing demand. Fed monetary policy, as is well documented, was too loose in terms of money growth, and by 1971 the US abandoned the modified gold standard, erasing the physical limitations of money growth. Worse, rate policies thought to be restrictive were actually making credit production a bigger problem.

The recession of 1969 – 70 is a perfect example. It came about not from diminished borrowing activity in response to higher interest rates (inventories continue growing moderately while there was a spike in final sales of goods in 1968-69 from an increase in deficit spending by households), inventories as a percentage of total goods GDP continued to rise through 1970. Spending finally weakened because households began to shift toward higher savings (the savings rate moved above 10% for the first time in the postwar period) when deposit rates (pushed by Fed actions) rose to and above 8% in early 1969 (the savings rate rises in 1969 at the expense of deficit spending). The higher interest rates did accomplish their near-term goals – to take pressure off inflation by slowing the economy – but in an indirect and unaccounted for manner. The savings bubble was allowed to continue manufacturing credit, passing the growing problem further into the future. While the Fed held rate policy as restrictive, it did not follow through with restrictive credit policies. By pushing savings rates up the Fed should have offset that jump in primary credit sources (primary sources are households and businesses, including foreign, that are not themselves intermediaries) with a restrictive policy for banks to limit credit potential and capacity. That would have preserved the natural arrestor for when inflation returned during the recovery.



The recession that resulted in 1969-70 was in some ways a shock to the Fed since it believed it had successfully navigated the near recession of 1967. It rapidly reduced rates and took an “accommodative” monetary stance, expecting to engineer its way out of a contraction. The savings rate fell below 10% again and households increased deficit spending. The accommodative policy worked as intended, GDP growth returned, but again in an indirect fashion. With credit sources still intact, there was plenty of potential lending waiting to find borrowers. During the recessionary period of 1970-71 corporations were using credit for equipment and capital spending, but by early 1972 inflationary pressures were returning and inventories began to build (Chart 2-4¹¹).

The low rates of 1972 and oil price movements began one of the fastest inventory builds in US economic history. The inflationary spiral that developed was monumental – the higher the rate of inflation the faster businesses want to build inventories to avoid higher production costs in the future. With a steady supply of credit from increasing savings attracted by rising deposit rates, the feedback loop can continue uninterrupted – only the correct interest rate and credit policies can stop the cycle.

The heavy demand for corporate credit only produced a 2% rise in composite corporate bond rates, despite inventories going from 38% of GDP to 48% in two short years (by comparison deposit rates rose almost 9%, to 12%, during the same period). Credit growth was nearly matching credit demand *because* the Fed went back to a “restrictive” rate policy. Forcing short rates dramatically higher in 1972 and 1973 did little to stop corporate borrowing. Instead the elevated interest attracted more household savings – by 1974 the savings rate was 12%, moving above 13% in early 1975. The Fed’s restrictive rate policy was fueling the inflationary spiral.

The spiral finally ended because households were spending more than 100% of their marginal dollars on inflation – none on volume growth (Chart 2-5¹²). At that point marginal spending has no utility for consumers, meaning less

inflation can get passed on to consumers. That produced the profit declines that led to the rising unemployment (at the same time as rising inflation), and ultimately an economic contraction. Inflation itself was the proximate cause of the recession (Chart 2-6¹³).

Inventories sharply contracted during the 1974-75 recession (now that the demand was diminished and inflation was decelerating, there was no incentive to overproduce). Financing costs were not an issue when production cost increases were being passed to consumers but it was a big problem absent those conditions. Marginal production became too expensive to maintain, and unemployment rose from 4.8% in the third quarter of 1973 to 8.8% by the second quarter of 1975. The bulk of the layoffs occurred in the two quarters after inventories began receding, and made the recession appear very similar to antecedent events.

Inflationary pressures continued to ease through 1976 mainly as a result of declining interest rates from the Fed’s now familiar accommodative pattern. The low rates (deposit rates had fallen back almost to 4% by the end of 1976) shifted consumer patterns back to spending over savings. During that period corporate credit growth was weak and inventory growth remained subdued. Lower rates meant to stimulate were actually keeping inflation lower, Fed rate policy had now been turned completely upside down.

During the “accommodative” rate period, corporate rates remained relatively stable, declining slightly. By late 1976 corporate spreads were high enough (as shorter rates fell) to start attracting more money to corporate credit. The slight rise in employment to begin producing inventory again was enough to change Fed rate policy back to “restrictive”. Now as an upside down policy the increase in rates again attracted household savings, which allowed for greater credit expansion, leading to more inventory building, creating still higher inflation, etc.

By 1979 a new Fed chairman had been appointed with a determined mission to beat



inflation, now out of control beyond 1974 levels. Short-term rates were pushed to unthinkable levels – deposit rates moved above 14%, with corporate bond and US Treasury rates following. Interest income alone was enough for households to pay for marginal inflation through deficit spending *at the same time* increasing the savings rate. At the end of 1978 interest income had already been slightly above 8% of GDP. From 1979 through 1982, interest income would rise to 13% of GDP.

Just as 1975, the inflationary spiral ended primarily as a result of marginal spending on price increases reducing marginal utility to near zero, and finally below zero. Higher interest income allowed that marginal spending to continue further than it did in 1974-75, but ultimately the unprofitability of marginal production began to take a toll on employment. By the second quarter of 1980 inventory production had peaked as credit began to shift away from corporate credit, and into US Treasuries. While corporate spreads were still between 2% - 3%, on a nominal basis it was not enough to be a viable alternate investment vehicle – faced with a choice of a corporate bond yielding 15% and a US Treasury at 13%, households and banks chose the 13% and lower perceived risk (Chart 2-7¹⁴). As a result of the inventory peak unemployment rose from 5.7% to 7.6%, and GDP contracted by a steep 7.8% annual rate in the second quarter of 1980.

The Fed quickly reversed short-term rates due to the severity of the contraction, allowing deposit

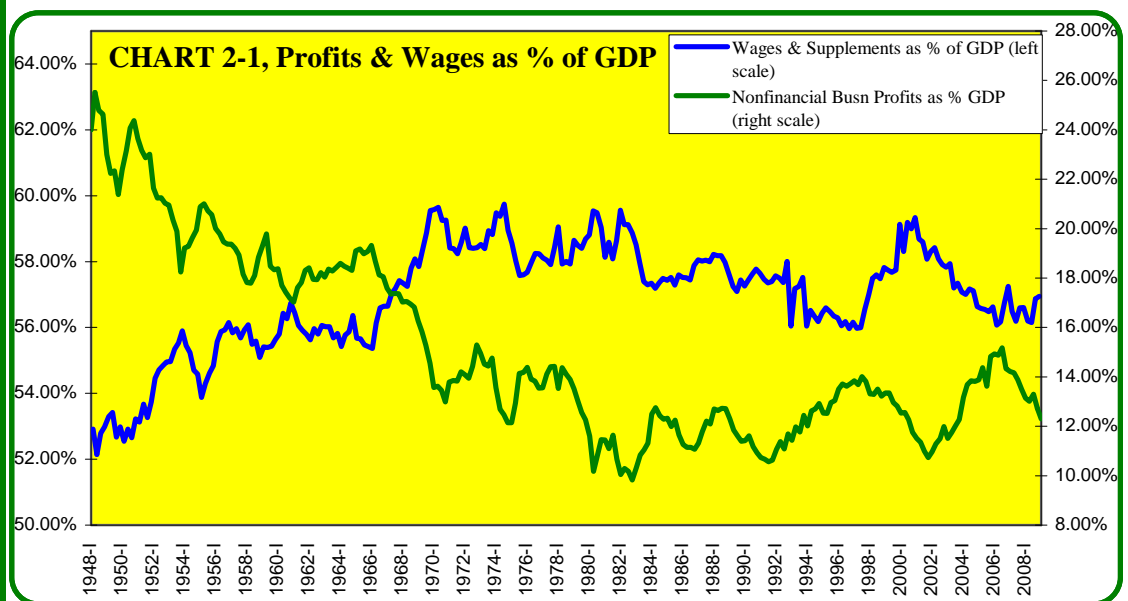
rates to fall from above 19% to around 8%. Household spending responded so quickly that inflation never had a chance to adjust lower and remained elevated, and the Fed hastily reversed yet again, this time pushing shorter rates above 20%.

The spiral ended because of the shift in savings from corporate credit to US Treasuries, resulting from a corporate borrowing ceiling. The inability of businesses to generate profits from marginal production because of the inability to pass price increases to consumers did not allow for much flexibility with higher borrowing costs. Unable to borrow at higher rates, corporate credit was crowded out by the US Treasury. Unemployment necessarily rose dramatically as inventories were drawn down after volume growth had faded from inflationary pressures. Wage income followed employment lower putting households back into the spend vs. save tradeoff. With deposit rates pushing 20%, household spending with no marginal utility could not compete with such high risk-adjusted investment returns.

While that seems to fit the conventional narrative – higher rates restricting borrowing – again, just like 1970 & 1975, it misses the predicate cause of inflation. By not addressing the overhang of savings, the banking system had the money sources for another credit expansion once weakness receded. But in thinking it had direct pressure on inflation through borrowing costs, the Fed stuck to its financial engineering, blind to the full effects.

Wage's share of GDP rises dramatically 1966-1971 but is constant afterward until 1983. Business profitability regains some of the lost ground but still has not returned to pre-1966 levels.

In terms of inflation, the lack of additional wage pressures in the mid to late 1970's shows an alternate cause, further supported by a lack of wage pressure during the 1989-90 and the 2005-08 inflationary periods.





Instead of wage pressures, inventory pressures demonstrate a much more precise understanding of inflationary pressures. It also provides the mechanical link to the oversupply of credit and its affects on inflation.

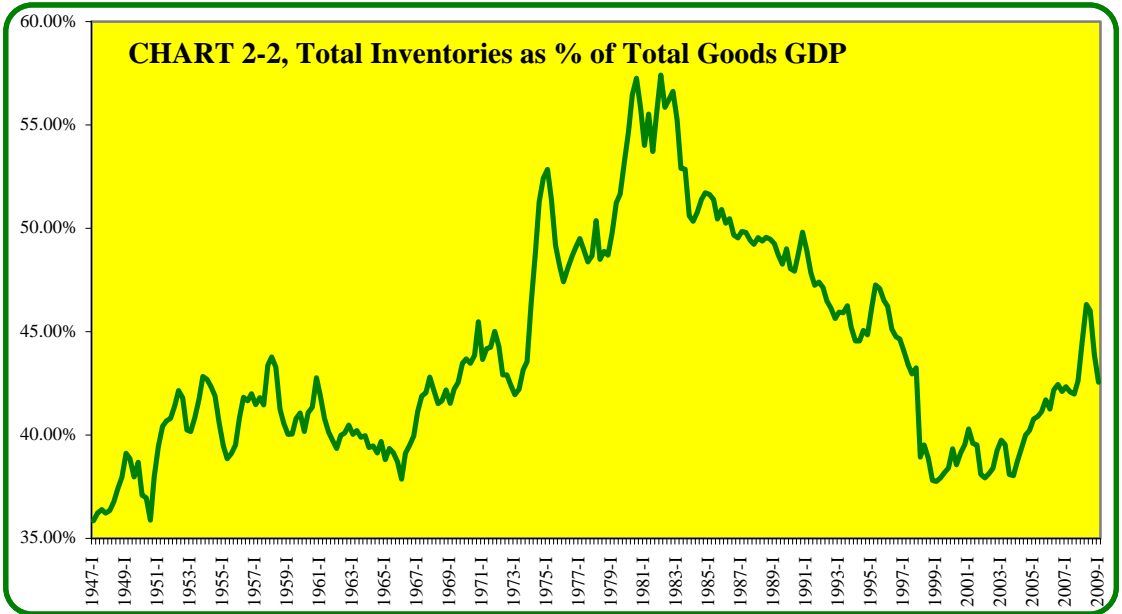


Chart 2-3 shows the link between inventories and inflation in producer prices.

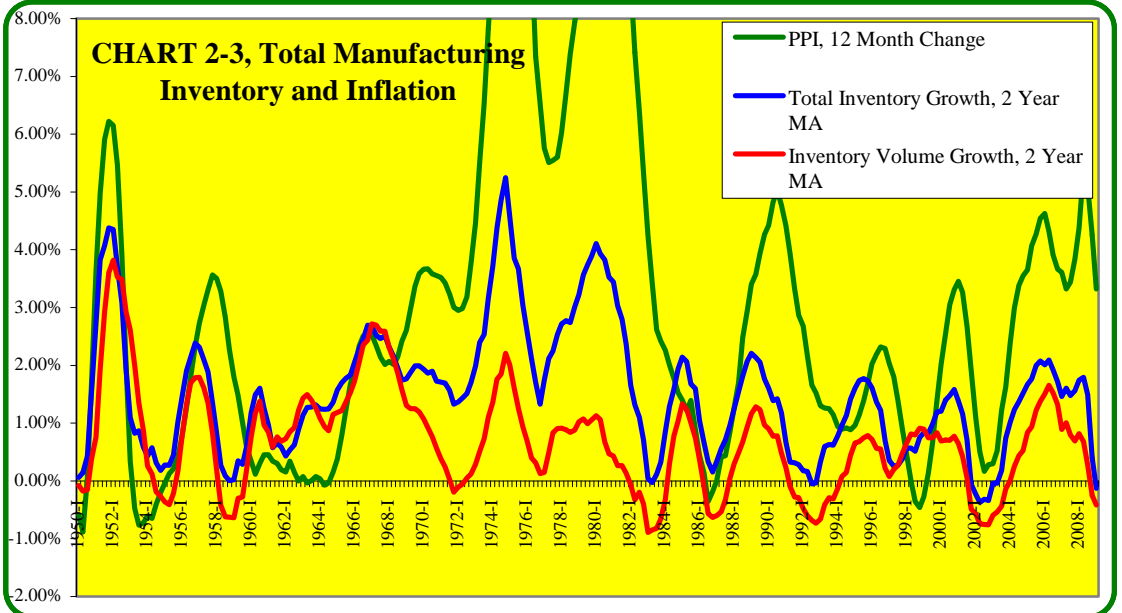
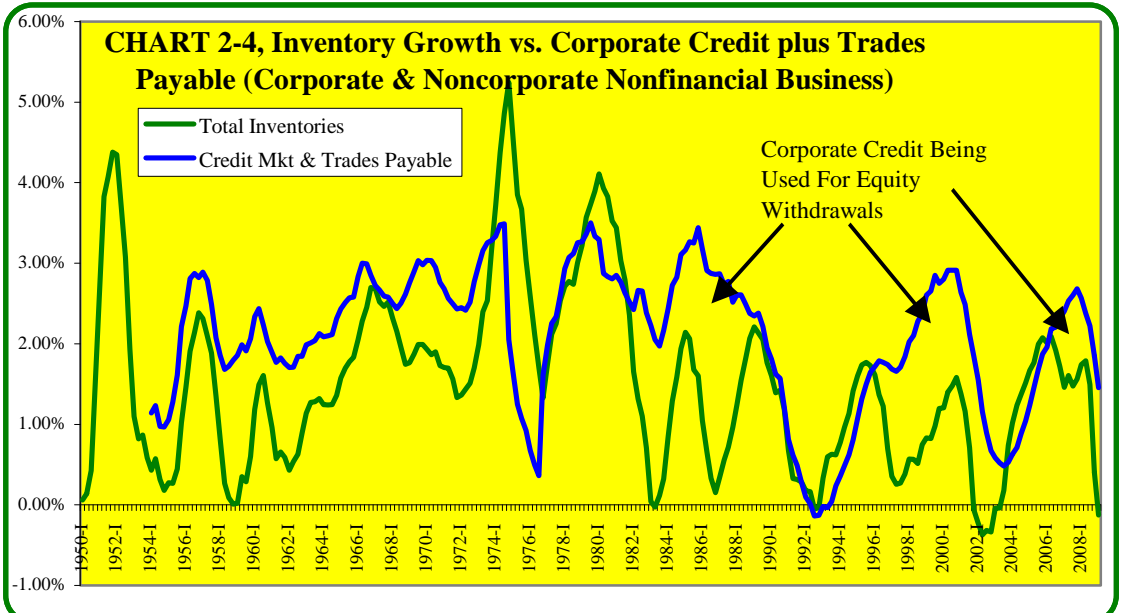
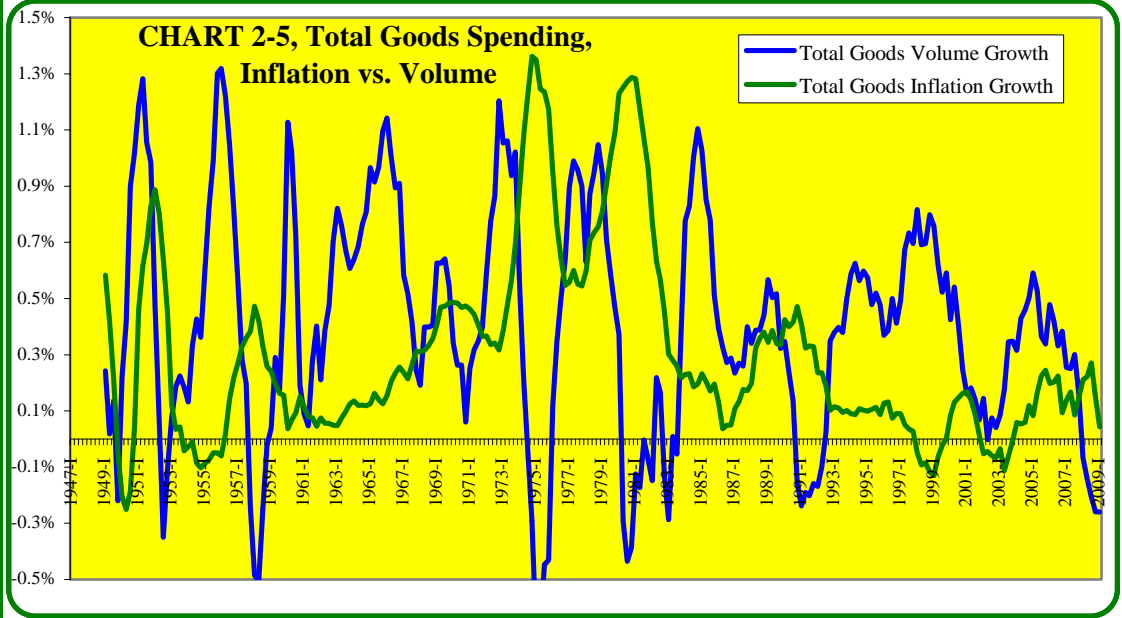


Chart 2-3 above showed the link between inventories and inflation, 2-4 shows the link between corporate credit supply and inventory building.

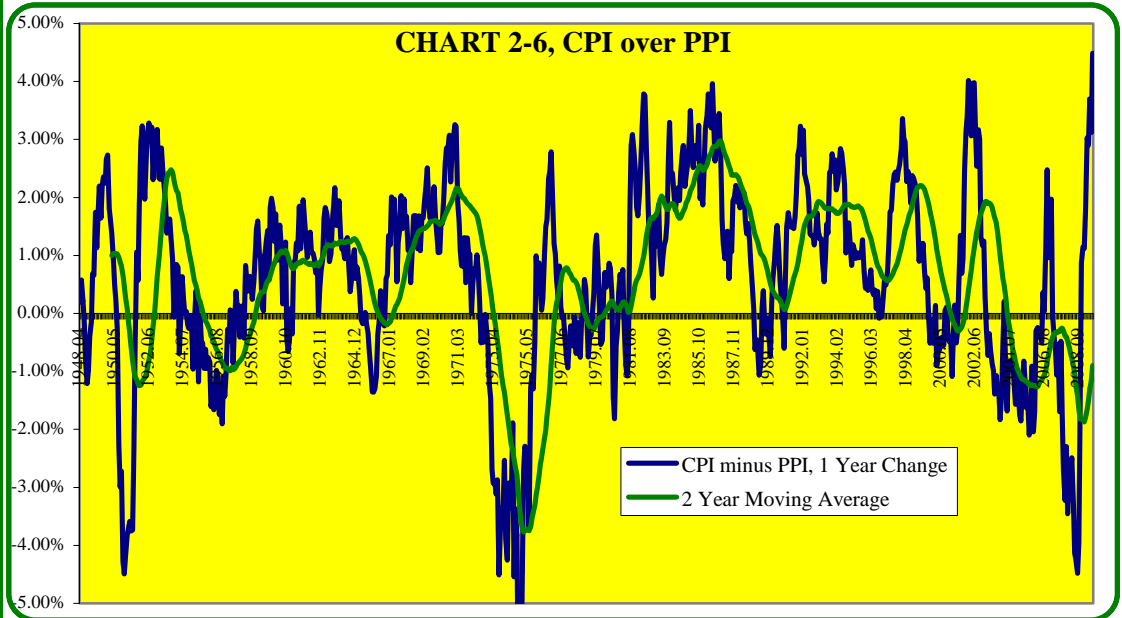




The 1974, 1980, 1990 and 2008 peaks in inflation growth show the marginal utility of spending on goods – all marginal dollars in those four cases are going to price increases instead of volume. This leads to business profit issues that undercuts the employment and incomes of households. The recessions that resulted were products of inflation rather than borrowing costs.

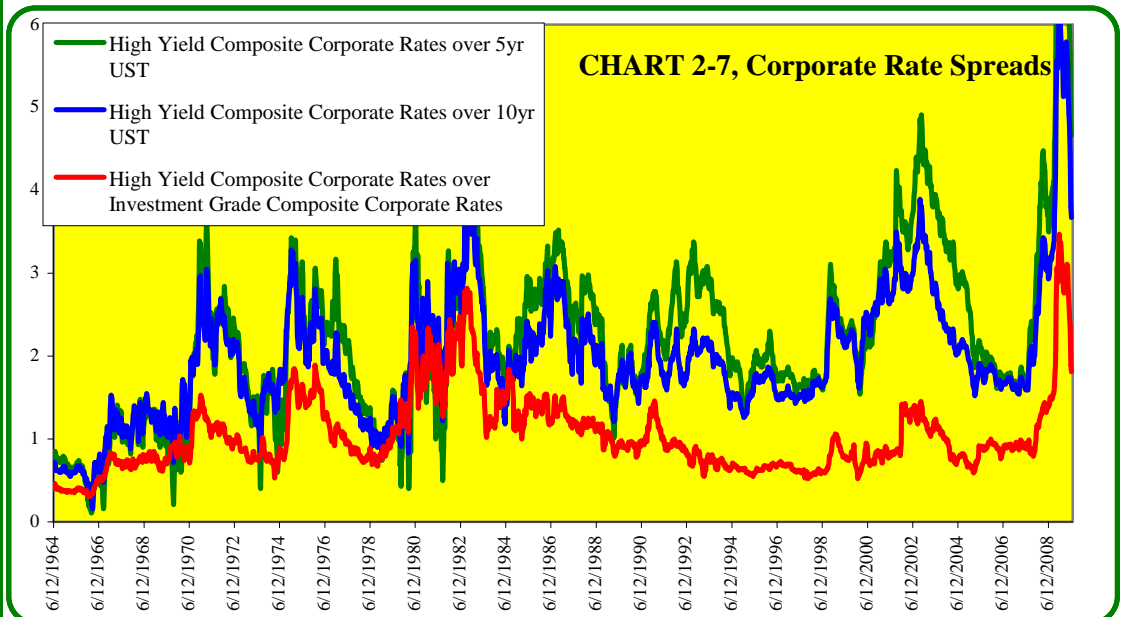


The difficulties in passing producer inflation to consumers is shown by the negative periods. From chart 2-5, the periods when marginal utility is near or below zero for consumer spending and businesses increasingly absorb producer inflation at the expense of profit.



While the PPI and CPI are not perfect representations of this dynamic, they are useful for locating these periods and the affects of inflation itself on business and consumers.

Corporate spreads were compressed in the late 1970's as rates were driven higher, creating the shift to safer assets that ultimately led to a decline in corporate financing.



The higher spreads in 2002 restarted the corporate credit boom that led to the inflationary period of the mid and late 2000's.



Part 3 The High Cost of Savings

The high interest rate policy of 1980-82 actually made the contraction longer than it would have otherwise been. Interest income kept rising dramatically until the middle of 1982 (when rates finally fell back below 10%), allowing enough interest income to keep up marginal spending on inflation. Without interest income the spiral would have been arrested far sooner. A policy of lower interest rates coupled with an increase in reserve requirements would have addressed both sides of the inflationary issue – lower rates would attract less savings, slowing credit growth, and higher reserve requirements to keep credit sidelined to limit inventory building. Such a policy would also address the savings buildup, stopping the asset bubbles before they got started.

Since monetary policy did not address the savings surge, there was a lot of money left to be deployed in the credit markets. When the corporate credit market fell apart, banks did not stop lending, they found alternatives – they lent money to each other (typically through bonds), leveraging their slowing deposit base. In addition to cross-lending, banks were busy lending to GSE's. By mid-1983 GSE Pools (which had begun in 1970) were responsible for 23% of the total mortgage market, from 13% in 1981, just two years earlier¹⁵. The credit bubble was taking the shape that is now very familiar: GSE's were taking up the slack in borrowing, recycling the funds back to the mortgage market at artificially lower rates.

The high interest policy also changed the fundamental business of banking. The Monetary Control Act of 1980 gave the Fed more control over non-member banks¹⁶. It also removed restrictions on the amount of interest S&L's could pay on savings accounts (which was causing funding problems) while also allowing banks to merge, gave S&L's and credit unions a new ability to offer checkable deposit accounts. They were also freed to set interest rates on their own while entering the consumer, auto and credit card markets (riskier assets). Mandatory

reserves were reduced to try to boost member profitability and NOW accounts were introduced. Rather than being a restrictive credit policy, these policies served to allow leverage to enter the banking system from all sides, as well as encouraged the hunt for interest rate spreads.

Economic recovery in 1983 and 1984 seemed to be a typical, fast-moving inventory rebuild. When deposit rates dropped below 10% in late 1982 (in typical Fed style, the quick reverse to accommodative policy), bond rates found their footing. Composite corporate bond rates had been as high as 15.5% (well below deposit rates) but only fell to around 12% while deposit rates were reaching a floor of 8%. Spreads over US Treasuries also were up. The high spreads served to push money back toward corporate credit, and were an indication that the cost cutting from the recession was allowing businesses to regain profitability and flexibility to pay higher rates for inventory. Much of the bottoming in the recession came from a resumption of household spending in the face of lower inflation – marginal spending was now productive as consumers were once again getting more for their money.

The inventory financing process started through retail outlets, providing a floor for the slide in production. By 1984 manufacturers were once again adding to their own inventories – GDP growth from the second quarter of 1982 through the end of the second quarter of 1983 was never below a 7% annual rate. Nearly 40% of that growth was inventory building alone.

That inventory construction was solid enough to produce the growth stage of the recovery, but it was not inflationary (Chart 2-3). From 1982 through early 1984 inventories had fallen from above 57% of total goods GDP to just above 50% (Chart 2-2). The inventory gained during 1983 and 1984 was at a pace below total GDP growth, enough slack in demand that inflation could continue to decelerate. Without the



inflationary incentive to overproduce, inventory growth was limited to restocking.

The Fed, sensitive to any pressure due to the close proximity to the Great Inflation and confident in its financial engineering effectiveness, again changed to “restrictive” rate policy throughout 1983 and the first half of 1984. The economy slowed by the end of 1984, but not because of a lack of borrowing. Once again the higher rates attracted household savings at the expense of consumer spending. Corporate spreads had remained near their 1982 peaks, so corporate credit was a primary beneficiary of the overall credit growth.

With an abundance of available corporate credit (in large part to decent spreads, but also the rise of GSE mortgage pools, banks could not compete with them so they looked elsewhere to deploy all those high cost deposits), and without an inflationary incentive to overproduce, corporate borrowers grew increasingly interested in ownership exchanges. By the middle of 1984 corporations were using a greater proportion of debt to take money out of the stock market through merger activities and privatizations – the junk bond era.

Using credit to finance changes in ownership, businesses were effectively transforming credit market overexpansion into asset price action (Chart 3-1¹⁷). Since most privatizations and takeovers were done at large premiums, prices were going in one direction – up. Equally important, these ownership actions served to reduce the supply of stocks at a time when demand was rising. This system was the mechanism for *asset* price inflation – hiding inflation from the narrow gaze of monetary authorities.

Financial needs (stock actions) began to outweigh real economic needs (inventories) by mid-1985. Producer inflation fell below 2% in 1984 and continued to decelerate. By 1985 companies had little incentive to produce inventories, particularly with profit pressures from import competition. The lack of inventory production put a lid on the employment recovery. The unemployment rate improved to

7.2% in the second quarter of 1984 (down from the 10.8% high of the fourth quarter of 1982) but stayed near that level for another two and a quarter years, to the middle of 1986. This was seen as a positive output gap that called for “stimulative” credit growth policies and lower interest rates, despite a growing bubble in bond and stock assets.

The lackluster employment growth (there was some employment growth as job gains were at least enough to accommodate labor force growth) through the middle of the decade contributed to a near recession in 1986. Income growth slowed with employment forcing households back into the save vs. spend tradeoff. In this case, with rates falling, consumers chose to spend and kept from a full contraction. Deficit spending increased but interest income as a percentage of GDP fell – rates were not high enough this time to allow saving and spending. That also translated into a reduced savings rate, falling to 6% in mid-1987 (a level not seen since the 1950’s). With demand restrained and inventories falling in absolute terms, inflation became disinflation, and the Fed declared victory.

The missing part of the victory was the asset inflation taking place during the same time period. It is no coincidence that this was the point that households allowed the savings rate to begin falling – household net worth had risen dramatically through equity price action. The excess corporate credit shifting to equity withdrawal benefited households through pensions and insurance plans, as well as growing personal retirement assets, and outright personal mutual fund and equity positions.

Without the outsized growth in equity-based net worth, it is hard to see consumers spending so much over earned income. By the middle of 1987, household spending above wages and taxes was nearing 20% (compared to an average of 3.5% in the late 1960’s and early 1970’s). The near recession of 1986 would have been an outright recession, giving monetary authorities another chance to arrest the inflationary credit market. But with slow, positive economic growth and low consumer inflation and rapidly



rising asset prices, nobody saw the need to intervene.

The structural distortions beginning to appear in the real economy were also being manifested in the credit markets. With too much money chasing productive uses, interest rates were not correctly and adequately pricing risk. The high rate policy of the early 1980's had forced many financial institutions to change the way they did business. Households began seeking higher yields by 1984, moving away from deposits and forcing intermediaries to seek alternative funding sources. This led to the extensive use of repurchase agreements. The crowding of GSE's in the mortgage market as a result of the savings bubble pushed financial intermediaries further out of the mortgage markets into riskier areas. The alternate source of funds combined with the extensive demand for riskier assets led to a fundamental mispricing of risky assets at mid-decade. The junk bond bubble burst, and the savings and loan crisis began.

Losses being experienced as a result of misallocation and overuse of credit could have functioned as a monetary arrestor, the same result as if the Fed had increased reserve requirements during the savings bubble. Low rates combined with an increase in risk aversion forced the credit markets to slow to a pace not seen since the 1940's (by 1993 anyway – Chart 3-2¹⁸). The Fed could have capped monetary growth to maintain the slow pace of credit growth until excess credit capacity had been removed.

Instead, the Fed encouraged a shift in savings vehicles from corporate credit to US Treasuries and now agency debt. The junk bond crest equity market transference, and corporations returned to inventory financing (also due in part to the deficit spending demand of 1986-87). By early 1989 consumer inflation had returned without wage inflation (particularly in the second half of 1990 as inventories had grown in relation to total goods GDP).

In response to the rise in consumer inflation (negative output gap) the Fed moved to a “restrictive” rate policy in March 1988 through

March 1989 – deposit rates rose from 6.5% to almost 11%. That restrictive policy again had the affects opposite than intended, the increase in interest income as a result of the higher rates allowed households to maintain a constant savings rate while simultaneously spending marginal interest income on rising prices (keeping the inflationary spiral going). The rate levels also increased the ongoing shift in savings away from deposits (along with an acceleration of the S&L crisis) and into US Treasuries and agency debt – similar to the rate spread compression of the early 1980's.

Deficit spending did not reverse until the third quarter of 1989 *after* rates had begun falling – the Fed predictably shifted to “accommodative” rate policy. The previous period's “restrictive” rates did not have the direct intended affect on inventory or manufacturing activity either. Both declined as a result of the slowing credit markets rather than increased borrowing costs. Just like the near recession of 1986, rate increases added to marginal spending through interest income rather than slowing the economy.

The recession of 1990 came about as a result of the accommodative rate policy. Deficit spending was declining due to the reduction in interest income (the savings rate was held steady from uncertainty in the equity markets and a significant slowing in equity net worth while corporations reversed their credit market funded ownership changes). By the middle of 1990 companies could no longer maintain profitability by passing inflation to consumers as they cut back spending growth. Without profit flexibility, inventories peaked and unemployment began to rise. By the end of 1990 inventories and production had reversed in absolute terms, and the economy was in recession.

As backwards as the lead up to the recession was, in monetary policy terms, the recovery really showed how much monetary policy was upside down in the monetized economy. Unemployment in every postwar recession had stopped rising within six months of the end of each recession (the majority within three months). The 1990-91 contraction ended in the



first quarter of 1991, but unemployment continued to rise through the second quarter of 1992, nearly a year and a half later – the first jobless recovery.

Job growth in a recovery, especially that tricky growth stage of a recovery, had been a function of the inventory rebuilding. But in the early 1990's inventories were still a high percentage of total goods GDP, meaning companies had an incentive to continue working through them, as opposed to earlier recessions when inventories typically dropped below optimum levels. With the S&L's now in complete collapse, sources of corporate credit were not readily accessible. So even if companies had an incentive to rebuild inventories there was no financing (at least for manufacturers, retailers were holding their own inventories).

While a lack of available credit and low volume incentive kept business activity low, the accommodative rate policy was restraining consumer spending. Deficit spending fell from a high near 20% above income in 1989 to 14% above income by 1992, with most of the falloff occurring in late 1991 and early 1992 – the same time period as the majority of the interest rate reductions. Deposit rates fell to near 3%, a level not seen since 1971. The accommodative rate policy was continued through February of 1994, and interest income as a percentage of GDP fell from 13% (where it had been throughout the 1980's) to 10% (although households had begun to shift out of deposits and into other fixed income assets, deposits still made up more than two thirds of hard money assets¹⁹). That significant loss of income was the key reason behind the jobless recovery – the rate policy meant to stimulate the economy was instead keeping it below its potential, giving the Fed a positive output gap rationale for its restraining “accommodative” policies.

Worrying about a Great Depression revisit, the Fed instead loosened further reserve restrictions on banking – creating the zero reserve requirement on money funds and expanding them to NOW accounts (see our June 2008 Special Report). Intended to get credit markets growing again, and convinced of the necessity

by the positive output gap, the Fed fundamentally misread the situation and put the economy on a course for the last two asset bubbles.

The S&L crisis and accommodative rate policy had forced savers to find alternatives, initially into government debt – including agency debt (allowing the GSE's to completely fund the mortgage markets in the early 1990's, and begin to act outside of their original purpose). But households were also moving their savings further up the risk scale into equities. This shift accounted for the dramatic slowing of the credit market, but it also kicked the stock bubble into another gear, and savings increasingly out of the Fed's jurisdiction.

The irrational exuberance of the early 1990's stock market was anything but. Unable to receive enough interest income from those “stimulative” rates to fund deficit spending, households opted for capital gains. By the fourth quarter of 1992 deficit spending began to rise steadily again, and the household savings rate resumed its post-1975 decline, falling below 5% by early 1994 (a level not seen since 1950). The savings rate, however, only measures income, it does not measure price appreciation of assets. But in the minds of consumers asset price inflation is as good as interest income.

Final recovery came not as a result of stimulative monetary policy, but in spite of it. The return to deficit spending was not a result of an increase in borrowing (consumer credit had slowed dramatically throughout the period and did not really pick up until 1994 – when rates were *rising*), nor was there an increase in earned income (unemployment stopped rising in the middle of 1992, but did not fall below 7% until the third quarter of 1993, and below 6% until later in 1994). The fact that unemployment had stopped rising (due to the cost cutting process) and had started to slowly decline was certainly a factor in consumers' decisions, but it was not nearly enough to justify an immediate drop in the savings rate.

The total value of household equities and mutual funds increased \$1.7 trillion between the bottom



of the market in 1990 and the end of 1992, an 11.4% gain in financial assets, and an overall 8% jump in net worth. The search for investment income found another effective alternative, and *that* ignited the growth of the recovery.

Once households were spending again, employment growth picked up as demand for goods and services rose throughout 1993 and 1994. By the fall of 1993 corporate demand for credit increased enough to pull rates higher (five months before the Fed would start pushing short rates up) finally attracting money back to the credit markets. That allowed the elusive inventory rebuild to finally materialize and finish off the recovery two years after the recession ended.

The return of “restrictive” rates in 1994 and 1995 did nothing to stop the inventory growth. And though it was still mild relative to earlier decades, it did provide some inflationary pressures (inventories rose as a percentage of total goods GDP in 1994-95). But businesses were learning to streamline inventories, and beginning to use just-in-time methods to boost profitability. By 1996 inventory growth was tailing off, and inflation with it. From 1995 through the end of 1998 inventories as a percentage of total goods GDP fell from 47% to 37% - a level not seen since the very beginnings of the Great Inflation in 1966. Not coincidentally consumer inflation fell to its lowest levels.

These dynamics confounded the output gap monetary policy. Low inflation and growing employment meant accommodative policy – and indeed the Fed did reduce rates slightly in 1995 and 1996, keeping them at that level until 1998 when rates were reduced again, and kept low through mid-1999. All the while the stock bubble was rapidly inflating with irrationally exuberant household savings.

Money had been flowing into equities at a high rate, and were now being augmented by a flood of new capital from retirement funds²⁰. The change toward defined contribution retirement plans accomplished cost savings for companies

in two ways – lower pensions contribution costs, and lower accepted wages as a result of stock price appreciation (401k contributions were seen as greater value due to rapidly rising prices). The result was a return of business profitability to pre-1978 levels and a significant reduction in wage pressures (a major portion of the productivity boom).

Higher equity wealth and lower wage growth meant a sustained period of higher household deficit spending (from 1995 deficit spending increased from 16.5% above earned income to over 20%). Equity-driven wealth, including the flood of retirement assets, saw an astounding \$5.2 trillion surge through early 1998, a 31% increase in financial assets over the end of 1992, or a 23% gain in net worth due to stocks alone.

Stock price actions restarted the corporate ownership transfers, as corporate credit was again being shifted to equity withdrawals (mergers and, for the first time in large amounts, share buybacks). As inventory financing needs fell in 1995, the process returned to mid-1980’s levels, enhancing the exuberant direction of asset prices. All of this credit was moved outside of the output gap parameters of the Fed, once again hiding inflation in asset price action.

By failing to take into account asset inflation, the neutral to accommodative rate stance of the mid-1990’s was influencing the flow of money into stocks, not only as an alternate form of investment returns through capital gains, but also in terms of income. By 1997, dividend income had reached 3% of GDP, taking up some of the slack from interest income and cementing stocks as the preeminent alternate savings vehicle.

Fed policy was also distorting risk perceptions of debt usage by encouraging widespread household acceptance of consumer credit and non-conforming mortgages. Deficit spending in this period was increasingly financed through the credit markets. During the rising rate period of 1994 and 1995, rather than have a negative affect on borrowing, consumer credit rose 23%. The net worth gains were more than enough to offset rising marginal borrowing costs (visibly



demonstrating the ineffectiveness of monetary policy). This also occurred during a period of sluggish income growth, meaning the stock price appreciation that allowed borrowing to supplement deficit spending was the sole sustainer of the recovery. By keeping rates at

low levels as a matter of its mistaken output gap beliefs, the Fed encouraged more borrowing to supplement both deficit spending and equity investment. Through September 1998, consumer credit grew another 20%.

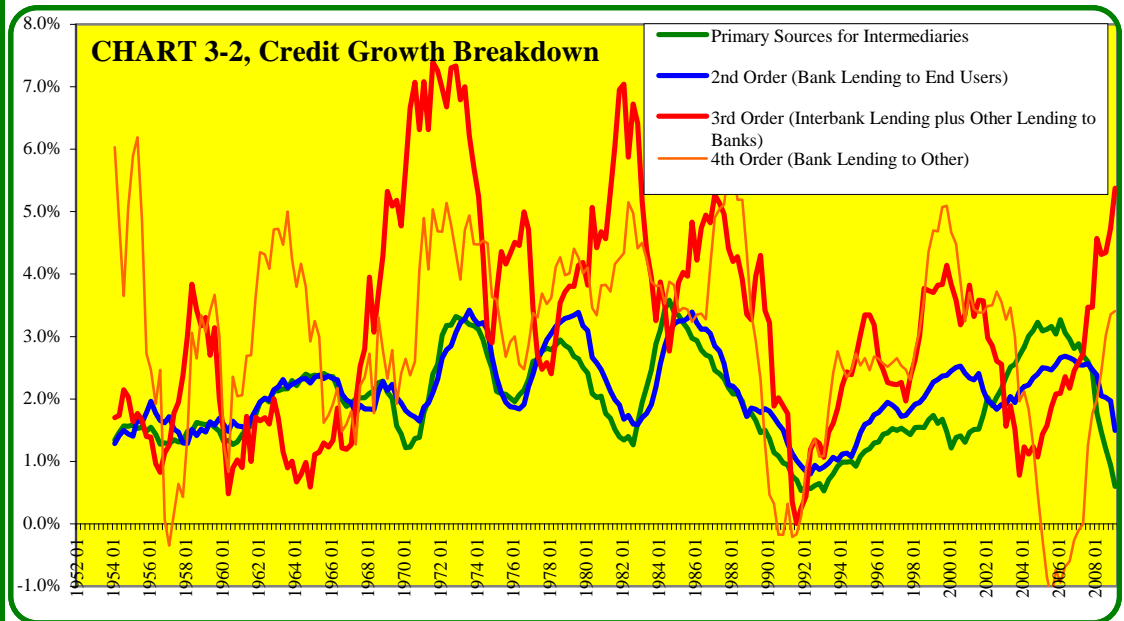
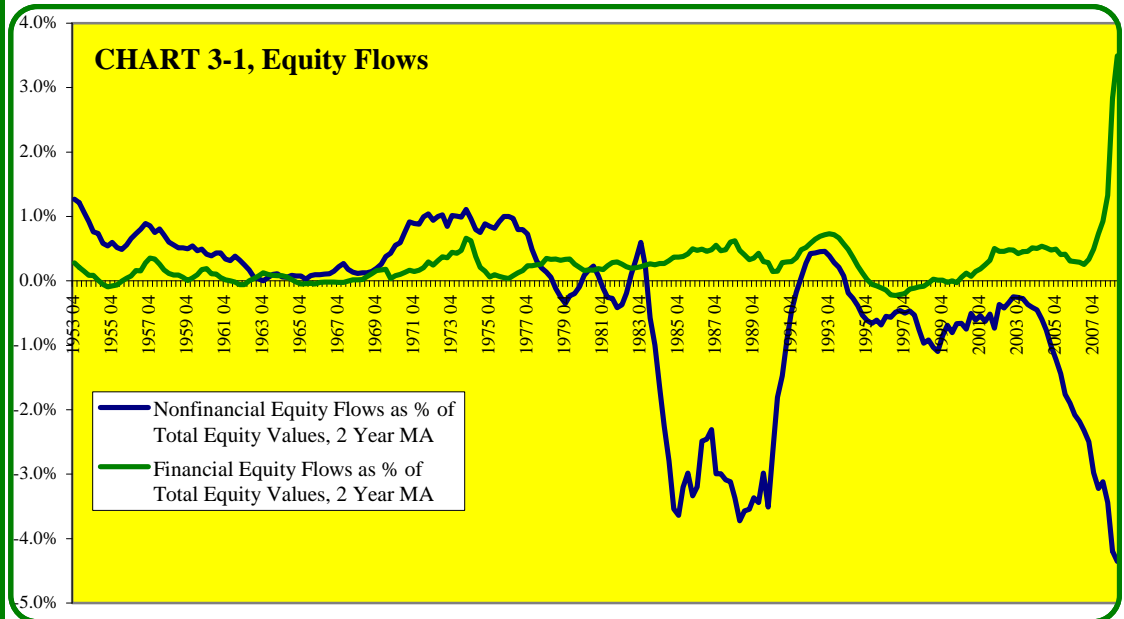
The oversupply of credit combined with the reduced need to finance inventories (shown in Chart 2-3, above) led to the increasing use of credit for ownership transfers (shown as a negative flow of equities).

The positive flows from financial companies (especially the early 1990's when deposits were becoming scarce) were a source of funding that helped expand the credit bubble.

The 1980's bull was a result of privatizations from junk bonds while the 2000's featured a lot more borrowing by investment grade businesses for share buybacks.

Primary sources are household, business and foreign savings and credit market holdings. 2nd order lending is bank activities recycling those funds back to primary sources in the form of loans. 3rd & 4th orders are bank lending to each other.

Up until 1984, 3rd and 4th lending was typically as a substitute for the dropoff in primary sources. The late 1980's substitution could not last without primary source growth, with negative implications for overall credit growth in 2009-10.





Part 4 Changing Face of Credit

Consumer credit as a whole became widely available for two reasons: that the Fed *wanted* to reflate the credit bubble, and the way that encouragement was carried out. There can be little doubt as to the former, the Fed changed reserve requirements in 1990 to allow a zero reserve asset, and kept rates at extremely low levels for years after the recession – efforts designed not only to encourage borrowing and credit activity, but, more importantly, to make credit generation more profitable.

The slow motion run on Savings & Loan deposits as state insurers collapsed with each successive institutional failure, created a funding crisis. In fact, the S&L collapse eerily parallels the credit derivative collapse of 2007 – 08. The first concrete step to regain the trust of depositors was the nationalization of the state insurers (S&L's were allowed to choose between state oversight and deposit insurer, or national oversight with the FDIC), a bailout intended to return depositor faith. When that did not work the government decided to bail out the entire industry with the creation of the Resolution Trust Corporation (RTC) – an entity created to take possession of all the bad loans, pass the losses to taxpayers, and return good capital to the market. It wrapped up in 1994, coincidentally the time when rates were pushed higher.

While the RTC was taking over the S&L's business, there was now a huge gap in the mortgage market. S&L's in 1980 accounted for about 50% of all mortgage activity²¹. By 1994, S&L's were only a shell of their former selves, with a much reduced 14% share of the market. Fannie Mae and Freddie Mac willingly took their place so that by 1994 GSE's and GSE pools accounted for 50% of the mortgage market.

The implicit federal government guarantee of the GSE debt (which became explicit in

September 2008) functioned as a cost advantage. Not only could Fannie & Freddie (and also the Federal Home Loan Banks) borrow at lower rates, they had no income tax liabilities and had standing lines of credit with the US Treasury. They were also able to create the market for mortgage-backed securities by leveraging their borrowing cost advantages to guarantee timely income and principal payments on the MBS it issued. The swap program that Fannie Mae initiated guaranteed liquidity in the market. All those advantages squeezed out competitors²².

The GSE's were busy expanding their market share between 1992 and 1994 (Chart 4-1²³), accounting for more 100% of the growth mortgage issuance (regulators were only too happy to oblige and avoid what they saw as a total collapse of the real estate market – a collapse that probably would have looked much like 2007-09; they were only successful in delaying the inevitable for sixteen years). Funding came from a variety of sources, including household savings seeking safety. But for the most part GSE debt became popular with money market funds and bond funds, and during the 1992-94 period foreign money. Equity issuance (mostly preferred) was also common to take advantage of the rising money flows in equities. But throughout the 1990's the GSE's were shifting from providers of mortgage liquidity through repackaging and guarantees (their original mission) to wholesale mortgage lenders.

In early 1989, GSE holdings of GSE securities was less than 0.1%. By 1994 it had risen to nearly 6%, and by the end of the 1990's holdings were almost 19% of all outstanding mortgage debt²⁴. That was leverage the notorious SIV's of the housing bubble could only dream of – instead of packaging loans for resale, they were buying the packaged loans themselves (and beginning to buy loans packaged by private label ABS issuers). By the



time of the federal budget surpluses of 1998-00, GSE debt had become the riskless asset of choice. The explosion in demand for agency debt from all sources allowed GSE's to literally dominate the entire mortgage market far more than their original charters allowed. But since they were actively reducing mortgage costs and allowing cheap credit to flow, while becoming very active political contributors, they were not a regulatory priority.

The affects on the rest of financial intermediation activities were a crowding out of the mortgage market. Faced with unbeatable competition, banks had to resort to other targets for their funds – and that increasingly meant each other. Lending between financial intermediaries had been growing steadily since the 1960's, but the 1990's saw its largest increases. In 1989 interbank lending accounted for 20% of bank funding sources, by 2001 it was a full third²⁵ – leverage for credit growth.

In addition to cross-lending, banks sought to expand consumer and business finance. Without an outlet for lending in mortgages, the overabundance of funds kept rates for consumers and businesses relatively low - contributing to the household borrowing shift and the corporate equity withdrawal.

These distortions began to create a funding problem for households. Asset price appreciation in a stock portfolio can certainly be used to finance deficit spending, but if that portfolio is contained in an IRA or 401k, it does not easily allow for current cash flow needs, particularly spending beyond wage income. But cheap and readily available credit, both consumer and mortgage credit, make a viable substitute. Getting rich off retirement savings, or even feeling better off, makes the decision to add debt much easier. Consumer credit expanded twice as fast during the rising rate period of 1999-00 than during the lower rate period of 1998-99. The reason, stock appreciation was highest in 1999 and early 2000.

The dot-com bust and subsequent recession in 2001 played out as a convergence of the monetized economy and the above distortions.

All of the processes used in the 1990-91 recession were repeated a decade later, evidence of the Fed's miscalculation of its effectiveness. There was initial weakness several years before the recession, this time business profitability started to wane in late 1997. Employment growth slowed but did not reverse. Household spending deficits kept growing as net worth rose with the stock bubble, effecting more borrowing activity and allowing consumers to save less – the savings rate fell from around 5% in 1998 to 2% by the beginning of 2000.

Inventories as a percentage of total goods GDP began rising in response to the equity-inspired artificial demand. With widespread credit available at cheap rates the pace of the restock set inflation back into motion, and the Fed into the “restrictive” rate policies in May 1999. Those higher rates only served, once again, to reinforce household deficit spending – the brief spurt of interest income arrested the fall in the savings rate while keeping the spending deficit trajectory intact (by the second quarter of 2001 the spending deficit was 22% of income, an all-time high). Inventory action kept building until the end of 2000, when corporate credit suddenly reversed on safety concerns – record bankruptcies were pushing money out of business credit and into more interbank lending.

As per its well-established pattern, the Fed lowered rates beginning in May 2000, then accelerating throughout 2001. Even though short rates were now below 2%, they were allowed to fall further through the middle of 2003 (at around 1%) and continue at that level until May 2004. Not coincidentally, the recovery after the 2001 recession was the second “jobless” recovery. Inventories remained constrained by fear from the bear market in stocks that functioned as an effective ceiling in corporate credit. Inflation followed inventories confirming for the Fed its output gap calculation and rate policy.

Interest income fell from 11% of GDP in late 2000 to 7.5% by 2004. That lost interest income constrained deficit spending, as overall spending remained weak throughout the “accommodative” rate period. The low rates did



stimulate borrowing as intended (for the first time) and consumer credit continued its rapid expansion. The first signs of the now fast inflating mortgage bubble were beginning to build outside the “official” banking system. Throughout the weak recovery period household liabilities rose \$2.5 trillion while net worth fell by \$800 billion. Equity asset values fell \$5.8 trillion from 2000 to 2003, but that was only 60% of the \$10 trillion gained in the 1997 – 2000 period alone. As bad as the stock bust was, it was not enough to offset the huge gains of the mid 1990’s and the forming housing bubble. So the low interest rates of the recovery period were all that was needed for households to push into an even higher debt load (for the first time in history, outstanding liabilities were greater than outstanding hard money assets).

Clearly spending patterns had been altered by the twenty plus years of the savings bubble, but presented with a high risk of losing significant asset value households responded favorably to low cost credit rather than improve the rapidly diminishing interest income capacity of the savings bubble. At this point in time, the transition of the savings bubble from interest-bearing, hard money assets to equity and housing assets susceptible to negative price actions was not at all guaranteed. The need for asset income by 2001 to fund deficit spending was now of paramount importance. Yet the alternatives for that income were not appealing. Low rates meant a large increase in total savings would be needed to replicate interest incomes of the earlier 1990’s, but that would mean a severe curtailing of deficit spending.

For policymakers the choice was clear – encourage borrowing or risk a severe contraction. So the economic contraction was narrowed and the initial recovery was a consequence of cheap financing. That households’ balance sheets were worse off (Chart 4-2²⁶) for the experience was not a real tradeoff since it was expected that the economy would monetize itself back to life. Yet that never happened, unemployment kept increasing through the middle of 2003.

Business profitability rebounded in mid-2002, but job growth did not reverse as it had in every other postwar recession. Why was this recovery different? The difficulty in transitioning from early stage recovery to full recovery (cost cutting had restored profitability but that alone was not enough to push to the last, sustainable recovery stage) was a function of weak investment income and the growing degree of borrowing substitution.

The push came from mortgage debt. The growing housing boom leaked enough into household spending and construction activity to generate some sustained demand – so by the middle of 2003 inventories began to rebuild. Corporate credit growth returned as a result of higher corporate rates and spreads, fear that pushed corporate rates higher during the dot-com bust was now attracting new money. In absolute terms, inventory growth increased as a percentage of total goods GDP bringing the acceleration in consumer inflation discussed at the beginning of Part 1.

That inflationary trend convinced the Fed to raise rates in 2004 and 2005, again having the opposite affect. The “restrictive” rates served to buoy household income through interest, and deficit spending strongly returned. The savings rate fell to negative territory in mid-2005 as asset prices were once again driving net worth. The “restrictive” rates intended to slow inflation instead drove demand, pulling the reluctant recovery to the last stage (upside down policy).

Seeing a full recovery, the Federal Reserve once again gave itself credit, despite public pronouncements of long end interest rate puzzles. What really happened was an agonizing perversion of risk aversion. Even after a devastating stock bubble, households were willing to chase price appreciation assets despite growing risks. Between 2000 and 2007 households added a staggering \$7.1 trillion in debt (\$5.8 trillion in mortgage debt, \$950 billion in consumer credit, the rest in smaller debt categories). Net worth had grown \$20.7 trillion over the same period, but nearly all of it was a result of price action of equities and real estate. When the bubbles burst a second time in 2008-



09, \$14 trillion in net worth was gone but the \$7 trillion in debt remains.

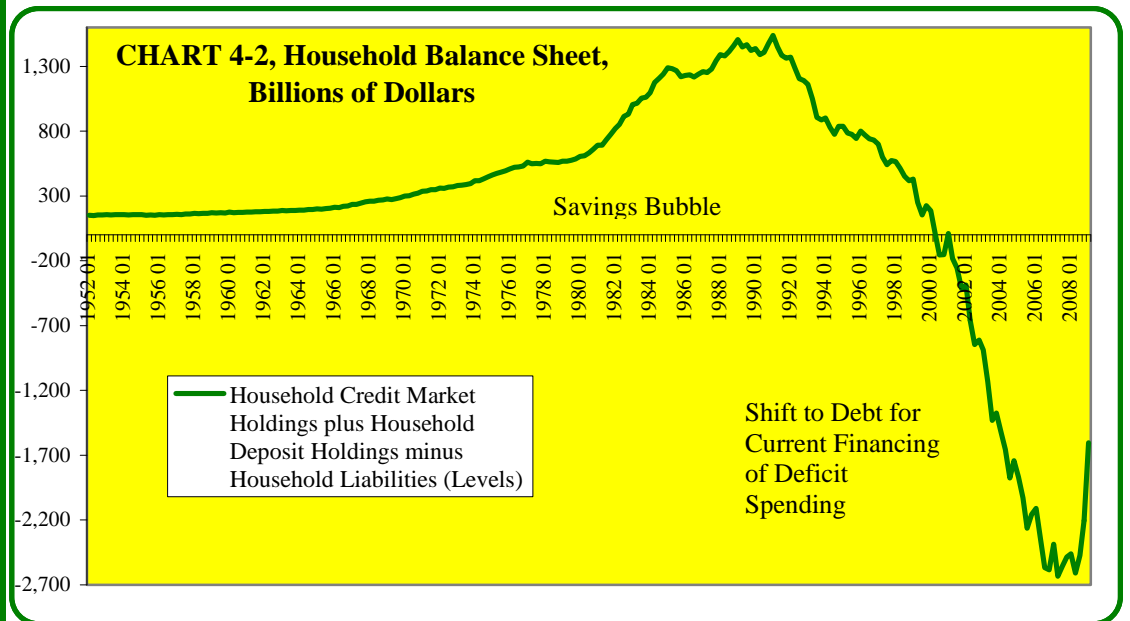
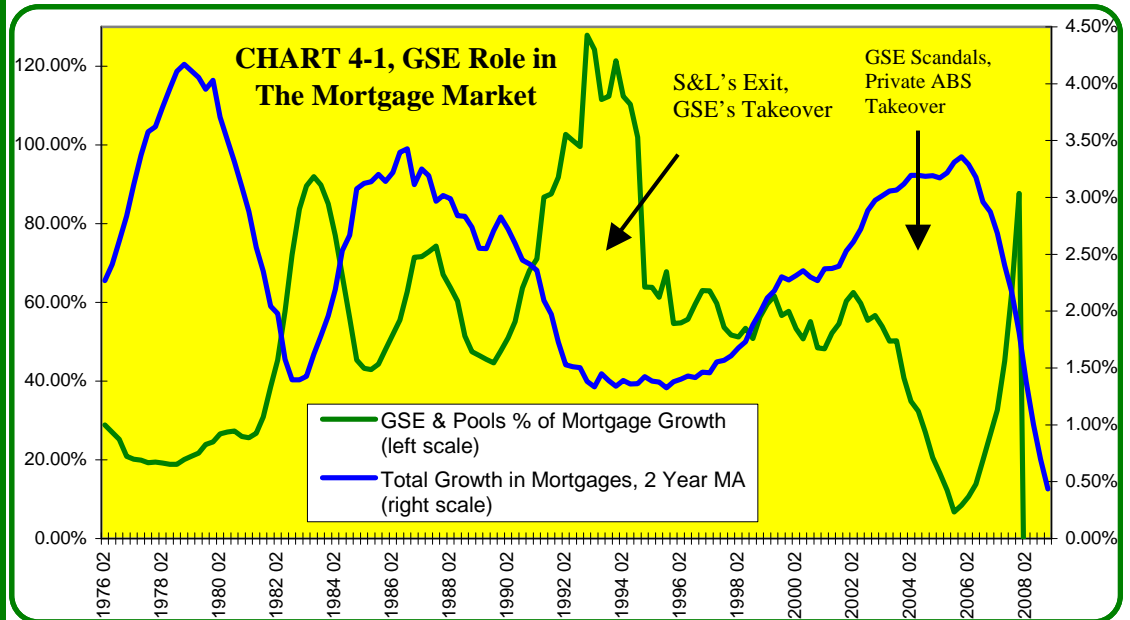
The real story of the last recovery was that it took all that debt to create it. The question for the current recovery is if it will take another \$7 trillion. If so, where will the money come from?

While the Treasury busies itself trying to realize that borrowing on its own (it publicly fancies itself as a plausible alternative to the mortgage bubble's leakage into real economic spending), the credit market has a different concern not present in 2003. The credit market *as a whole* is in trouble, and there are no funding sources left for households.

GSE's began taking over the mortgage market in the 1980's, beginning with the decline in 2nd lending during the 1982 recession. When the S&L's began to collapse GSE's were accounting for all mortgage activity, and the majority of activity through the rest of the 1990's and early 2000's.

When the accounting scandals occurred the GSE's took a step back and were surpassed by private label ABS issuers looking to capture the outsized profits the GSE's pioneered.

Households had saved more money in their interest-bearing assets than added in debt. Much of this was done with the aid of higher interest rates. The lower rates of the 1990's led to equity preference, creating the spending mismatch that led to increased debt usage. The pace of debt accumulation in the 1990's and 2000's was dramatic – fully reversing the balance sheet position of households by 2000, and putting households in a debt position that far exceeds the diminished ability of savings to cover it without asset price appreciation. 2008 shows the reversal of this dynamic and the debt reversal of the increased savings rate.





Part 5 The Point of No Return

The current recession is a result of an over-reliance on asset income and inflation for marginal spending: income for direct funding of spending deficits, and inflation to offset the borrowing used as a substitute for wealth building in retirement accounts and price appreciation of non-liquid residential structures. As detailed in Part 4, these occurrences are the leftovers of the Great Inflation, distorted by nearly three decades of mistakes piled onto lost opportunities.

Rather than allow the economy to arrest negative trends, constant rate changes created incentives for riskier methods of maintaining this unstable equilibrium. Savings in 1983 took the form of bank deposits and fixed income assets (hard money assets) not as susceptible to price risk. Since these were interest-bearing assets, the income they generated financed the early stages (post 1975) of household deficit spending. By 2008, consumers were spending just about 25% more than they made, saving next to nothing, and borrowing large amounts to keep the unstable process intact. The end result of the savings bubble is a composition of household wealth not likely to contribute much to a final stage recovery.

At the beginning of 1985, households held more than 36% of their financial assets in interest bearing securities (mostly deposits and money market funds, but more than a third in bonds of some type). The remaining portion consisted of pension reserves, equity holdings and mutual funds (in that order). Because of the high proportion of hard money assets, interest income reached its peak of more than 13% of GDP. From that point on, interest rates have trended much lower, and by the height of the stock bubble in 2000, only 18.8% of financial assets were hard money, interest assets (nominally these assets grew at only a 4.5% compound annual rate).

The “stimulative” and “accommodative” interest rates of the 1990’s accomplished only stimulating riskier behavior. Shifting a majority of savings to assets susceptible to price actions meant a shift in purchasing behavior. Unlike interest bearing assets, using equities to increase net worth means (for the vast majority of investors) waiting for prices to move enough to pay off the riskier transaction. For retirement accounts, the statutory and taxation limitations of using these assets means they are not a good source of current spending. To compensate for this “maturity” mismatch, households had to find a plentiful source of current cash inflows.

Since GSE’s had effectively taken control of the mortgage market, particularly when GSE-debt popularity increased as US Treasury issuance fell from fiscal budget surpluses, they flooded the mortgage market with relatively-cheap mortgages. But it also pushed the banking system to find alternative borrowing targets, which were found in consumer credit, business credit, and non-traditional or non-conforming mortgage loans (including HELOC’s and other home equity loans that would leak into household spending – Chart 5-1²⁷).

The net result was not only increased risk to household assets, but also to household balance sheets. By 2000, households were adding more than \$1 in debt for every \$1 saved in hard money assets. In the 2000 – 2003 period households seeking safety from the stock markets shifted \$1.17 trillion into deposits and money market funds, but nothing into higher yielding credit instruments in a vain attempt to regain some form of risk-adjusted balance. During the same period households added \$2.5 trillion in new debt, with the spread between the two widening (rates on income fell faster than rates on borrowing).



The boom period of 2004-07 only intensified the household risks. In addition to equity price susceptibility, low mortgage rates encouraged transitioning assets to include housing price risk. Net worth gains in both price bubbles took the borrowing/non-touchable asset growth dynamic to their unsustainable zenith. The “restrictive” rate policy of 2004 –05 had no effect on longer-term borrowing rates because there was no parallel effort to restrict credit growth in the shadow credit market. The rate policies actually encouraged more off-balance sheet activities. Connected to this process was the yen/carry trade’s affects as a huge new source of credit growth for the banking system to make up for the near zero savings rate of American households. Cheap Japanese funds were transferred to the US credit market as repo funds.

Monetary authorities were presented a golden opportunity to finally get credit growth under control in 2003 when accounting irregularities surfaced at Fannie and Freddie. The discovery of earnings manipulations to achieve compensation for high-level executives finally forced some in Congress to question the sanity of allowing so much influence on the mortgage market to entities with special government features. In the wake of the scandals, Fannie and Freddie relinquished their hold on mortgages, and by 2006 GSE share of the mortgage market had fallen from 49.1% to 35.4%.

ABS issuers willingly filled in for them, attracted by the outsized compensation for packaging and securitizing loans. By allocating so much capital to the securitization process, mortgage rates were kept low enough to continue attracting borrowers (who themselves were still looking for lower cost current cash flow to offset the still growing asset “maturity” issue).

The precarious current position of household balance sheets is not lost on the Fed, nor private economists. But their concerns are manifest in monetary and rate policies that are counterproductive. Again, in the wake of asset price breakdowns, household savings are going

to safety assets – those that are producing near zero interest returns. Meanwhile, borrowing costs have to be artificially bounded by Fed action to try to preserve some ability of households to borrow (who have none left). All of these maneuvers are serving to paint the economy into a corner from which no policies may arrest negative distortions.

The near-zero returns on short-term safe assets are a product of the “quantitative-easing” policy of the Fed. To counteract the banking crisis, which the Fed saw as deflationary in nature (too many debts and too few lenders), the Fed has radically expanded both its balance sheet and its actions within the credit markets. The self-advertised goals of these actions are to preserve the credit market’s ability to finance household deficit spending on consumer goods and assets and to restore the ability of business to finance inventory restocking (the collapse of the commercial paper market has severely hampered inventory growth, accounting for much of GDP contraction).

After analyzing the behavior of the monetized economy in 1992 and 2002 it is difficult to see how the current monetary and fiscal policy can produce the necessary conditions that allowed those recoveries to materialize. In the early 1990’s the key was the growth in net worth through equities, allowing households to save less earned income and finance more deficit spending. In the 2000’s, it was borrowing that preserved limited spending growth while employment slowly returned, and then increased interest and dividend income to finance more deficit spending. Can either of those scenarios work under current conditions?

In both recoveries, low interest rates were counterproductive towards household spending but households had alternatives. We should not expect net worth growth through equities to allow another drop in the savings rate since it was already at zero in early 2008 (it was around 7% from 1987 through 1994). The only way to push the savings rate below zero is through borrowing or drawing down accumulated savings. The former cannot take place given the current state of household balance sheets. Even



at artificially low borrowing rates, banks and intermediaries cannot find enough qualified borrowers to make loans. And given that debt load, the latter makes little sense either. Households are not going to use their savings to continue to spend above incomes while leaving those debts intact (absent a sudden and dramatic reversal of house prices).

The fact that the savings rate has risen dramatically in 2009 shows the 1990's recovery scenario as not possible. It also suggests that marginal income is being used for balance sheet reparation. The higher savings rate does not necessarily mean money flowing to assets, it can also mean paying off debt. Under these constrained circumstances, the only way to grow spending is through income, earned or interest. And in that respect the expiration of the "Bush" tax cuts²⁸ will be particularly detrimental (see side panel).

Employment cannot rise without a full recovery for businesses. Interest income will be constrained by low deposit and treasury rates – Bernanke and the Fed have already stated that they expect a positive output gap (meaning low inflation and an economy needing "accommodative rates") until 2011. From the June 2009 FOMC meeting minutes²⁹:

"Although recent increases in oil and other commodity prices were likely to raise headline inflation over the near term, most participants expected core inflation to remain subdued for some time. Several measures of labor compensation had slowed in recent quarters as unemployment mounted and wages were not likely to exert any significant upward pressures on prices, given the expectation that labor market conditions were likely to deteriorate further in coming months and probably would not improve quickly thereafter...A few participants were concerned that inflation expectations could continue to rise, especially in light of the Federal Reserve's greatly expanded balance sheet and the associated large volume of reserves in

the banking system, and that as a result inflation could temporarily rise above levels consistent with the Committee's dual objectives of maximum employment and stable prices. Most participants, however, expected that inflation would remain subdued for some time...The future path of the federal funds rate would depend on the Committee's evolving expectations for the economy, but for now, members thought it most likely that the **federal funds rate would need to be maintained at an exceptionally low level for an extended period**, given their forecasts for only a gradual upturn in activity and the lack of inflation pressures."

The Expiration of the "Bush" tax cuts on January 1, 2011 will be one of the largest tax increases in US history, and will affect ALL taxpayers and a large number of businesses:

For lower wage earners – the child tax credit will shrink from \$1,000 per child to \$500. Nominal marginal tax rates will rise between 3% and 4.5% in each bracket, meaning the lowest wage earners will get the highest tax increases. If that wasn't enough, the 10% bracket is eliminated completely raising the tax burden by 50% (before the marginal rate increases).

For investors – capital gains rate will rise to 20% for the top brackets and 10% for the lowest two brackets. Qualified dividends will disappear and dividend taxes will revert to income rates.

For married taxpayers – the marriage penalty will return as the standard deduction for joint filers falls from 200% of single filers to 174%, and the upper limit for the 15 percent bracket will shrink from 200% to 167% of the upper limit of single filers.

For small businesses – maximum expense deductions will fall from \$100,000 to \$25,000, returning the cash flow mismatch between tax liabilities and depreciating expenses.

Most of these tax cuts will affect middle class earners and small businesses the most, just as the recovery is looking to transition to growth. Since these increases take affect in 2011, the transition in spending expectations will come in the latter part of 2010.



Without a healthy rate increase, there will be no interest income to finance spending. Dividends will not be a viable alternative either – the substantial dividend income of 2006 and 2007 evaporated with the financial crisis.

The “cash for clunkers” program is a good example of restrained demand. In order to buy cars and get the free (transferred) government money households restricted spending in other areas (other durable goods, electronics, appliances, furniture). July retail sales³⁰ ex-autos declined by 0.6% (economists expected a 0.1% increase) despite only one week of the program. On an absolute basis, the economic activity created by the demand for government-sponsored vehicles was offset completely by reductions in other areas (and by government confiscation of savings – more on that below).

In the first quarter of 2009, the decline in business spending constituted the entire 5.4% decline in GDP. It was spread equally amongst business investment in structures, investment in equipment and software, and inventories. Those plus the cuts in payrolls demonstrate that businesses have borne the brunt of the recession.

There are two components to those spending restraints, cutting the fat from bloated operations, and suspending necessary spending. The first comes as a natural tendency of organizations to lose focus on efficiency during good times, and these cuts will not be restored. The latter is a result of limited availability of internal funds or credit to engage in capital spending for future growth. A full recovery, or near full recovery, brings that spending back. In either case the new focus on efficiency will not allow rapid employment growth.

If the majority of business cuts are suspended necessary spending, then a return of profitability will refocus business on capital spending. The portion of that spending relating to expansion plans may be reevaluated in the context of expected demand resurgence. So weak demand from consumers will keep those suspended projects on the shelf.

Taking a look at the current labor market gives us an indication of the proportion of business regression. 105% of all job losses³¹ (losses were offset by limited gains in education and healthcare) during the downturn have come from seven sectors: durable manufacturing (28.4%), construction (25.8%), employment services (18.6%), retail (12.7%), non-durable manufacturing (8.6%), transportation and warehousing (5.5%), and wholesale (5.4%). What is striking is the amount of job losses (half) related to the goods economy, despite the fact that spending on goods only amounts to 23% of GDP. The disproportionate toll on the goods economy shows that the service economy is much less elastic in terms of marginal spending, meaning much of the goods economy is now considered expendable (luxury spending) compared to services. Since most of the growth in the service sector has occurred in education, healthcare and business services, the first two are indispensable relative to plasma TV’s and Coach handbags. While that may seem like an unrealistic choice, the fact that the goods economy has suffered so much indicates that luxury, unnecessary spending made up a significant portion of economic growth during the last boom (considering the rapid expansion of net worth through dual asset price action this is not surprising).

This means a cap on inventory restocking. Even if corporate credit were to become plentiful it is not likely to be translated into demand for inventory. Without a return of deficit spending there will be little incentive to *overproduce* for future demand (some restocking will occur from last year’s overreaction). Full recovery means some growth has to emerge, either a full goods turnaround or growth from some new sector. Without consumer flexibility it cannot be the goods sector. The current recovery is shaping up to be very similar to 2002-03, *without* the borrowing alternative.

Without a consumer or business recovery, some advocated government action as a substitute. The “stimulus” bill that was enacted has yet to fully kick in, and when it does it will likely cause more harm than good. On the first part, spending within the act more often than not does



nothing to create demand outside of keeping a small part of the labor force employed. Since 25.8% of all job losses have come from the construction sector it may seem like a good idea to reemploy some of them on government projects. This is precisely what the Japanese did to no avail in the 1990's, and FDR tried in the 1930's. The net result in both cases was a huge increase in government debt with no concrete change in the economic situation. The reason is that, absent a full, steady job, the government employed worker will look to spend as little of the government income as possible – saving as much as possible for the predetermined day when the government project ends. And since spending is likely to be on *necessities*, it is little help to an economy suffering from a sharp cutback in *luxuries*.

Some have claimed that it is better to have people working than sitting home on unemployment or welfare. But in the end, both are essentially the same – transfers of money via the government (which already account for 14% of GDP). On the first hand, the government is getting something tangible in return for the transfer (stimulus projects) but it is dubious as to whether they stimulate anything. The real costs to taxpayers go beyond payrolls – in terms of construction spending there are costs of materials and administration. On a comparative basis, it is cheaper to keep people at home on unemployment.

Much of the stimulus bill (\$79 billion³²) was a transfer to states to keep state and local workers on the payrolls. This functions as another form of unemployment insurance that keeps bloated state budgets from naturally constricting with its tax base. Another temporary fix to the problem that pushes that shrinking into the recovery (when the stimulus is gone tax bases will not have recovered enough to justify those workers, and job cutting will come anyway).

The major problem with the need to borrow funds to accomplish the stimulus is crowding out of private borrowers. Since the government ran out of tax dollars during the normal course of its business, every marginal dollar spent on the stimulus is a borrowed dollar. Every dollar

borrowed by the government at near zero rates, is a dollar taken from households in the form of lost interest income, and every dollar taken from other sources is a dollar taken away from corporate or consumer credit. Since the search for safe assets has allowed the near-zero borrowing, there has been a shift out of the banking system and into direct lending (the bank funding crisis). To make up the shortfall, the Federal Reserve and the US Treasury have used TARP to keep banks solvent. Household assets that used to fund banks are now funding them indirectly through government borrowing (mostly through money market funds). As a matter of that indirect process, the entire government operation is piggybacking on the now plentiful demand for UST assets. So marginal costs for increasing the deficit is currently minimal.

But in the context of the credit market as a whole, government borrowing is being done at the expense of business. By demanding safe government assets (no longer agency securities) primary lenders (households through money market funds) were shifting out of corporate debt, and intermediaries were not able to meet corporate demand. The perceived risks forced corporate rates up on what little credit was available. If the government had not increased the deficit exponentially from TARP, and through the stimulus and omnibus bills (and also declining tax revenues), where would the savings have shifted? It seems likely that safety would have been more of an imprecise term, that investors would have scrutinized debt classes more carefully, and chosen safety from within the corporate debt class. Under those terms most corporate borrowers would have found ample sources of funds at attractive rates (lower risk businesses would have had credit terms closer to the government's terms). In this very important respect, the government has confiscated credit from business by the virtue of being the indirect supporter of intermediaries, and using its standing to take advantage of its newfound spending (very similar to 1935-36).

The argument for government intervention now becomes whether or not it was a necessary cost. If the government had not acted through TARP,



would the financial system have collapsed? Following that, were the stimulus and omnibus bills necessary to forestall a worse contraction justifying the cost of confiscating business credit? Our March 2009 Special Report answers the former question – there were other more effective and less costly means of supporting the banking system, and the TARP program itself contributed as much to the decline in trust as the original contagion.

The latter question is being answered directly from the economic numbers themselves. The economy has pushed itself into the first stages of recovery on its own – businesses have cut enough costs to return to profitability, and have begun to think about resuming some suspended projects. Since businesses were largely responsible for most of the contraction, the return of profitability itself is enough to end the contraction and start the first recovery stage. None of the stimulus spending had any part of the bottoming process, and the government spending still to come will not lead to sustained economic activity, nor will it add to the transitive nature of the recovery. Dislocation within contractions trigger a reallocation of resources that is interrupted by government interference and intervention – bailouts keep inefficient projects going at the expense of sustainable, profitable projects, while artificial employment keeps labor from transitioning from declining industries to more stable growth industries.

What we are left with is government deficits that are rising rapidly funded by confiscating credit. To date, the credit sources for government borrowing have been money market funds, foreign sources and the Federal Reserve. As a practical matter, the Federal Reserve's purchases of US Treasuries (along with its balance sheet expansion) have ignited realistic fears of inflation. The Fed's stated comfort with "accommodative" policy for several more years based on output gap calculations means that (June 2008 Special Report) the Fed will err on the side of employment over inflationary pressures, as it has for over forty years. That predictable pattern is the basis for these inflationary expectations since Fed action has

reliably produced inflation (asset and consumer) since 1965.

By itself, these inflationary fears are not likely to have a real affect on marginal inflation – only inventory and actual sales can sustain inflation. But inflationary expectations can have transitive affects on prices, such as spikes in oil or commodities. These affects can be harmful to consumer spending in the short term. So while the Fed is right about systemic price increases, it is severely underestimating the negative affects of price spikes in response to its own actions. Those price increases from speculative inflationary expectations can, if conditions and credit means are right, lead to inventory actions that can pass those speculative input costs to consumers as inflation. The latest attempt to curb speculation (particularly in oil and commodities trading) seems to be a belated regulatory response to the damage short-term price action can bring to consumers, but it does so out of political expediency rather than any admission of the importance commodity prices play in influencing inflation expectations (treating the symptoms rather than the cure).

Inflation expectations are tricky things – look at the damage from the 1970's. Once expectations reach a tipping point they will not be restrained by talk and plans, only concrete action will work. Right now, talk about inflation from within the investment community is about inflation going in one direction, with many expecting *hyperinflation*. That in itself is a calculated bet on the odds of the Fed getting it wrong again. While professional and institutional investors begin positioning money based on those expectations (which has the practical effect of producing price spikes), monetary policymakers continue to focus on imprecise output gap calculations.

What is truly disturbing is that the same people who watched the credit bubble build from the inside (who were taught policy by the people who presided over the disaster of the 1970's), used upside down interest rates and refused to acknowledge they were ineffective, are now suddenly going to be right on course when it comes to an even bigger challenge – rescuing an



economy that is so distorted from over-engineering that a recovery that was building is threatened by their devotions to their twisted perceptions of their own success. And their answer to that is *more* economic engineering.

Interest rates and the dollar are telling another story, one that does not have a happy ending. Stimulus, omnibus and TARP have accomplished two simultaneous affects on expectations: inflation sensitivity as we noted above and now deficit sensitivity. Both, to some extent, have been detected in the slow, steady rise in treasury rates – especially at the long end of the yield curve. By themselves, the rate increases appear very positive - the yield curve has steepened signaling good growth. But in comparison to alternative investments, there are cracks appearing in the policy scheme.

Corporate bond rates increased dramatically when the panic first erupted. Much like the slower panic of the dot-com bust, corporate debt found itself outside the risk appetite of lenders (households and intermediaries). Since the current panic was much more pronounced and condensed into a much shorter period, the effect on corporate rates was also more pronounced – bond spreads were far higher than they have ever been (and treasury rates were far lower than they have been in decades). As the panic has subsided, corporate yields have begun to normalize. But that return to pre-panic levels has come at the expense of treasury prices (Chart 5-2³³).

Looking at bond rates from both classes the dichotomy is pronounced. The week of April 3, 2009, saw a change in the direction of corporate bond yields, as they have started noticeably lower. The same week treasury yields (maturities 5 years and out) started to rise significantly. Those trends have been remarkably stable despite the myriad changes in daily data. The only interruption was the June 12 – July 10 reversal of treasury rates. But those dates match exactly the local high and low of the major stock indices.

These trends present clear evidence of investors returning to riskier assets. In comparison to both

corporate equities and corporate bonds, longer-term treasuries are overpriced and rates need to adjust upward to attract money. Some see this as evidence of a normal recovery action, but looking into the auctions themselves shows more problematic data.

As treasury rates rose the percentage of government debt purchased by foreign central banks and the US Federal Reserve rose. This is troubling for two reasons. First, the US Treasury is going to continue to need every dollar to finance further deficits for the foreseeable future. Since the beginning of the year, \$1 trillion has been added to the debt (\$400 billion was added from September to December 2007). Based on official estimates³⁴, that leaves another \$200 billion in debt to be added in August and September alone. Most of that debt has been placed in bills (maturing in less than one year) and shorter notes (bonds maturing in two, three and five years). In some cases, buying by foreign holders (mostly central banks) have accounted for 50% - 70% of the total auctions (Chart 5-3³⁵). While the bid-to-cover ratios have been robust, it means that domestic purchasers are demanding higher rates. As the government goes to borrow increasing dollars in the near future, it also has to roll over its existing shorter term debt. If the largest pool of funding is demanding higher rates this early into a recovery, can that bode well for the rest of the massive borrowing program?

The scarcity of these funds is another large problem for government borrowing. The Federal Reserve has limited its buying to \$300 billion (who would have accepted the Fed buying \$300 billion in mid-range treasury notes a few years ago?) ending in October. How will rates react when a huge source (and one of the only sources) of funds is gone? If rates rise and the Fed initiates a second program it will only harden inflation expectations.

Foreign sources of treasury buying are not unlimited either. In fact, foreigners have pulled their money out of several other US asset classes, including agency debt. The consolidation around the safety of treasury instruments is not surprising given the scope of



the panic, but will not last through the recovery. Even with all the central bank activity (Fed and foreign) interest rates have steadily risen.

Foreign purchases of US assets are not surprisingly tied to the current account deficit. When the current account deficit has been high, meaning more dollars stranded outside the US, foreign purchases of US assets have been high (Chart 5-4³⁶). Three large spikes in foreign buying have occurred: in the mid-1980's (peaking in 1986), in the mid 1990's (peaking in 1996) and in the mid-2000's (peaking in 2005). All of those peaks have closely correlated to peaks in the current account deficit (the converse is also true, troughs in foreign buying of US assets have occurred close to troughs in the current account deficit). For the US Treasury, the worrying sign is the rapid decline in the current account deficit as global trade fell significantly through the worst of the current recession. Since 2007, foreign sources have unwound \$633 billion in repurchase agreements with banks, and have shed almost \$400 billion in agency debt (GSE issued notes, bonds and mortgage-backed securities). Those outflows have been partially matched by purchases of treasury notes, bills and bonds (\$900 billion), the most significant amount of buying among any source of funds. But those shifts are not likely to remain, since both match the flight to safety of US households. With domestic sources demanding higher rates for holding government debt, how far behind are foreign sources?

With domestic consumption weak we cannot expect the current account deficit to reverse in the near future. That leaves two sources of trouble for the treasury department – both the willingness (return to riskier assets) and the ability (pool of dollars outside the US) of foreigners to lend to the government are straining. Inflation expectations will be the central focus of either calculation.

Beyond the foreign source of funds, money market funds have been the largest source of short-term government funds. Without the panicked shift from commercial paper through prime money funds to government funds, short treasury rates would not have fallen as far as

they did. Since the middle of 2007 money funds' holdings have increased by \$1.2 trillion, or 51%³⁷. While that in itself was a shift to safety assets, assets within funds also shifted toward safety. There was a 48% decline in corporate bond holdings of money funds (\$208 billion, \$100 billion in the third quarter of 2008 alone). While \$430 billion went to treasury bills (again a large portion in that third quarter), \$640 billion was used to purchase agency debt – the same debt that foreign and household sources were fleeing. And of that \$640 billion, \$383 billion came before Fannie and Freddie were nationalized – which provides the reasoning behind their government takeover. If they had been allowed to fail, the money fund panic would have been exponentially worse, considering the relatively smaller failure of Lehman started the panic by triggering relatively small losses in prime money funds.

While simultaneously dumping agency holdings in personal accounts, households were picking up the same agency debt through money funds simply because the money funds were titled “government funds”. These are not rational actions. The implication for the treasury is what happens when rationality returns. The flight to safety overrode every other investment consideration, but safety has slowly lost its luster. Larger pools of investors are again choosing riskier assets (corporate debt and equities), money fund investors will not be far behind.

The tipping point will come when there is competition for short term funding. The commercial paper market took most of the financial damage: at its 2007 height there was over \$2.18 trillion in commercial paper outstanding³⁸, 56% of that was asset-backed paper (borrowings of CDO conduits to finance the senior tranches). As of August 19, there was just under \$1.2 trillion in commercial paper outstanding – \$988 billion less, or a loss of 45% of the total market. Since money funds are required to invest in short term assets, they have limited alternatives for their funds. The added pressure of the sharp increase in money fund demand meant a desperate search for borrowers, explaining the purchases of dreaded agency debt



that, until September 2008, was not explicitly guaranteed. The fact that short term rates are near zero is a function of no alternate investments – in this case there is competition for borrowers.

The Federal Reserve has accounted for a large part of commercial paper demand since the September panic – initially purchasing over \$300 billion in paper (mostly financial)³⁹. Much of the decline in outstandings in 2009 is a result of the Fed winding down the program, reducing its holdings by \$280 billion, while the overall market has fallen \$405 billion. That means the appetite for paper has not yet returned. But there are signs of stabilization. Financial paper issuance has picked up since an August 5 low, and nonfinancial paper has been relatively stable since the middle of July. While not enough to influence short-term rates, there has been a noticeable increase in private demand to replace the Fed's holdings.

The actions of short term commercial paper rates intimates that there is still some demand for paper but not enough supply. The funding crisis last fall forced intermediaries to look for funding alternatives – TARP being one of them. Then the stress test nonsense pushed some of the larger financial institutions to raise even more funds through preferred and common stock offerings. So the direct need to issue commercial paper has been limited as it has been bypassed for longer-term funding. But much of that funding was done on relatively onerous terms. At some point in the future, as safety and funding requirements recede in importance banks are going to need to fund their operations from the short end of the yield curve to improve profitability. Likewise, inventory and working capital of nonfinancial business will need an increase in financing as business activity returns, and inventories are replenished.

Longer term funding sources were desirable in terms of the stress test as a matter of what they were really measuring. While they were sold as measurements of recession-related losses, the stress tests were really looking at how banks would fare with the added burden of FAS 166 & 167 (at the time FAS 140). Banking authorities

have been, since 2008, trying to reverse the shadow credit markets. By reconsidering the non-consolidation provisions banks have been using to set up QSPE's, regulators could effectively limit them (minor changes) or do away with them entirely (major changes). FAS 166 & 167 opts for major changes starting in November 2009⁴⁰.

By eliminating the legal separation issues, banks that used QSPE's off-balance sheet arrangements for credit derivative practices will be forced to consolidate all those assets. But bringing risky assets back into consolidated operations will effectively dilute bank capital ratios and reserves – QSPE's have no reserves of their own, which was why they were used in the first place (maximizing capital efficiency). Reducing bank capital efficiency has two major effects, slower overall credit growth, and a determined need to immediately raise capital.

There is a great deal of uncertainty as to exactly how to repatriate those risky assets, particularly with the liquidity crisis as a not-too-distant memory. That uncertainty effectively limits the lending activities of banks. So banks have been reluctant to make new loans when they have to worry about reserve requirements of loans that were made years ago.

There has been a \$3 trillion increase in financial assets of commercial banks since the fall of 2007, but only \$672 billion has gone into new bank credit⁴¹. \$737 billion has remained in reserves at the Fed, and \$1.6 trillion has gone into miscellaneous assets – some of that is attributed to Fed activities, but mostly it is the investment of bank holding companies in their commercial bank subsidiaries. In other words, the majority of the increase in assets has come from shoring up reserves as opposed to new lending activity. At some point closer to November, financial institutions will begin to have greater visibility of their funding needs tied to capital reserves and ratios. At that point commercial paper issuance may begin to rebound providing the alternative to US Treasuries.



Accounting issues are only one aspect of the credit market's declining growth rate. Without continued credit growth, how can a competition for funds be avoided? The White House Budget Office and the Congressional Budget Office expect another \$1.3 trillion deficit for 2010. Where will that money come from?

The slowing growth of primary sources of intermediation, mostly from the reduction in foreign repurchase transactions, has put the credit market on its current course. Chart 3-2 showed the dramatic slowing of primary source money, similar in depth to the late 1980's, but much more rapid. The change in primary source instruments (from deposits toward riskier assets) in the late 1980's led to a significant increase in interbank lending as a replacement for lost deposits. Over time, without primary sources, interbank lending cannot be sustained. The rise in interbank lending in 2008-09 comes from only two places – commercial bank miscellaneous assets, and funding companies purchase of money market funds and corporate bonds. The former, as discussed above, was a response to the pending affects of the accounting changes on reserves, and accounted for **68%** of the growth in 3rd order credit (loans between intermediaries).

The latter pertains to a class of intermediaries consisting of nonfinancial parents of financial holding companies (GMAC or GE Capital) and US subsidiaries of foreign intermediaries raising funds in the US. Foreign capital activities diminished substantially as those repo agreements were not renewed (see above), leaving the bulk of credit activity coming from nonfinancial parents. The parent companies have been raising money through the Fed (\$363 billion) and through the unwinding of their subsidiaries commercial paper liabilities (\$1.36 trillion)⁴². Rather than invest the proceeds in their subsidiaries, they have been lending out to other intermediaries through money market funds (\$466 billion) and corporate bonds (\$608 billion). The only reason for this type of activity is to prefund loss reserves without actually transferring the funds to their subsidiaries. In other words, they are waiting to see the actual affects of the accounting changes and the

recession on their finance subsidiaries before moving the money to shore up their reserves. By raising the funds now, there will be no pressure should liquidity become troublesome again. But as those reserves are needed to offset losses or security consolidation at the subsidiaries, funding companies will withdraw these funds from the overall credit market, in effect reducing total lending to pay for the accounting changes.

Overall, 45% of the entire growth in the credit market since the middle of 2007 is due to three changes: commercial bank funding of reserves in anticipation of FAS 166 & 167, funding company investing while waiting for FAS 166 & 167, and TARP funding of GSE purchases of mortgage assets. Sources for all three of those segments have been, in large part money printed by the Federal Reserve (we consider TARP borrowings a part of printed money since those borrowings have been financed in part by Fed purchases of UST). Taking those sources of credit growth out of the equation, and the entire credit market has grown at a weak 1.3% quarterly rate – far below the 2%+ average of the past three years. So, to put this problem in perspective, the government is going to need **2.5%** growth just to finance its \$1.3 trillion 2010 deficit. The money just is not available – the Federal Government will have to confiscate every available dollar, and will increasingly have to compete with private borrowers for them.

Once that competition forces rates to rise, all sorts of negative consequences will emerge and reemerge. Rising rates will, first and foremost, reinforce inflation expectations. For many investors expecting acceleration, increasing interest costs will confirm their market expectations and lead to further inflationary actions, such as money flowing to commodities. It may also lead to further erosion in foreign funding for credit activities. Typically higher rates encourage more foreign money, but if rates are seen rising as a result of inflationary expectations it will discourage investment as US assets will be perceived to have rising relative risks. This will mean accelerating dollar erosion against major currencies, further cutting into the



current account deficit (dollar declines mean less import activity and dollars flowing overseas) and foreign ability to buy US assets.

The rise in treasury rates will push other borrowing rates higher. Corporate rates that have been falling in opposition to longer treasury interest will have to reverse as the rising treasury rates are effectively a floor on all borrowing. Mortgage and consumer rates will have to rise as well (mortgage rates are often tied to the 10-year UST). The affect on households will be an increase in borrowing costs as well as a decrease in available credit. This may seem to help alleviate the interest income problem but deposit rates will not be rising as the Fed tries to hold bank funding costs down believing it is stimulating the economy in its positive output gap position. At this point household spending power will further erode as interest income stays minimal but borrowing costs rise. Or households can chase those rate increases by moving out of deposits and into riskier assets. This will effectively reignite the funding crisis since bank deposits have been the sole source of primary funding for intermediaries. The movement out of deposits will not arrest the credit competition since rate acceleration will act as self-feedback loop – spiraling rates are necessary to attract every marginal dollar in competition for broad financing.

For the real economy, increased borrowing costs plus inflationary commodity pressures can only lead to consumer spending retrenchment. Without any consumer flexibility there will not be any way to pass on inflation and input costs without further cuts in household spending. While that means more trouble for the goods economy, it may increasingly mean trouble for services (leisure, prepared food, even health costs as unemployment continues to be a problem).

The same no-win scenario is being set up for businesses. Higher borrowing costs and less

available credit will mean a slower inventory rebuild. The commodity price pressures will mean renewed profitability issues, creating more pressure on employment, including a need for further payroll cuts and wariness over rehiring. And if some inventory restocking does take place it will not likely translate to rising employment since there will be pressure to increase output through productivity, squeezing even more out of remaining workers for little to no increase in wages (very similar to 2002-03).

Worse yet, any inventory that does materialize will be a net negative on future growth. Without resurgent growth in consumer demand businesses will be forced into another inventory drawdown as marginal demand falls and the costs of holding that inventory further erode profitability. A second economic contraction is a result of these combined negative pressures.

By crowding out the credit market, the government is putting the economy on a road to a double dip recession. There is simply not enough credit for these enormous deficits. The Fed is aiding the process by funding a large portion of the dislocation, in doing so creating irresistible inflation expectations. At some point someone in Washington has to make a determination of how to pay for the enormous debt *at the same time* withdrawing the artificial monetary stimulation. Given the history of the Fed, its statements before and during the crisis, there is no doubt it will err on the side of over-stimulation (it should change its mission statement to finally admit it). Those two incompatible goals can only lead to another contraction. If the Fed keeps printed money through bank reserves it will stimulate inflationary expectations that will act on interest rates as noted above. If it withdraws bank reserves and displaces credit, the competition for funds will intensify, and the economy will act as noted above. The only way out of this trap is to remove the federal gorilla from the markets.

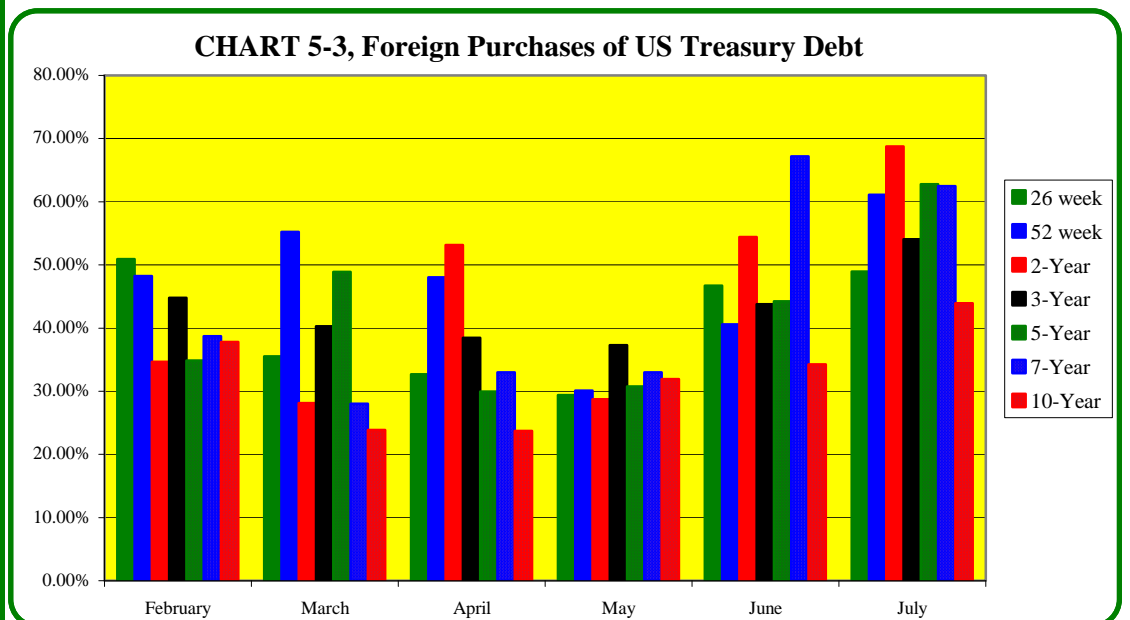
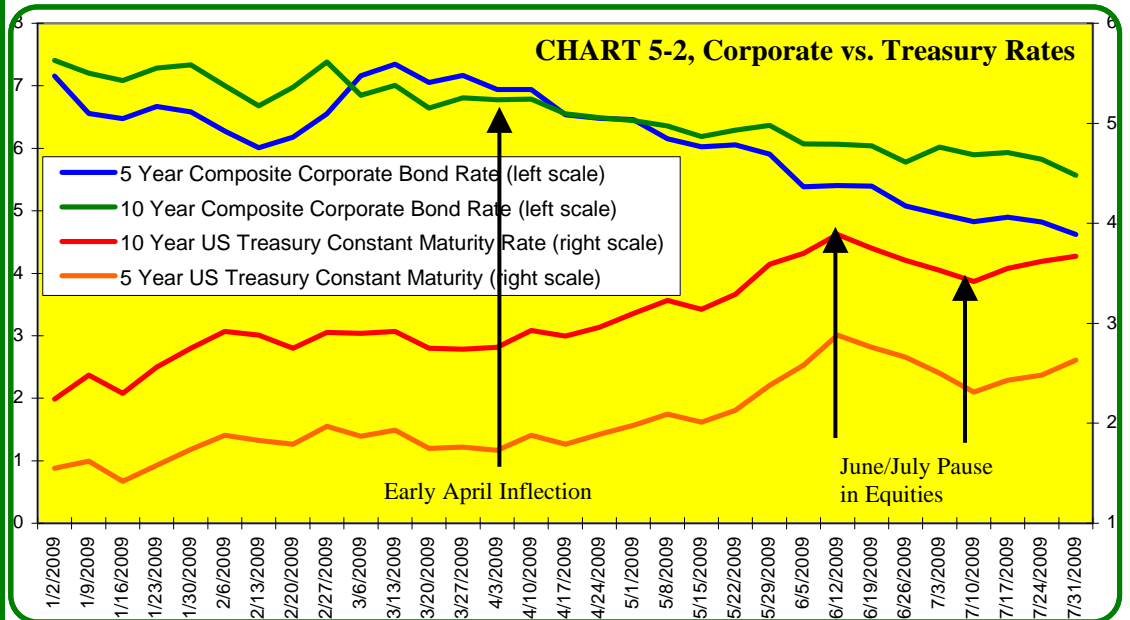
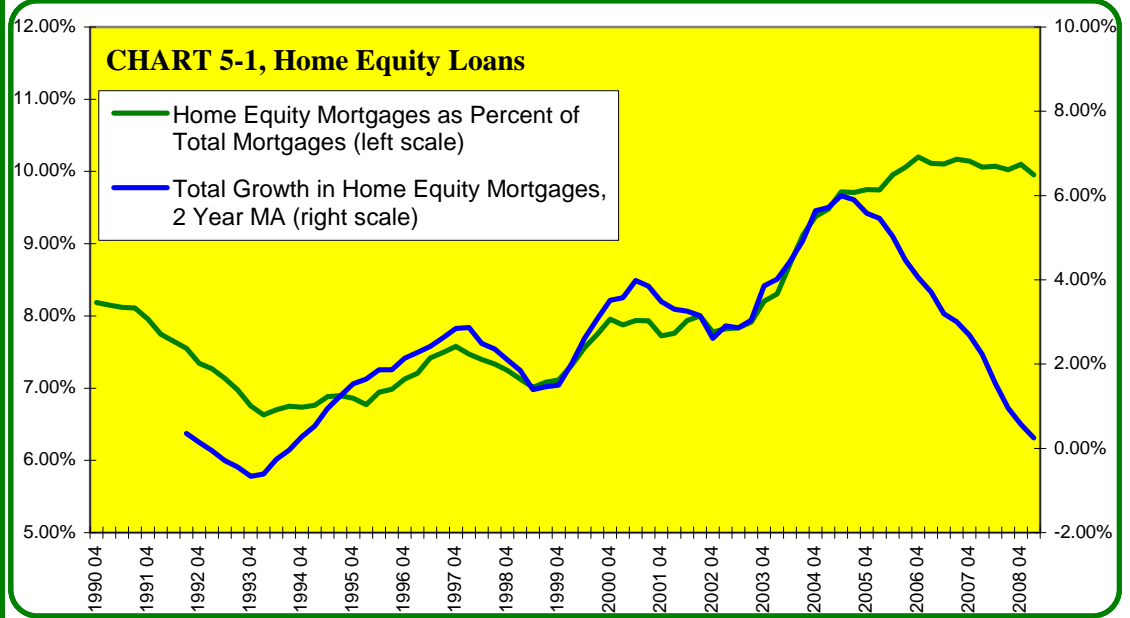


With GSE's dominating the conventional mortgage market, commercial banks and private intermediaries increasingly used non-conforming mortgage debt as outlets for lending activity. Home equity loans were among the most used option – a loan product that is widely used for financing spending.

Since early April, US Treasury rates have been trending higher in competition with corporate debt and equities. At some point the competition for funds will command accelerating rates.

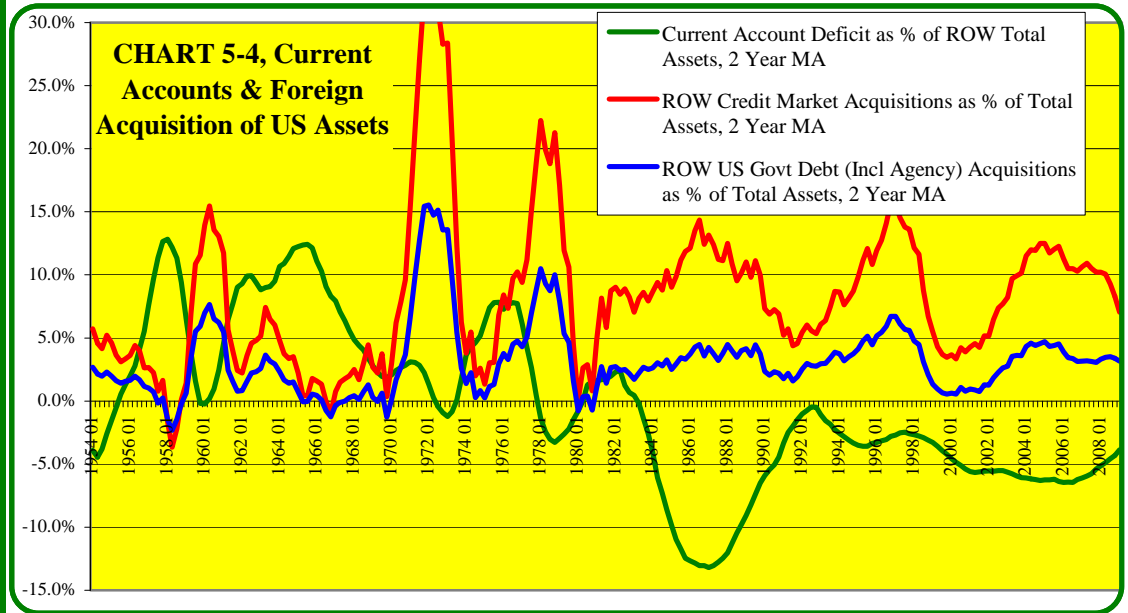
Without significant purchases of treasury debt by foreign sources (central banks) and the US Federal Reserve (not shown) interest rates would have risen much faster. Foreign buying accounting for 60% - 70% of several issues should be a worrisome sign to investors and policymakers.

Rates rise fastest in May, the same month foreign purchases are lowest.





The ability of foreign sources to purchase US assets is tied to the number of dollars stranded overseas. The reduction in international trade does not bode well for the ability of foreign entities to continue purchasing US assets, particularly for financing the massive fiscal debt of the next few years. This will intensify the competition for funds.



Part 6 Federal Depression

Both the recoveries in 1993 and 2003 were the result of positive trends in either net worth or borrowing, followed closely by incremental asset income (when the Fed reversed its “accommodations”). In 1993 the growth in equities allowed a decline in savings to finance an increase in deficit spending, while in 2003 borrowing substituted for equity growth (though that would follow too). Both recoveries featured stable growth in corporate profits.

These characteristics are not just coincidental, they are required. That is why the increase in borrowing rates, near zero deposit rates, tax increases and inflation expectations will be so damaging, they are the opposite of what is needed. Adding to those pressures is the potential weight of currently proposed changes to energy policy, taxation policy, labor policy and health policy. In all four cases the proposed changes add to the oppositional forces. But since they are only proposed changes, we are

only briefly reviewing them as future concerns while reserving some optimism that they remain proposed for years to come.

The processes discussed in Part 5 will be enough to hasten a new contraction, but these policies may combine to mimic the worst aspect of deflation – a severely curtailed incentive to produce. Worse still, these inverse incentives will affect a larger portion of the economy, well outside the goods economy and into significant sectors of the service economy.

Deflationary pressures force businesses to respond drastically. Cutting spending and production capacity to scale back operations not only throws more people out of work (worsening the demand problem) eventually too many workers are cut and assets idled to maintain efficiency. The goal of any business with fixed costs is to increase production to take advantage of an economy of scale, reducing the per unit



cost of production. Taking that process in reverse has the affect of increasing per unit cost, further reducing per unit profitability, potentially to the point that profitability ceases. Any business that continues to produce at a loss will eventually be forced to radically alter its operations (or get a government bailout) through fundamentally reduced activity.

We do not expect deflationary pressures to form as a result of these proposed laws, but it seems plausible that each of these bills can in some combination mimic the effects of deflation, pushing another bad contraction into a depression (1930's rerun).

Healthcare Reform

Rather than wasting time on the politics of the issue, we will focus on the economics. Proponents have been spending a lot of time getting this bill to be budget-neutral, that is the cost of health reform (either single-payer, public option, or just universal coverage) will not increase the deficit. This is a misguided distraction from the real issue – regardless of the effects on the deficit it will *cost* real money to someone.

The initial estimates are \$1 trillion over 10 years⁴³ – knowing the history of selling new entitlements that estimate is likely to be an order of magnitude low: the Medicare prescription drug program created in 2003 was sold as costing \$400 billion over ten years, yet by 2006 the estimate had been increased to \$1.2 trillion⁴⁴; the initial 1965 estimate of Medicare's total expense in 1990 was \$12 billion vs. the actual cost of \$102 billion⁴⁵. \$100 billion per year is not a small amount and will come from taxes (a government surcharge on businesses that do not offer health insurance to workers), mandated coverage (forcing the uninsured that can afford insurance to buy it) and government borrowing. The first is a tax on business, the second is a tax on a group of consumers, and the last is an increase in the competition for credit.

In typical Washington fashion, the collection of those taxes would begin in 2011, but the actual benefits would be pushed out until 2013. This

accomplishes dual political goals, to make the program seem less expensive since it only includes eight years of expenses in the initial ten-year look period, and keeps those expenses (and the major changes) on the other side of a Presidential election. In economic terms it means the tax increases will take affect in 2011 without any benefit. For businesses and households that means the adjustment year will be 2010.

If a business does not offer health insurance to its workers and is facing an insurance mandate or tax tradeoff, it will likely be forced into a consideration of whether it should keep current employment levels, or cut employment to fit the changing workforce cost scheme.

A similar tradeoff would be necessary for consumers forced into mandatory coverage (the government is offering a sliding scale of tax credits to help pay for coverage, but that scale leaves open a significant portion of the population where it will be cheaper to pay the tax surcharge rather than purchase coverage – these people will be taxed for no benefit). Facing restrained marginal income, this population will have no other choice but to cut current spending. It is a direct tax on people with no direct benefit – the very definition of a transfer. In this case the transfer is from businesses that would have benefited from that lost spending activity to the government or health insurance companies to offset some future estimated health costs of unrelated persons.

None of these activities change the costs of healthcare. As the CBO stated unequivocally⁴⁶, costs will actually increase as the number of Americans who access the health system increases. Economically speaking, this proposed reform creates negative economic distortions at exactly the time the economy needs every marginal dollar for the recovery – with no immediate benefit or offsetting decline in costs.

Energy

It is not our intention to argue the question of anthropogenic global warming, nor the role



carbon dioxide plays in it, but rather to isolate the economic affects of a policy that claims to try to move those parameters. First, it must be stated that this bill by itself will have an extremely small affect on planetary warming – as admitted by its proponents⁴⁷. Without China, India and the developing world’s cooperation, our efforts will produce little change (even with their cooperation overall efficacy will be small⁴⁸). But proponents argue that we need to lead with our own actions before expecting the rest of the world to follow.

The cost of our leadership:

- Dramatic increase in energy prices. Cap and trade in UK and Germany saw 16% and 25% (respectively) increases in electricity rates as a result⁴⁹.
- Preparing for Cap and Trade, Duke Energy filed for 13.5% increase in electricity rates citing this regulatory proposal⁵⁰.
- From Barack Obama: "Under my plan, the cap-and-trade system, electricity rates would necessarily skyrocket."⁵¹
- The push into non-nuclear renewable sources will force utilities to use higher cost generation facilities. Renewable projects do not make money by themselves, they are only profitable when subsidized. In this case, the subsidies will come from an increase in the end user price of electricity. Also, renewable sources are not as reliable meaning a significant back-up generation capacity is needed, further increasing the cost of renewable systems (it is not cheap to maintain a backup station at the same time keeping its capacity idle in reserve).
- Environmental concerns are also increasing the cost of projects, such as the prairie chicken’s affects on 5,500 megawatts of proposed Texas windfarms⁵². Those costs will be liberally applied to consumers. Wildlife concerns increase the cost of any proposed projects often to the detriment of humans.

- Section 304⁵³ will provide for an efficiency inspection at the time of sale or retitle. The federal government proposes to tie money transfers to states to the number of efficiency inspections. When a property sale or renovation is finalized it will trigger a state inspector that will conduct an efficiency survey of the dwelling. If it is not up to standards (that are 30% above current standards at the time of its passing, meaning that nearly *every* residence and business will be below standards at the time of passage) that information will be collected in a public database, and be passed to federal authorities for possible civil action (fines). This would have a devastating effect on the housing recovery - it may create an incentive for buyers to build new houses at new codes, bypassing current housing inventory altogether. That would effect another dramatic slide in prices for existing home, foreclosures, abandonments, etc.
- The effect of new standards on commercial real estate will make commercial property more expensive, forcing rents to increase across the board, cutting into profitability. The only benefits will be a narrow segment of the energy products markets (like heavy Democratic contributor GE), at the expense of a broad slice of the economy.

Labor Flexibility

The “card check” bill (EFCA) and provisions in both health care and cap and trade (as well as enacted provisions in the stimulus bill) will decrease the flexibility of the labor market by making unionization more universal (particularly by mandating universal contracts - employees not in a union will be forced to adopt any union-negotiated or arbitrated contracts). The affects on wage pressures will mimic the inflexible labor market/profit dynamics of the Japanese economy and its “lost decade”.



The EFCA bill, in particular, would have the potential to imitate the practical effects of the Wagner Act of 1935 that allowed for full unionization of the manufacturing sector, and contributed to the deep economic contraction of 1936-37. Its collateral effects would also duplicate the Hoover policies of 1929-30 that set wages too high for the deflationary conditions of the time. Lee E. Ohanian, a UCLA professor of economics, authored a study⁵⁴ that found,

“The policies, which included both propping up wages and encouraging job-sharing, also accounted for more than two-thirds of the precipitous decline in hours worked in the manufacturing sector... By keeping industrial wages too high, Hoover sharply depressed employment beyond where it otherwise would have been, and that act drove down the overall gross national product.”

Every experience of government intervention in the labor market has ended badly, not only in the 1930's but also the 1970's wage and price controls of the Nixon administration. Following the Japanese into labor inflexibility makes no economic sense. The best way to help workers is by ensuring a positive profit climate for businesses to expand, providing workers with permanent income sources. Unionization has destroyed or displaced nearly every industry where it was prevalent (steel, autos, textiles, airlines, etc).

Wage inflation through union-led efforts before and during the Great Inflation created the climate that would ultimately see those industries' declines by opening the door to import competition. By 1975 (Chart 2-1), wages accounted for 60% of GDP, much higher than the 55% - 56% share of the booming 1960's, and well above the 54% - 55% share of the 1950's. Wages were not only a constant source of inflationary pressures, they were also crowding out the profitability of business. By 1980, businesses had begun to seek profitable alternatives. The import trend started as an alternative to the 1970's wage pressures (import chart). Companies had begun to actively seek

technology as a way to increase the efficiency of all those workers, but at the expense of new ones. Some were successful, many were not (steel, electronics, textiles). The move to outsourcing is a remnant of the predicate labor bubble of the savings bubble.

Taxation & Rent Seeking

Changing the taxation rules to eliminate the special provision for non-taxation of offshore profits (currently businesses that keep their overseas profits overseas are not taxed by the US, only the jurisdictions where the profits are made) while allowing the “Bush” tax cuts to expire is the opposite of what is needed. The US already has the second highest corporate tax rate of developed nations. The offshore provision effectively keeps US businesses on an even taxable base with its foreign competitors. Getting rid of this provision will have the effect of a large tax increase on US businesses, whose affects will be felt in the US, not overseas. For some businesses it will mean moving out of the US completely, for others it will be a tax increase that will severely curtail the profit recovery.

There is also some talk of a value-added tax, a national sales tax, to pay for the redistributive plans in Washington. If this is enacted it will single-handedly cause a depression. The amount of spending activity displaced cannot be offset by any positive benefits of redistribution (of which there are not many). Households and consumers need every marginal dollar just to maintain current spending levels, which are still uncomfortably high, and pay debt loads. Taking 10% or more for federal taxation will mean an immediate 10% or more decline in overall spending activity (I believe it will be very close to a one for one tradeoff). Even in non-recessionary times this would be traumatic.

The overall direction of the economy toward redistributive policies will have a “Japanese” effect. In our January report we looked at the problems plaguing the Japanese economy and its “lost decade”. The primary non-bank culprit was systemic inflexibility with regard to profit



and competition. What is happening is the first stages of a similar dynamic:

- WalMart signs on for healthcare reform to stifle its main competitor, Target⁵⁵.
- UPS supports government intervention in unionization efforts at rival Fedex⁵⁶.
- Phillip Morris supports FDA regulation of nicotine to limit new entrants into the cigarette market⁵⁷.

When established businesses use government allies to stifle competition it has the effect of reducing overall economic efficiency. GM and Chrysler are perfect examples. As unprofitable businesses they should have gone out of business or restructured through bankruptcy (not the farce they did end up in). Government interference has allowed these companies to remain largely as they were with government guarantees of costs (with the UAW as one of the largest shareholders there is no way they will ever be allowed to fail). The practical effect is a company that will need a continuous supply of capital to maintain its obligations – the shedding of its “bad” assets has not changed the unprofitable nature of their business.

Nothing has changed the fact that fuel standards have forced automakers to sell high MPG cars below cost to offset profitable production of SUV’s and light trucks. Rather, the new CAFE standards⁵⁸ have increased this distortion. But since the government is now in the car business, it can “pay” for these new standards by absorbing the economic losses of its own policies. The net result is confiscation of credit to pay for ongoing losses, a net negative to economic efficiency (the money the government borrowed to keep GM and Chrysler in business will come from crowding out another business that could have used the capital to create sustainable enterprises), and creating more profit pressure on profitable business (in this case Ford) to compete (the same as the GSE domination of the mortgage market or the exit of private insurers in the Florida hurricane insurance market after the introduction of a low-cost government insurer backed by taxation and publicly-funded unprofitability).

This type of corporate rent-seeking is relatively common on smaller scales – WalMart often extracts large tax abatements for placing outlets in certain jurisdictions. But the scope and aim of these activities are largely new, and will have a longer-term affect on overall economic efficiency.

And that is likely to be the paramount problem of the next boom cycle (when it finally arrives at some distant point). Inefficiency has been creeping into American business through environmental regulations (the lack of ability to develop cheaper energy sources such as offshore oil or even nuclear power), the overhang of unionization, and government transfers for entitlements (Chart 6-1⁵⁹).

Despite/because of a monetized economy, this country has had an increasingly difficult time generating new jobs (Figure 6-2⁶⁰). Each successive boom/bust cycle since the Great Inflation has seen a reduction in average job growth that is not commiserate with population growth. The environmental regulatory cost issue is self-explanatory (and this is not an argument against regulation, rather the environment-first considerations).

The retirement entitlement of social security has increased the tax burden for employment. The percentage of the population not in the labor force grew rapidly through 1990. Since then it has leveled off, but maintained a constant percentage. This is due to a demographic pause before the retirement of the “baby boomers”. Of those not in the labor force, the vast majority were 65 years and above social security beneficiaries. Employment taxes as a percent of GDP has closely matched this part of the population’s growth. As the number of retirees on social security increased the burden to pay for them did as well, particularly since government transfers now account for 14% of GDP (including unemployment benefits).

All these combine to make employment growth particularly difficult (as do healthcare costs). Job growth in the mid-2000’s was far below what it had been just a decade earlier. What is particularly worrisome is the upcoming retirement of the baby-boomers. The burden



(this is not a reflection of intent of those collecting social security, rather an indictment of those who sold this as a economically feasible entitlement) of retirement costs on the productive part of society will be rising significantly in just the next few years. With the current climate focused on *expanding* redistributions through government transfers, it is not likely that this imbalance will be addressed by then.

The combined affects of reduced efficiency are reduced economic growth. Practically, reduced efficiency means even lower employment

growth, higher interest costs to pay for an increase in efficiency risk (without a higher economic growth rate we will have to compensate investors to be an alternative to other countries with better economic potential), and more structural distortions to the asset markets (shifts out of assets to finance deficit spending, and now retirement deficit spending).

If these proposals become actual policies, it is not too much of a leap to see a rerun of the regulatory efforts of the 1930's – using misguided policies to turn a bad recession into a deep and sustained depression.

The growth in retired persons not in the labor force peaked in the early 1990's as a matter of demographics. The collection of taxes did as well, as a matter of employment difficulties (Figure 6-2). The growth in retired persons will grow dramatically beginning in the next few years, so will the burden. Without solid employment growth the fiscal deficit will have to expand even further and/or the collection of employment taxes will have to expand.

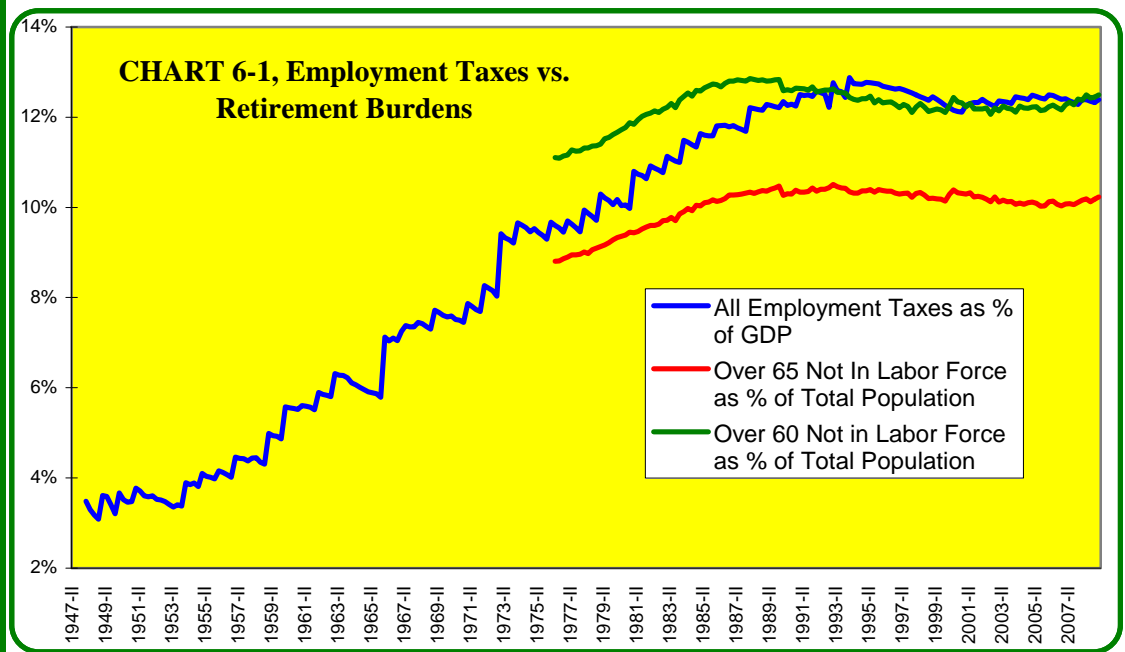


FIGURE 6-2

LABOR MARKET DISPERSION

Labor Market Peak	Total Jobs, Millions	# of Quarters Between Peaks	Millions of Jobs Added	Quarterly Job Growth Average	LABOR MARKET DISPERSION					
					Manu.	Retail	Professional & Busn Services	Leisure	Construct	Education & Healthcare
1948.3	45,294				31.9%	10.0%	6.4%	6.0%	5.0%	4.6%
1960.1	54,458	46	9,164	0.37%	28.8%	10.2%	6.8%	6.3%	5.3%	5.3%
1970.1	71,453	40	16,995	0.59%	25.7%	10.4%	7.4%	6.7%	5.2%	6.4%
1981.2	91,482	45	20,029	0.49%	20.5%	11.4%	8.5%	7.5%	4.7%	8.0%
1990.2	109,817	36	18,335	0.46%	16.2%	12.0%	9.9%	8.4%	4.8%	10.0%
2001.1	132,500	43	22,683	0.40%	12.8%	11.6%	12.6%	9.1%	5.2%	11.7%
2007.4	138,152	27	5,652	0.15%	11.3%	11.3%	13.1%	9.8%	5.4%	13.4%

The increase in taxation on employment plus regulatory and environmental costs, and unionization and wage growth from the 1970's, have pushed manufacturing jobs offshore. The service sector has not grown sufficiently to completely erase the decline, resulting in slower job creation with each successive growth cycle. The best job climate was the 1960's – before the wage pressures of the Great Inflation from Chart 2-1 (the pace of the decline in manufacturing's share of jobs was noticeably higher in the 1970's and 1980's).



Conclusions

Federal plans to “stimulate” lost demand combined with the Federal Reserve’s “accommodative” balance sheet and interest rate policies are pushing the economy down a road that cannot be reconciled with their stated goals. Moving in these parallel directions will have recessionary unintended consequences – so much so that the likelihood of avoiding those consequences shrinks every day.

The real shame of this situation is that this does not have to happen. The data and analysis are right in front of policymakers to correct their mistaken assumptions. Can anyone honestly argue that the Fed’s calculations of the output gap have been anywhere close to accurate, or have been particularly useful? If it had been, there would have been no savings bubble in the 1970’s feeding inflation, bypassing the natural arrestors that had kept the simple Phillips tradeoff in check for decades. If the Fed had been correct in its rate policies then asset inflation, including three ever-increasing bubbles, would have been neutralized before they began, or got out of control.

Anyone who argues that the Fed has been effective will have to answer for the jobless recoveries. After the monetization of the economy from the savings bubble, Fed rate policy has been upside down. The impact of that savings on real world spending is obvious in the context of interest (and later dividend) income. Yet the Fed operated as if the economy would respond positively to low rates and negatively to higher rates – all the data conclusive says otherwise.

The irrational exuberance of households was a rational response to the absolute need for higher investment returns. That need was an outgrowth of the deficit spending the savings bubble created. But Fed officials still speak of a simple world where wages are the only source of inflation, and unemployment is still a function of

the proximity to the fuzzy notion of economic potential.

Instead of pursuing monetary policy through the lens of an output gap derived from an absolute devotion to Phillips Curve inflation/employment, it would be much more useful and accurate to take into account: business profitability, inventory behavior, household income beyond wages, and credit market affects on all three.

Using those inputs we see the economy far differently than the Fed does. Under those terms low interest rates are “accommodative” only to bank profitability, easy credit is the largest source of inflation (asset and consumer) and that households and business will react rationally when pushed by inaccurate policies.

The policies of the Federal Reserve and the Federal Government should be enhancing household income while simultaneously providing support for business profitability. Business profitability will end a contraction by eliminating the need to cut costs. Sustaining that profitability will allow a resumption of postponed business spending, moving the economy closer to a full recovery. Interrupting that process by increasing taxes, borrowing costs, or forcing wage increases will create new contractionary pressures, and business will react to those pressures accordingly.

Households will do the same. The monetized economy and interest distortions from all the Fed’s economic engineering have coerced households into a corner. Assets were increasingly shifted to price risk, and net worth was increasingly derived from retirement assets and residential structures beyond the reach of current needs. That impossible position was kept in motion only by “accommodative” credit. The end result is households with no flexibility – disappearing net worth, assets that are out of reach, debt loads beyond means, and rates that



restrain marginal asset income (not to mention TARP and its effects on stock dividends and panicked selling of preferred shares).

Reduced credit costs for banks (at the expense of household asset income) are supposed to stimulate credit growth by making intermediation more profitable. Yet the banking system is still loading up on capital reserves in anticipation of regulatory changes. How can credit grow when regulators (with full backing of the Fed) are forcing banks to reserve for loans they made years ago? As we detailed in March 2009, the process of securitization was not the cause of this crisis. The untempered search for yield through riskier assets was. Destroying the securitized market will not unring the subprime bell, but it will slow credit growth to a level not seen since the early 1990's, at exactly the time they are counting on debt to reverse the recession.

Foreign withdrawal from the repo market has been the largest single source of credit weakness. For understanding and anticipating credit growth, this cannot be underestimated. The largest sources of lending in repo agreements were mortgage-backed securities, which were derived from the yen-carry trade. It is rapidly unwinding (the very reason the Yen has been appreciating during the financial crisis despite it being anything but a safe harbor) reversing the largest source of primary funding for US credit growth (the after affects of Japanese “quantitative easing”). By killing the securitization market, regulators are killing a significant source of bank funding.

And the credit market needs to grow to accommodate Federal borrowing - \$1.3 trillion more just next year, an entire six months of overall credit growth just for the treasury. Competition for funds is inevitable – in simple terms, consider that the low rates of the mid-1990's and mid-2000's were a function of competition for *borrowers*. That the \$1.3 trillion does not take into account the massive new spending priorities of the current government means the potential for inflation expectation fulfillment can only increase. The resulting increase in interest rates will

simultaneously serve to cut economic growth while also reinforcing those inflation expectations (some call this stagflation).

Faced with both of those pressures, the Fed will automatically keep “accommodative” policies, further confirming expectations, and keeping the economy weak. At that point there is no way out. A contraction will result from too many negative pressures. The only question will again be how severe. And the answer to that question will be how much of a burden the government places on the productive part of the economy.

In the near term the stock markets are focused on the recovery potential, and rightly so. As we noted in March, the end of the banking crisis through the change in mark-to-market started an enormous rally. The confirmation of the recovery has only furthered the market's upward momentum, as there is now very little doubt the current contraction is nearly finished (undercutting the justification for more “stimulus”). At some point, that optimism is going to be met with a grim reality: a forming recovery does not guarantee a full recovery.

For now it is hard to say when an inflection point will be reached with so many variables still in play, but rising interest rates will definitely be one of them. One of the precursor variables will be the current account deficit, and the indirect purchasing of US Treasuries. As foreign money recedes the credit troubles will intensify, and at that point there will be no return (confidence lost is not easily regained). Without foreign sources to make up for the lack of American savings (any future savings are likely to be in the form of paying down debt rather than more money in savings accounts), credit growth is all but gone.

Sometime after that, we can expect the yield curve to invert as the treasury has a harder time rolling over its massive obligations while financing new debt, signaling the advance stages of the next contraction. Corporate demand for short term credit will also be a variable here, as will any change in business profitability.



It looks like we could see those precursor events by the middle of 2010, with timing and magnitudes determined by the overall fiscal burden, and the inflationary actions of monetary authorities.

For the longer-term period the combined affects of lower economic efficiency means an overall lower growth rate, once a stable recovery does finally occur. The practical affects look to be a

struggle for asset price growth with money flowing out of assets to finance spending (both inflation and retirement). This makes judgments about economic and asset price movements all the more important, simple buy and hold investing will not work in this climate. The adage of the length of market struggles equal to the bull markets that precede them may yet be the investment theme of the next decade – it isn't easy to clean up after the party's over.

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