



ATLANTIC CAPITAL MANAGEMENT

## **FINDING PROFIT IN CORPORATE AMERICA**

**Efficiency, Flexibility and Sustainability Dictate The Fall, and The Rise**

SPECIAL INVESTMENT RESEARCH REPORT  
JANUARY 7, 2009

Written By  
Jeffrey P. Snider, President

Additional Research Provided By  
Steven Stejskal, Research Analyst

Pages 1 & 2	<b>Introduction</b> The markets have panicked, the banking system is a mess and now economists are convinced that massive action is needed to avoid a bigger mess (the Japan scenario). Their predictions have a large flaw, and their track record is not enviable.
Page 3	<b>Part 1 – Details of a Lost Decade</b> The Japanese economic miracle of the 1980’s was build on an unsustainable foundation of asset bubbles. CHART 1-1 Nikkei Index.
Page 4	The aftermath of the bubbles was a slow descent into a self-feeding spiral of inefficiency and deflation. CHART 1-2 Japanese Bank Deps, CHART 1-3 Contributions to Japanese GDE.
Page 5	A recovery took place in 1995 & 1996 but it was a mirage. Some warning signs that were missed. CHART 1-4 Japanese unemployment.
Page 6	Deflation became a persistent problem that was not dealt with, and its effects were significant. Some policy actions were undertaken but were ineffective. CHART 1-5 Yen per Dollar.
Page 7	The inability of banks and businesses to be more efficient was the major cause of the malaise. CHART 1-6 Japanese Deflation, CHART 1-7 Decline in Overall Banking Assets.
Page 8	<b>Part 2 – A Comparison of Burst Bubbles</b> There are some strikingly similar circumstances between the US of 2008 and Japan in the lost decade.
Page 9	The fundamental difference between the US banking system and the Japanese banking system – the Japanese system’s capital base was shrinking while the US system is only experiencing a liquidity gap.
Page 10	Japanese businesses were unable to create positive profit inefficiency due to cultural inflexibility. The combined effect was an inefficient economy unable to escape its decline without serious intervention.
Page 11	<b>Part 3 – Corporate America Holds The Keys</b> Economic growth happens at the margins: changes in PCE, non-res GPDI and employment can be traced to the profitability of corporations.
Page 12	CHART 3-1 Corporate Profit Growth vs. Corporate Income & Government Expenditures.
Page 13	Explanations of the regression models methods
Page 14	Non-residential GPDI regression model & Employment regression model.
Page 15	Personal Consumption Expenditures regression model.
Page 16	Discussion of the PCE model, and conclusions from the data.
Page 17	Conclusions from the data. CHART 3-2 Corporate Profit Growth vs. non-res GPDI and Employment Growth.
Page 18	<b>Part 4 – The Labor Market As a Scorecard, Part II</b> Comparison of the labor market with the 2001 recession and 1981/1982 recessions. Recent developments in the corporate profits segment.
Page 19	CHART 4-1 Profit of select sectors since 2001.
Page 20	<b>Part 5 – Policy Wildcards and Worries</b> A list of all actions taken by the Federal Reserve since September 2008.
Page 21	The real goals of the Fed’s actions are not about forcing loan growth, but bridging the liquidity gap and forestalling deflation. CHART 5-1

	Growth of Money Market Funds and Bank borrowing. CHART 5-2
	Growth of Asset-backed Commercial Paper.
Page 22	The Fed has sat idle while the makeup of banking liabilities has changed dramatically. As such, the Fed's response to the crisis has been misaligned.
Page 23	A review of the crisis.
Page 24	Potential problems arising from the Fed's recent actions.
Page 25	The problems with fiscal stimulus.
Page 26	<b>Part 6 – The Market Deleverages</b>
	Market movements since September are not fundamentally related, they are being carried out as a result of debt being called.
Page 27	Fundamental measures of the stock market. CHART 6-1 Asset-backed collateral at the Federal Reserve vs. S&P 500
Page 28	CHART 6-2 Measuring the relative value of stocks to the economy. CHART 6-3 The average slope of the Treasury Yield curve and its predictive value.
Pages 29 & 30	<b>Conclusions</b>
Pages 31- 33	<b>Endnotes</b>

## INTRODUCTION

### FINDING PROFIT IN CORPORATE AMERICA

Efficiency, Flexibility and Sustainability Dictate The Fall, And The Rise

Featured prominently in our September 2008 Special Report was a labor market scorecard, used as a measure of recessionary progress. While our focus then was on predicting the stock market's reaction to what we saw as massive layoffs in very short order, this report will focus on the effect those job losses have on the broader macro-economic picture.

The timing of this examination is extremely relevant and not simply a follow up to September. After panicking through October and November, investors, politicians, and the public alike are all searching for an end – an end to the market's disastrous trend, an end to the loss of public confidence, and an end to the nasty contraction. The labor market provides insight into all of the above.

Gloom and doom are again en vogue, as familiar as they were in 2002 and 2003. Even the Federal Reserve's own economic forecast<sup>1</sup> predicted a protracted contraction. Increasingly, the common theme from economists is a long economic winter lasting well into 2010. But are these the same economists who foresaw a robust second half of 2008<sup>2</sup>?

In a January 6, 2009, column for the Financial Times<sup>3</sup>, Martin Wolf, a well-known economic commentator, sums up what has become conventional wisdom for this crisis. The need for stimulus is so large, "A discretionary boost of \$760bn (€70bn, £520bn) or 5.3 per cent of GDP is not enough", because as he sees it that amount of output will not "prevent unemployment from continuing to rise through the next two years". It is the Keynesian model of economics, the academic sense of employment tied to output. Clearly this theory has made its way to President-elect Obama.

There is a mechanism for delivering economic recovery, and a pretty simple one. But being conditioned for complexity, the experts often get hung up in the details of their arcane, academic models and miss the big picture. The real world mechanism driving employment is not output – it is *profit*.



It may seem to be a small distinction, but its application is extremely important. This point, more than any other argument, validates a recovery during crisis. If business can cut costs at a rate exceeding output declines they will return to profitability, and cease to cut costs. The only way the output decline overwhelms that dynamic is in deflationary periods where the enterprise value of production also declines. That is why so many are worried about a repeat of Japan. The similarities in the banking sector are too much to ignore.

A well-known essay by Carmen Reinhart of the University of Maryland and Kenneth Rogoff of Harvard, titled “The Aftermath of Financial Crisis”<sup>4</sup>, cited by Martin Wolf in his essay, presents examples of national economic imbalances in the aftermath of banking crises. The dislocations caused by credit disruptions are immense. But no distinctions are made between the exact nature of each banking crisis, and why the results from each were extremely varied. As we will see in this discussion, not all banking crises are the same.

The same is true about the structure of each economy. Regions that are structurally more flexible do not suffer the same as those with less elasticity.

Digging deeper into the real economy, in any country, what becomes clear is the first law of a real economy: efficiency and sustainability rule all; everything else is inflationary. Policies and sustained interventions that do not address this basic principle will not/cannot succeed in the manner in which they are intended.

The second law of a real economy is that economic change happens at the margins. Economic growth, or decline, occurs because of changes in the inputs of marginal actors. In the current decade that means corporate America. Not small business, not government expenditures, and not even the banking system. Corporations define activity at the margins.

We finished our conclusions for the September Report with a prediction that we may use this report to lay out a case for a recovery. What follows is exactly that, and it isn't as bad as many are expecting.



## Part 1 Details of A Lost Decade

The world experienced a global recession in the early 1990's, mainly in late 1990 and early 1991. For most countries it was rather mild and short, with full recovery by the end of 1992. There was one very notable exception – Japan.

Entering the decade of the 1990's the Japanese economy was a model of economic consistency and growth. Its industrial export base was the envy of the industrialized world and its companies had come to dominate the industrial landscape. So much so that, in what was nearly inconceivable just fifteen years previous, the Japanese economy became the world's second largest. There was even speculation that, in time, Japan could supplant the US economy's dominance.

All that changed, catching the world, and the Japanese off guard. What started as an inane attempt by the Bank of Japan to rein in speculative asset prices began a sixteen-year period of recession, deflation, and depression. With the benefit of hindsight the mistakes, miscalculations, hubris, and misaligned social structure stand as a warning for economies beset by banking woes and asset bubbles, circumstances that increasingly resemble the United States of 2008.

Beginning with the Japanese economy in 1989 and 1990, the similarities are indeed striking. Asset bubbles ruled both the stock markets and housing markets. The banking system had engaged in years of unsustainable lending without regard to creditworthiness. In the decade of the 1980's loan assets in the Japanese banking system increased 280%. Not surprisingly, mortgages (classified by the Japanese as "loans on deeds") accounted for the bulk of the rise – increasing by 337% for the decade<sup>5</sup>.

The Nikkei Index, Japan's benchmark stock index, also ran ahead of itself, rising 292% from January 1984 until its high in December 1989. And most of that gain came in the three-year period of 1987 – 1989.

To get control of the asset markets the Bank of Japan increased its discount rate from 2.5% in late 1989 to 6% in August 1990<sup>6</sup>. In response the Nikkei index lost 33% over that period, and another 5% by the end of 1990. Land prices also plateaued, and more importantly loan growth and deposit growth both slowed markedly. The stage was set for a disastrous 1991.

Structurally, the Japanese banking system played a greater role in the Japanese economy than what we are familiar with. Not only did a bank provide credit to a particular business, it was often customary for the bank to become partners with that business, purchasing stock in their clients' companies. The familiar relationship applied to the banking system itself, as banks deposited their reserves amongst each other. By the end of 1990, 18% of all bank deposits belonged to other banks<sup>7</sup>.

Because of the cozy relationship banks did not write-off or force payment of loans to struggling companies – it was culturally

CHART 1-1: Nikkei Index 1984 -1993

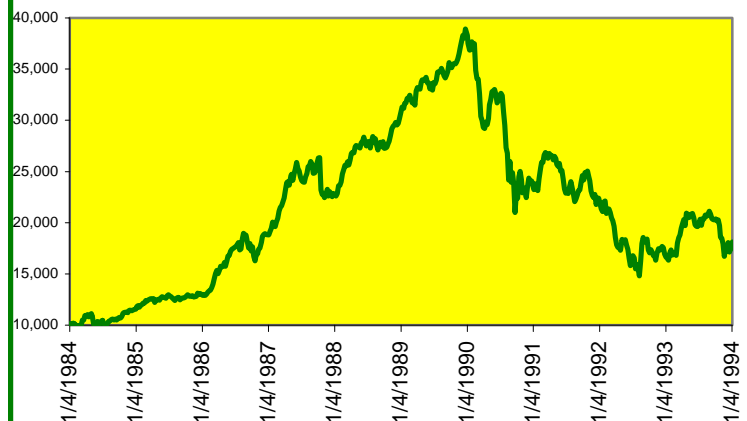
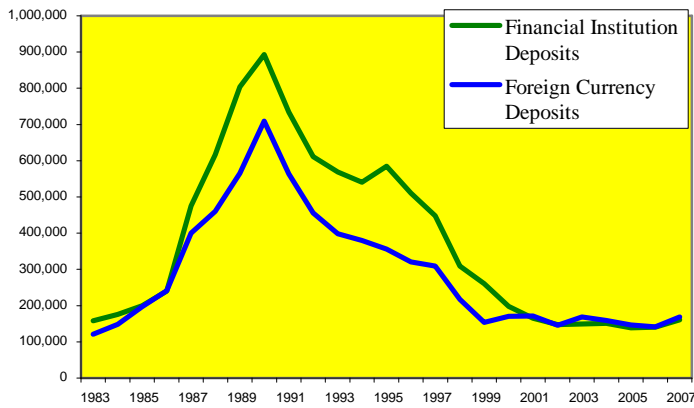




Chart 1-2: Japanese Bank Deposits



unacceptable and reflected the failure of a bank to live up to its role. The buildup of non-performing loans started well before the 1990's, but the decrease in efficiency of Japanese businesses was not dealt with immediately. Bad loans were papered over in a self-fulfilling asset bubble (not unlike the US ten years later). Instead of writing off a bad loan the bank simply purchased stock in the troubled company, often in conjunction with other banks, and increased credit availability. Inefficiency took a back seat to maintaining the status quo.

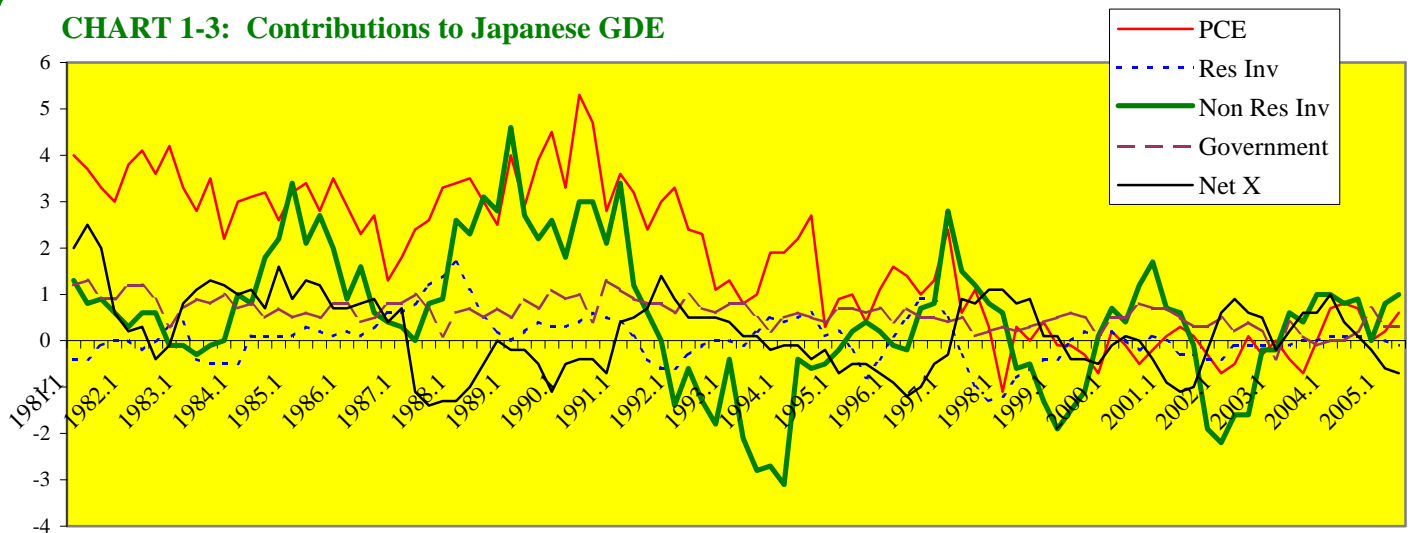
As the percentage of nonperforming loans and inefficient bank capital increased, the asset bubbles became the sole driver of credit growth. Because Japanese banking intermediation operated as a closed-loop system, the growing inefficiency and reliance on asset prices was transmitted

system-wide. The only way to finance the whole tangled mess was dramatic increases in asset returns away from core loans (stock values on the balance sheet of banks increased 419% in the 1980's<sup>8</sup>). So the bear market that hit in 1990 completely upset the system.

To cover capital requirements banks began to hoard cash, withdrawing their reserve deposits from each other. The self-feeding, slow motion run on bank deposits came not from the public but from other financial institutions. In 1991 ¥16 trillion was withdrawn from the banking system by other banks. That coincided with a ¥15 trillion withdrawal by foreign entities fleeing the asset markets<sup>9</sup>. Liability pressures forced more asset sales and the cycle of declining asset prices continued for three years.

With the banking system in turmoil, businesses began to search for alternate sources of funding. One structural change from the 1980's was the development of a Western/American style credit market. Until that point Japanese banks dominated the credit arena. But the credit markets demanded profitability and the ability to pay off bonds and notes, so only healthier companies were able to find financing (as should happen). The flight of quality borrowers from the banking system increased the proportion of non-performing loans and the overall inefficiency of the banking system. As a consequence credit

CHART 1-3: Contributions to Japanese GDE





from the banking system began a slow decline.

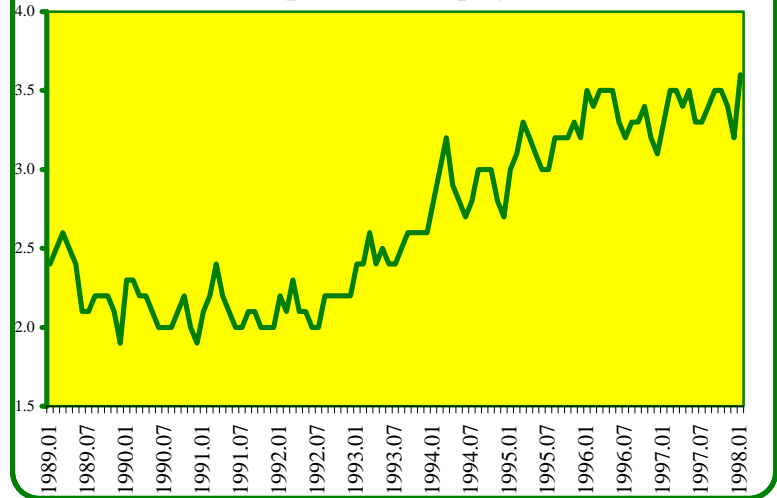
Without expanding bank credit business investment spending fell in late 1991<sup>10</sup>. Accounting for almost 20% of GDP at the time, it was a large enough segment to push the entire economy into a downturn. Japanese consumer spending varied little, on the other hand, even during contractions – as a percent of GDP, consumer spending never moved beyond a narrow range of 53% to 56%<sup>11</sup>. In other words Japanese consumer spending is inelastic, geared to necessities and less at the margins. The driving force of economic activity at the margins is/was business spending.

The dramatic decline in business spending was the only remedy for Japanese businesses in the face of a slowdown. Cutting payrolls was not an option for cultural reasons; employees were expected to have jobs for life. Unemployment barely budged, rising from 2.3% to 2.8% in 1993<sup>12</sup>.

But even that modest increase in unemployment is misleading. Rather than accounting for a cut in payrolls it more accurately reflected a hiring freeze. Almost all of the unemployment increase occurred among younger workers, especially workers under 30. For workers over 40, unemployment only increased an average 0.1%. In the face of growing unprofitability businesses could not cut their single largest cost component.

By 1994 there was improvement in economic conditions. Stock prices and real estate activity had stabilized. The banking system had stopped bleeding total deposits and loan growth actually increased modestly. The Bank of Japan had allowed money supply growth to recover and the government began infrastructure-focused stimulus projects. The economy kept improving through 1995 and 1996 so that by 1997 policymakers felt confident enough to increase taxes, trying to return the government's finances to a surplus after

Chart 1-4: Japanese Unemployment Rate



three years of large deficits. The results were disastrous - the economic recovery was a mirage.

There were several warning signs that policymakers either ignored or miscalculated. First, the banking system had not really stabilized; the decline had only slowed. Overall deposit activity increased from the public but financial institutions were still withdrawing money and hoarding the cash. As business enterprises, banks were losing money due to the steady increase of inefficient capital assets. Worse yet, the cash hoarding was not part of a concerted effort to recapitalize; the only concern was keeping banks afloat. That effort to maintain appearances accounted for the slow pace of the decline. An effort to actually fix the problem would have forced a quicker pace.

Second, because there was no monetary stimulus (money supply growth was anemic for most of the rest of the decade) the supply of yen became stressed. Demand for the currency was universal among all sectors, from the government for stimulus projects to businesses struggling in the face of the credit contraction. The price of yen skyrocketed from 141 yen to the dollar in June 1991 to 81 in April 1995<sup>13</sup>.

The increased cost of yen produced two problems – a GDP drag from the export



sector, and deflation. The export sector was a vital growth engine for Japanese business throughout the 1970's and 1980's. Yet from 1993 through 1996 (the "recovery" period) it was subtracting from GDP.

Deflation was a much larger problem – systemic deflation results from a shortage of credit or cash. Without reasonable availability of money businesses and consumers are forced into asset sales to pay for basic items, or to outright barter. Mass selling forces businesses to reduce prices to reflect the general price level established by the lack of money to reasonably intermediate purchasing. The process reduces the enterprise value of all production or business, decreasing the willingness of producers to produce goods and services - particularly businesses with an inflexible cost structure.

Repricing of business enterprise values and the reduced value of future production increases the likelihood of default on loans. For the banking system, deflationary devaluation of business enterprise added to the inefficiency already afflicting bank capital. Without some form of reorganization Japanese banks were not able to expand credit, and had to continue to pursue liquidity through cash hoarding. The pool of available capital from financial institutions was constantly shrinking so there were no alternatives – the closed system was slowly starving itself and the economy.

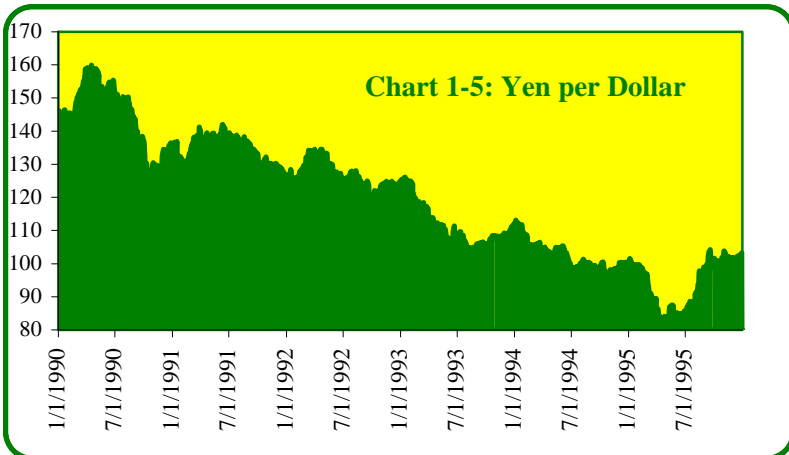
Fiscal policy was the only response of the Japanese government. Most of its efforts

were focused on public works (pushing the federal deficit to 6% of GDP<sup>14</sup>). Rather than helping the economy, it actually made the problem worse. There was no appreciable change in the employment situation, nor was there any real impact on consumption or business investment<sup>15</sup>. The only real affect was to add considerably to competition for currency. By turning from a budget surplus to a large budget deficit the government went from a net supply of yen to a large net demand for it.

By 1997 the government needed additional revenue to trim its deficit and felt confident enough in the "recovery" to raise taxes. It increased the tax on consumption from 3% to 5%<sup>16</sup>. Even though the increase was modest, the effects were devastating to the economy. The decrease in consumer purchases in response to the tax increase (about a 3% decline) was enough to push Japan into a second, much worse recession in late 1997 and most of 1998. Stock prices slid to new lows and real estate price declines steepened. Credit from the banking system again fell, especially loans on bills and overdraft loans (credit used by businesses to finance working capital). The negative feedback loop of falling asset prices and deflation returned and intensified.

Finally in November 1997, the collapse of a relatively small investment firm, Sanyo Securities<sup>17</sup>, forced the Bank of Japan to act. Because of the limited availability of credit and currency, the Bank of Japan decided to inject 22 trillion yen into the banking system (around \$190 billion)<sup>18</sup>, a tiny amount compared to the overall size of the problem. The effect on money supply growth and bank credit was negligible.

The Bank of Japan also acted to guarantee all depositors since several additional banks had failed<sup>19</sup>. Stock prices in Japan rallied on hopes that government intervention was finally a remedy, but none of the persistent problems had been solved (another similarity to Federal Reserve actions meant to stabilize the wrong segment of bank





liabilities - more on this in Part 5). After slight improvement in 1998 (the economy actually experienced some inflation) deflation returned in 1999 with a vengeance. All sectors of the economy remained weak and the banking system intensified its decline – from 1997 through 2002 total assets of Japanese banks actually fell 7.1%<sup>20</sup>.

There was little growth in the Japanese economy throughout 1999 and 2000 despite several cosmetic attempts to restructure banks and the economy. When the US and other industrial economies fell into recession in 2001 after the dot-com bust, the Japanese export sector contracted again. Business spending fell with it and Japan was, for the third time in eight years, in a recession - the worst of the three.

Some efforts were exhausted to force Japanese banks to clean up its problem loans but each was met with increasing resistance. Missing was an organized and forceful push to increase the profitability of Japanese business and the efficiency of its capital base. A lot of energy instead went toward finding a way to keep the tangled mess going as long as possible, rather than toward a comprehensive, and likely painful, solution. But while the pain may have been

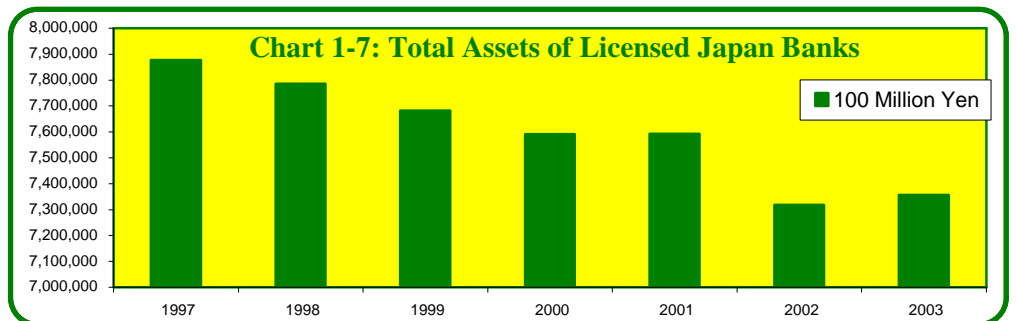
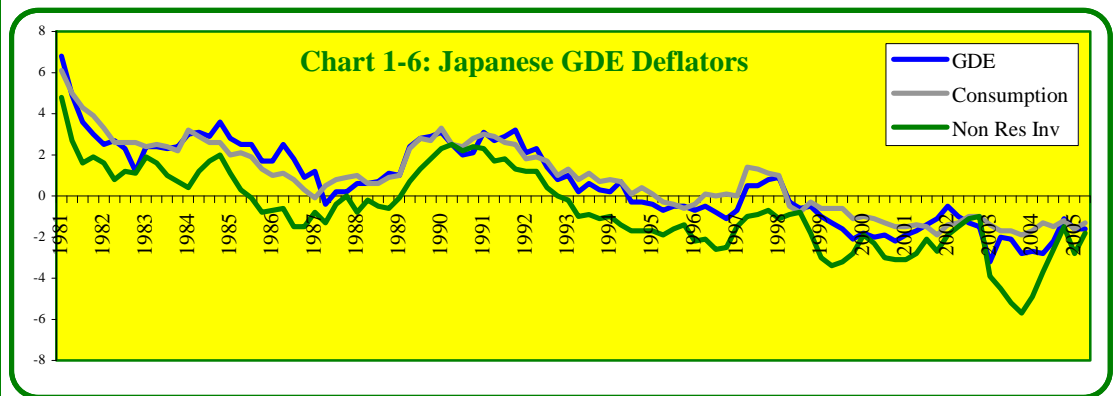
fierce, it probably would have been short. Certainly much shorter than sixteen years.

In 2001, the Japanese finally began a radical new policy known as “quantitative easing”<sup>21</sup>. The Bank of Japan shifted its focus to controlling the money supply (quantity) from targeting interest rates (even though they were extremely low at the time). By increasing the money supply so dramatically (essentially printing money) policymakers hoped to force inflation expectations into credit markets. Coupled with zero nominal rates, the resulting negative real interest was intended to improve spending expectations and economic activity. The large cash injection was also meant to help recapitalize the banking system.

The results have been inconclusive even six years later. There is little doubt that the economy has improved, as has consumer and business spending – no fourth recession. Deflation continued to be a problem until 2006, but inflation, modest as it is, has indeed returned. As for the banking system, the slow decline continued through 2004, shrinking to levels not seen since 1990. Since then, loan growth has been modest but positive.

Deflationary pressures build in the business spending segment beginning in 1992. By 1993 overall inflation in Japan is near zero, and deflation becomes widespread in 1994. After the short “recovery” in 1997, deflationary pressures continue well into the middle of the next decade.

The effects of deflation and inefficiency are devastating to the Japanese banking system. Total assets decline from 1997 through 2003, a shrinking of balance sheets to meet the loss of liability funding.





## Part 2 A Comparison Of Burst Bubbles

The lost decade does contain some similarities to the current economic crisis in the United States:

1. Speculative asset bubbles, equities and real estate that hid structural economic weaknesses for several years before bursting spectacularly.
2. Credit expansion and financial institutions' balance sheet health was predicated on those asset bubbles. The rapid deflation of the bubbles exposed this unsustainable system, causing a liquidity crisis.
3. Interconnectivity of the banking system magnified the systemic credit retrenchment.
4. Initial policy responses were timid or miscalculated (focused on the wrong segment).
5. A radical policy of quantitative easing was introduced after significant economic disruption.
6. US bailouts will keep inefficient businesses afloat, just as banks kept Japanese businesses afloat throughout the lost decade.

Those are striking similarities, but upon closer inspection there are distinct, structural differences that put the two economies on entirely separate paths. If the US has its own lost decade, it will be uniquely American.

When inefficient uses of credit build up to the point that significant margins of the economy are not sustainable a contraction is the natural result. Inefficient projects are canceled or shuttered, replaced by efficient uses of funds. The buildup in inefficiency results from systemic mispricing of risk. Under the most efficient of circumstances the cost of credit or money is priced high enough (through interest rates and credit standards) to dissuade use of those funds on projects that have a lower probability of sustainability – lack of sustainability increases the probability of default. Therefore the vast majority of economic activity is based on sustainable economic projects.

During boom times and inflationary periods (the two usually go together), periods where the supply of money outpaces efficient demand for money, the cost of capital is artificially too low. Because money itself is seeking efficient use, when all the highly efficient projects are funded cash and credit begin to find their way into more and more

inefficient places. The competition of funds to find uses allows projects to proceed that would normally be sidelined.

A perfect example is the subprime mortgage spree. Potential mortgagees were denied mortgages from banks because their credit ratings (credit scores are nothing more than a modeled probability of sustainability) produced interest rates (cost of capital) that would be too costly for those borrowers to pay. But they were given mortgages at lower rates by Wall Street because of the oversupply of money. Any house that was built (or purchased) by the inefficient borrower should never have been built (bought).

Because the supply of funds was so out of balance, the sheer number of inefficient borrowers given access to money produced substantial economic activity that was not sustainable (whether it was building houses, remodeling, or using the house as an ATM), and asset price increases that were likewise unsustainable (in the case of purchases that allowed more purchases, and so on). The overall risk premium of money from oversupply was too low to preclude the increase in inefficiency. Because so much economic activity was predicated on unsustainable and inefficient uses of capital a contraction was inevitable – a new



equilibrium reflecting efficient uses of capital.

Both the Japanese example and the US example show the buildup of inefficiency and non-sustainability through asset price bubbles. But the manner in which those inefficiencies were built and manifested was fundamentally different in two aspects.

In Japan, inefficiency had built through the cultural ties between lender and borrower. Since banks were equity owners in businesses they lent to it produced a huge moral hazard. Often, businesses were kept afloat with credit simply because the bank was an owner, and to do otherwise was socially unacceptable. As such, the overall efficiency of bank assets declined as the ratio of unsustainable loan cases increased, and were transmitted systematically via the closed banking system. Non-performing assets remained on balance sheets and were balanced by increasing asset prices and increased interconnectivity among banks.

From 1980 through 1990 total bank assets increased 228%, funded by a 335% increase in cash and repurchase agreements, and a 209% increase in investment securities. Within the investment security segment stock asset levels increased 420% over the same time period, and became almost 5% of all bank assets<sup>22</sup>. Using funds from other banks as the primary source of liability growth, and stocks as a secondary source, produced an unsustainable capital foundation.

The asset-based reductions in the American system, while demonstrating stupidity, greed and the final transformation of Wall Street from a depository of financial knowledge to a collection of used car salespeople, have only forced the banking system into a **liquidity gap**. The degree to which US banks rely on borrowing is as high as the Japanese relied on financial deposits to be sure, but the majority of borrowing is done through the commercial paper market<sup>23</sup>. That market is just a separate method for

gathering public money through money market funds (more on this in Part 4). Moreover, the public pool of capital is not as susceptible to asset price declines (and in most cases reacts inversely in the US).

While the Japanese capital base was shrinking, there is no such decline in the America capital base. Rather money market cash is being used temporarily for other investments. Out of fear of loss, investors, through those money funds, are staying away from financial commercial paper. But that distaste is only temporary – there is a liquidity gap. The task for the Federal Reserve is only to bridge the gap until confidence can be restored, and liquidity follows. The Bank of Japan, would have had (if it had done anything at all) to become a permanent source of funds for the banking system. With persistent deflation, and a declining economic base, that would not have been a viable option. This point cannot be stressed enough as it represents the fundamental difference between the two banking systems, and why a US repeat of Japan is not likely. American banks will not have to reduce their asset-base, only stay in business long enough to wait out the crisis.

While the major differences in the banking system affect credit growth and the prospect of deflation, the second distinction between Japan and the US more directly impacts economic activity. Efficiency is the key to economic sustainability and both economies, by virtue of their asset bubbles, were building inefficiencies prior to the collapse.

The typical response to a slowing economy and increasing profit inefficiency is for businesses to cut costs. Capital spending and labor account for the bulk of business expenses on both sides of the Pacific, so a contraction should affect the cost structure of both in the same manner. But in Japan the same cultural pressures that forced banks to extend credit to inefficient and failing businesses also forced businesses to retain employees. Layoffs were seen as a



dishonorable last-ditch effort before bankruptcy.

Inflexibility in the labor market was a prevailing cause of the lost decade. Rather than allow enterprise efficiency to improve through cost cutting, businesses were held hostage by social custom. As we saw in Part 1, unemployment barely budged during the first recession. Through the others, two of the worst recessions in Post WWII world history, Japanese unemployment only increased from 3% to 5.4%. Even if you account for chronic undercounting of unemployed persons (Japanese who work one hour a week are counted as employed<sup>24</sup>) there was still not enough cost cutting flexibility that was necessary to return profit efficiency. Again, from Part 1, the bulk of the increase in unemployment occurred in younger workers, suggesting a hiring freeze rather than wholesale layoffs – an inability to pay new workers rather than the ability to cut existing ones.

Without the ability to create profit efficiency businesses are not able to increase probability of sustainability. That weakness kept the Japanese economy from returning to a solid footing, a perpetually weak business sector that was always one step from contraction. Add to that a deflationary environment that forced enterprise value reduction, and the cycle of inefficiency could not be solved without addressing the issue directly. Government intervention was useless unless it included some form of business and banking restructuring. But that would require a sustained and unprecedented (for Japan) increase in unemployment, and the closing of thousands of unprofitable companies.

That option was not even considered seriously until after 1997<sup>25</sup>. And even then it was never fully realized; it was debated well into the next decade. The net increase in the proportion of loans to unhealthy

businesses almost guaranteed that those inefficient enterprises would be kept afloat. To fully recognize the loan assets as worthless would mean insolvency. No bank wanted to volunteer for such a disgrace.

In this manner the inefficiency of money flows and business enterprise was a co-enabled, self-perpetuating spiral of economic malaise. Businesses were a continued source of inefficiency for the banking system by being unwilling to return to profitability through cost cutting. And banks were a source of inefficiency to businesses by being unwilling to shut off credit and force the cancellation of unsustainable activity. Again, the inflexibility of this dynamic was the reason for the slow collapse of the Japanese economy – the worse conditions became the more it guaranteed incremental inefficiency.

As long as the limited supply of money was used for inefficient means there could be no escape from the deflationary trap (not to be confused with the liquidity trap) that held the Japanese economy hostage for sixteen years. And even now, there is still debate as to whether any of the issues have been fully resolved. Doubts exist as to the extent the banking system has fulfilled the requirement to reinvent itself as an efficient source of intermediation, and whether Japanese enterprises have been granted enough flexibility to establish a profitable cost structure.

The biggest piece of evidence on the negative side of the debate was the flight of capital during the period of quantitative easing (2002 – 2005). A huge amount of new money was created with little cost, but instead of funding profitable and sustainable Japanese business projects the money was directed to Wall Street. That yen/carry trade strongly indicates that the causes of the lost decade still have not been fully solved.



## Part 3 Corporate America Holds The Keys

The difference between American business and Japanese business is simple, but highly significant. Within that distinction lay the heart of any recovery; its strength, and the threat of stagflation, is left to policymakers (more on that in Part 4) but the turnaround itself has little to do with Washington.

In analyzing the American economy it is amazing to see the relative speed and breadth of the action companies take in response to economic turmoil. Sifting through the data of economic inputs an unmistakable pattern emerged. The rise and fall of the US economy during the past 30 years has been dictated by corporate America.

Economic growth and contraction occurs at the margins. No single source has more affect on the margins than corporations. In fact, non-financial corporate profit efficiency dictates nearly every facet of marginal economic activity. Government expenditures have little effect, and employment is a symptom rather than a cause. Even small business profitability has an insignificant relationship with marginal growth.

There is enough graphical evidence (Page 17, Chart 3-2) to see the changes in profit efficiencies affecting the other inputs. In order to remove as much doubt as possible we ran the inputs through a series of hundreds of regression analyses<sup>26</sup>.

From the data we can see a consistent chain of events leading to recessions. The greatest predictor variable is corporate profits. The rise and fall in corporate profits dictates marginal economic activity for consumption (PCE), business investment (non-res GPDI), and even employment. The system logically fits the real world economy: corporations experiencing a decline in net income react by reducing costs. Since labor and capital

expenditures are the largest cost items, both experience declines. Those declines do not come immediately, but are lagged between four and six quarters after the change in profitability trend. The decrease in non-res GPDI and PCE combine to reduce employment, which further depresses PCE.

The lag times involved suggest that businesses wait long enough for confirmation of the trend before reacting. That inelasticity in the early quarters provides more evidence that profit efficiency is the leading variable. If corporations acted immediately they would sacrifice longer-term profitability by prematurely canceling growth projects, or laying off valuable workers. Instead, companies will sacrifice short-term profitability to try and maintain a longer-term increase in profitability. It is only when weakness in the longer-term profitability trend is confirmed that dramatic action is enacted. In this way, corporations act as a short-term shock absorber for the economy, accounting for a great deal of the significance.

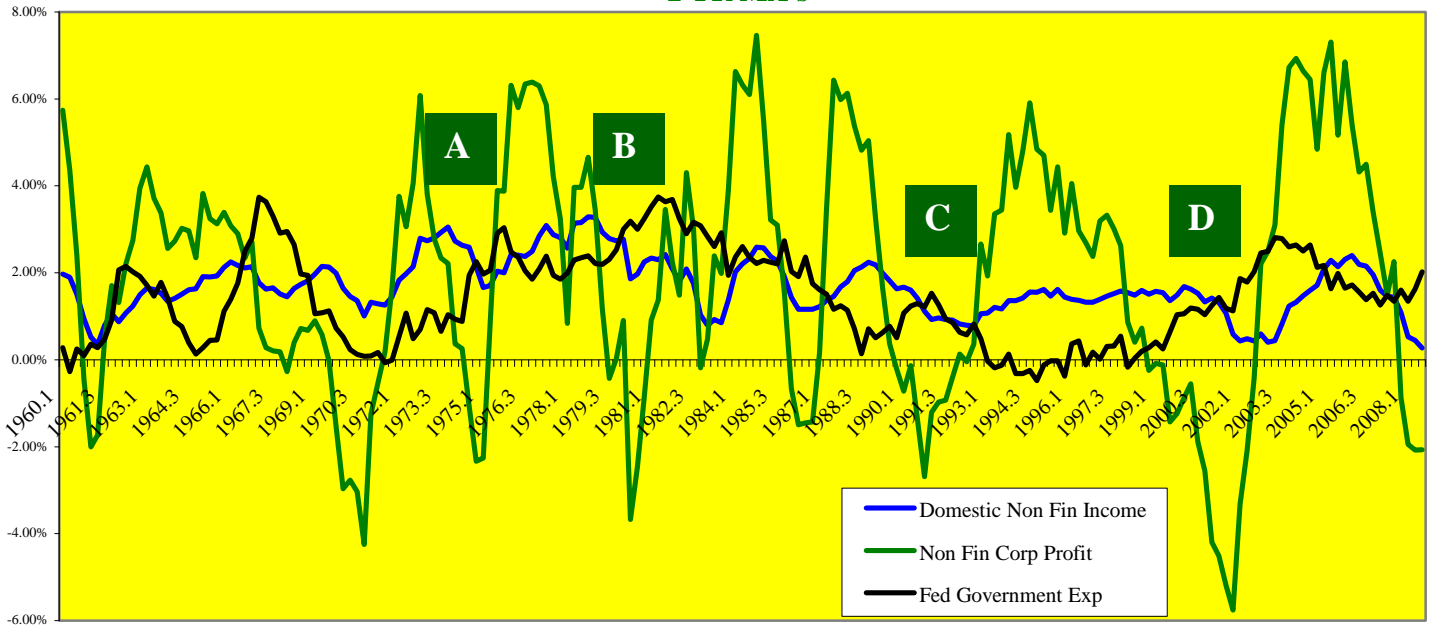
To statistically test the above-described system we used 2 year moving averages of quarterly changes in each of the variables. Our purpose is not to define (or divine) the exact quantity of economic activity, which would be near impossible, but rather to forecast the trend in each.

Each economic variable is tested using its nominal value, not the real value adjusted for inflation. We removed inflation in order to test the affect of inflation itself on each variable.

We evolved our test period into two distinct groups, from 1987 through 1997, and 2000 through 2008. We dropped the 1982 - 1986 period and the 1998 – 1999 period because of significantly different lag times.



**CHART 3-1: Corporate Profit Growth, Corporate Income, Government Expenditures**  
2 YR MA's



**1972 through 1976**

**A**

Corp Profit growth peaks Q4 1972  
 Corp Income peaks Q4 1973  
 Govt Expenditures (nominal and real) continuously increase  
 Corp Profit trough Q4 1974  
 Corp Income trough Q1 1975

**1978 through 1984**

**B**

Corp Profit peaks Q4 1978  
 Corp Income peaks Q1 1979  
 Govt Expenditures increase until Q2 1981, moving inversely to Corp Income  
 Corp Profit and Income double dip Q2 1980  
 Corp Profit second trough Q4 1982  
 Corp Income second trough Q1 1983  
 Govt Expenditures moving inversely 1981 to 1983

**1987 through 1993**

**C**

Corp Profit peaks Q3 1987  
 Corp Income peaks Q4 1988  
 Govt Expenditures increasing (moving inversely) from Q3 1988 through Q1 1991  
 Corp Profit trough Q4 1990  
 Corp Profit growth returns Q1 1992  
 Corp Income trough Q3 1992  
 Govt Expenditures decreasing Q1 1991 through 1993 (moving inversely)

**1997 through 2003**

**D**

Corp Profit peaks Q2 1997  
 Corp Income peaks Q1 2000 – dot-com bubble increases the lag time  
 Govt Expenditures increasing throughout the period, no affect on income or profit  
 Corp Profit trough Q4 2001  
 Corp Profit growth returns Q3 2002  
 Corp Income trough Q2 2003

In every recovery employment & business investment (non-res GPDI) reach their lowest point at the same point corp profits are moving back above 0% (CHART 3-2, Page 17). In other words, employment and business spending have, in each of the last four recessions, continued to decline until corporations return to profitability. In no small coincidence, the increase in corp income and ultimately GDP occurs at or near the same point.



In each case the lag time of economic reaction to the independent variables was sufficiently different to increase statistical insignificance amongst the larger-period models. In the 1982 – 1986 period lag times were reduced dramatically by the speed and degree of the recovery from the bad 1982 recession, and the unusually large distortion of inflation receding. Similarly the 1998 – 1999 period lag times changed from the overall model. In this instance the lags were much longer as a result of the dot-com bubble. That asset bubble sustained economic activity that would have receded sooner under normal conditions, and that eventually did. Rather than suggest a breakdown in the models, these anomalies provide more evidence since, as a whole, the models hold through both highly unusual periods (only the lag times changed). The inability of statistics to account for dynamic variables provides the testing limitations.

In all cases the changes in corporate profit growth itself is caused by different exogenous variables. But each exogenous variable manifests itself through growing profit efficiency or inefficiency. In the case of the housing and dot-com bubbles, the oversupply of money funded more and more inefficient business ideas (all of those internet companies in the late 1990's that only had a dot-com name, not a business plan). In the case of the 1981-1982 recession, inefficiency was caused by an undersupply of reasonable credit that forced efficient uses of capital to be postponed or canceled. On both sides of the spectrum corporate profit efficiency is the mechanism for transferring imbalances to the economy at the margins. The ensuing dislocation is simply the process of removing the imbalance.

To further isolate changes at the margins, we tested each variable with its most inclusive value first to find significance and then isolated subsets from there. For business profits, we tested total business income as well as the subset of proprietor income, before testing the subset of corporate profits. That subset was further divided into financial corporate profits and non-financial corporate profits. The financial segment produced little significance in the dependent variables, implying that the enterprise efforts of financial intermediation have little economic impact (not to be confused with the efforts to expand credit). Instead, there appears to be a correlation in the growth of assets, meaning the success of financial institutions, while not directly affecting the economy, may have a greater impact on the price of stocks and real estate, or vice versa.

Non-financial corporate profits, on the other hand, produce in each of the independent variable regressions the greatest statistical significance. In almost every case, profit growth also has the greatest lag; suggesting that it is the first to cause changes in each of the dependent variables.

In the category of Gross Private Domestic Investment the most significant variable was the non-residential subset; in the employment category we removed financial-related jobs, as well as government related employment. Finally we tested total personal consumption expenditures, as well as its three subsets: durable goods, non-durable goods, and services.

In the following results any reference to corporate profits refer to non-financial corporate profits. Likewise, any reference to employment means non-financial, non-government employment.



**Non-residential GDPDI**

Time Period 1987 - 1997			
Independent Variables	Lag	Slope (m)	t-Values
Corporate Profits	5 quarters	+	6.9
Business Liabilities	8 quarters	-	9.7
CPI	4 quarters	-	5.5
Coefficient of Determination		0.916755	
F-Value		139.49	

Time Period 2000 - 2008			
Independent Variables	Lag	Slope (m)	t-Values
Corporate Profits	5 quarters	+	6.2
Business Liabilities	2 quarters	+	9.8
Corporate Bond Rates	3 quarters	-	3.8
CPI	4 quarters	-	8.1
Coefficient of Determination		0.9591132	
F-Value		175.93	

In the 1987 to 1997 period the best fit comes from a three-variable model using corporate profits, business liabilities, and consumer inflation. In each test the corporate profit variable engenders statistical significance to the other variables – without the predictive value of profit growth the other two variables cease to render statistically significant results – the same is not true of the converse.

Overall, the model provides a very high coefficient of determination. That implies that our model accounts for 96% of the change in the trend of non-residential GDPDI.

Here the lag of corporate profits is exceeded by the lag in business liabilities, suggesting that business profitability was impacted

negatively by a build up of corporate debt (negative slope) at relatively high interest rates. But the lack of significance of the variable without the corporate profit variable confirms the central role that corporations play in the transmission of imbalances. That dynamic changes for the latter period as business spending increased with an expansion of liabilities. And the shorter lag time for the variable suggests that business investment in the 2000’s was financed in large part by debt. That is confirmed, somewhat, by the addition of a fourth variable (corporate bond rates) to the regression model in the 2000’s. The negative slope implies that continuously low interest rates for corporations stimulated business investment spending.

**Employment**

Time Period 1987 - 1997			
Independent Variables	Lag	Slope (m)	t-Values
Corporate Profits	5 quarters	+	6.5
PCE	2 quarters	+	5.9
CPI	4 quarters	-	8.4
Coefficient of Determination		0.95593	
F-Value		200.64	

Time Period 2000 - 2008			
Independent Variables	Lag	Slope (m)	t-Values
Corporate Profits	3 quarters	+	5.3
PCE	0 quarters	+	11.2
non-res GDPDI	2 quarters	+	8.9
Coefficient of Determination		0.9591132	
F-Value		175.93	

The corporate profit variable dominates the significance of the other independent variables. In both time periods a three variable model generates the most significant results, but the third variable changes between periods. In the early

period inflation has a significant impact, while business investment is significant in the other. That change can be interpreted through the impact of higher average inflation from 1987 through 1993, and the



relatively benign and steady inflation of the 2000's (not counting 2007 and 2008).

The significance of business spending on employment relates to the stable proportion of consumer spending after the dot-com bubble (from our March 2008 Special Report, Page 4). That stability, or decrease in elasticity, placed business investment

increasingly at the margins, where consumer spending accounted for a larger share of marginal activity in the period leading up to the 2000's.

Overall, the high degree of significance again shows corporate profits as the best predictor of the trend in employment growth.

### Personal Consumption Expenditures (PCE)

Time Period 1987 - 1997			
Independent Variables	Lag	Slope (m)	t-Values
Corporate Profits	5 quarters	+	7.3
Consumer Credit	2 quarters	-	9.6
Household Liabilities	0 quarters	+	15.4
CPI	2 quarters	-	4.2
Coefficient of Determination		0.877441	
F-Value		66.22364	

Time Period 2000 - 2008			
Independent Variables	Lag	Slope (m)	t-Values
Corporate Profits	3 quarters	+	1.9
Mortgage Liabilities	5 quarters	-	4.3
non-res GPDI	3 quarters	+	4.6
Employment	0 quarters	+	11.9
Coefficient of Determination		0.942829	
F-Value		123.6858	

The predictability of the PCE regression model in the 1987 – 1997 period is somewhat less than the other variable tests, and was amongst the most complicated. Using a four variable regression model we were able to produce two statistically significant models with slightly different, but complementary, interpretive results.

The first model used corporate profits, household assets, revolving credit, and inflation as independent variables. The second used corporate profits, consumer credit, household liabilities, and inflation as variables. Again, both models' significance is impacted the most by the corporate profit variable. The first model shows a negative slope for the revolving consumer credit variable, suggesting that an increase in credit card debt and home equity loans leads to a reduction in spending two quarters later. That is confirmed by the consumer credit variable of the second model showing the same negative slope and lag.

The household liability variable, however, has a very significant positive slope, seemingly at odds with the other two

variables' results. Since revolving credit and overall consumer credit are both household liabilities it should follow that all three act in the same manner. But the difference in lag times, two quarters for the first two, no lag for the last, suggests that consumer spending is impacted positively in the quarter where credit is increased, but after two quarters the increase is enough to upset household debt service and produce a decline in spending. The effect of debt-financed spending was short-lived in the late 1980's and early 1990's.

One last observation about this period and its models: while the overall predictability is lower than other models it can be corrected by using durable goods expenditures as the dependent variable. The implication here is that service spending and non-durable goods consumption expenditures tended to be more inelastic in that period. Services and non-durable goods consisted of a higher proportion of non-discretionary items. This finding is consistent with a higher proportion of durable goods spending at the margins –



making the variable much more elastic and accounting for the increased predictability.

In the 2000's, the variables shift toward, as you may expect, housing and asset-related variables. This time period, for the first time, does not see the corporate profit variable as the most deterministic, however. Instead, the other variables share in the significance.

The model uses corporate profits, mortgage liabilities of households, residential fixed-investment (res GPDI, or housing), and employment. The corporate profit variable in this model is bordering on random, while the employment variable is the most significant. The zero lag shows that employment growth increases and decreases consumption very quickly. While some may question the use of employment as an independent variable for consumption, and using consumption as an independent predictor for employment (both showing zero lags) we have concluded that both can affect each other independently through reactions with their own independent variables. For example, an increase in business investment spending could offset a drop in housing-related activity. The positive effect on employment from the increase in business spending would increase the level of consumption, but the

negative effect on consumption from lower housing activity would reduce employment, thereby canceling the indirect effects on both employment and consumption, and making both *directly* affect each other.

The other noteworthy conclusion from this model is the negative slope of the mortgage liability variable. Just as the household liability variable from the earlier time period acted as a drag on spending, in this model an increase in mortgage liabilities decreases consumer spending five quarters down the road. The temporary nature of the benefit can be seen in the time frame of the housing bubble. The housing boom of 2004 and 2005 began to slow by 2006 (approximately four to six quarters lag), which necessitated (from Wall Street's point of view) the subprime mortgage spree. By the end of 2007, consumption began to weaken further as mortgage payments began to weigh on those consumers.

Finally, even though the corporate profit variable does not demonstrate the greatest significance in terms of predictability, our profit-centric theory still holds. Instead, its significance can be implied indirectly through the employment variable. In this manner corporate profits provide significant indirect effects on consumer spending, as well as some minor direct significance.

---

The change in trend from losing money to stable income growth allows business to, firstly, stop cutting costs and, secondly, resume spending activity that had been postponed because of profitability issues. For consumers, the cessation of layoffs creates a stable employment outlook that likewise allows them to resume postponed spending. In the context of a credit crunch, a significant portion of the contraction comes from that process of delaying non-discretionary spending – it becomes a greater percentage of marginal activity from a lack of available credit.

From all the statistical and graphical relationships we have a good idea of marginal economic activity. Within each model there was little predictive value using proprietor's income (small business). And, as a warning to proponents of fiscal stimulus, there is a significant, inverse statistical relationship between government expenditures (both federal alone, and total government), and employment and PCE – government expenditures act as a drag on the economy because of lower levels of efficiency and lack of sustainability. The weight of all this evidence more than suggests that marginal economic growth

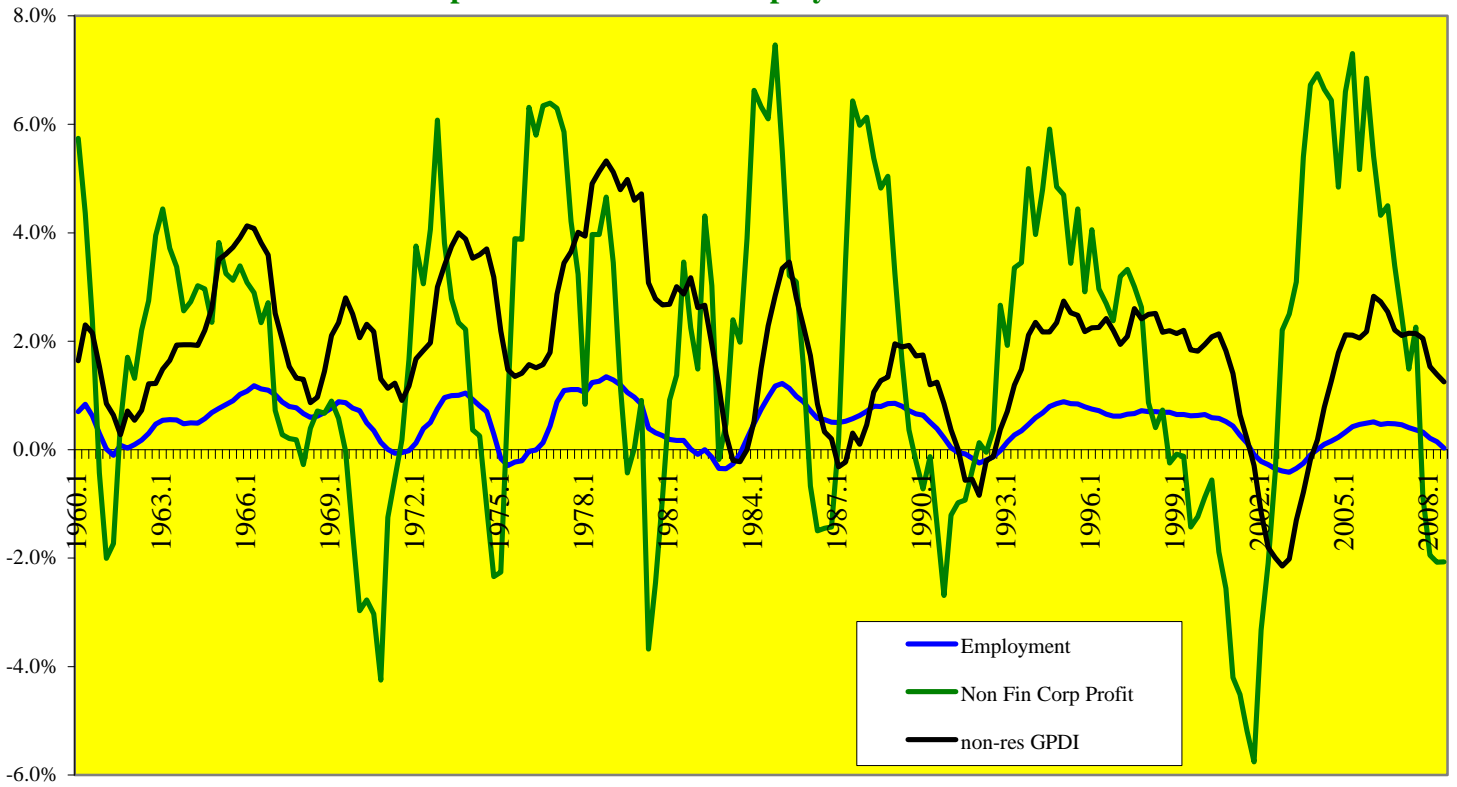


comes from ability of American corporations to turn a profit. Two sectors of the economy that account for 81% of all GDP (PCE & non-res GPDI), and the most important non-GDP social effect (employment) can be traced to that effort.

We can also conclude that the greatest source of efficiency in the economy comes from the corporate sector. Corporate income accounted for about 51% of all business income in 1970. In 2006, before the latest round of profit trouble, it accounted for 62%<sup>27</sup>. During the past 30+ years corporations have been the driving force behind economic and employment growth.

This stands in stark contrast to the Japanese business model of inflexibility. Certainly corporations can be the largest source of inefficiency in the US economy but any inefficiency is dealt with in relatively short order through drastic changes in employment and investment. And through those changes lie the seeds of any recovery. While Japanese businesses languished with constrained profitability through labor inflexibility, American business uses layoffs to create a non-constrained, positive efficiency trend – cost cutting outpaces revenue declines to produce increasing income at a stable rate. The net result is a sustainable new profit growth equilibrium that forms the basis for renewed growth in employment and consumer spending.

Chart 3-2: Corp Profit Growth vs. Employment & Busn Investment 2 YR MA's



In each contraction the trough in non-res GPDI *and* employment growth corresponds almost exactly to the same point the corporate profitability trend moves back to positive. The timing of the return of employment growth and the resumption of postponed non-discretionary spending is distinctly tied to profitability. This forms the basis of a recovery, especially when, as we saw in our regression models, PCE is tied with employment – a stable job market encourages consumers to resume delayed spending.



## Part 4 The Labor Market As a Scorecard, Part II

In our September 2008 Special Report we viewed the relatively slow pace of job cuts with the idea of corporate profit growth in mind. The 650,000 payroll reductions from January to August<sup>28</sup> were not enough to generate a change in efficiency. Instead that slow pace indicated that the lag time from profit declines was rapidly approaching – the slower pace of job cuts in the first half of 2008 was in response to slowing, but still positive, profit growth. Profit efficiency turned negative in late 2007 so the escalation in payroll declines was imminent.

We predicted that 1.5 million job cuts were likely within a five-month period starting in September. Through the first three months of that period the economy has shed 1.2 million jobs. December's employment figures look to be at least as bad as November.

In overall terms, the jobs market lost 2% of its total pre-recession jobs from 2001 to 2003, and a total of 3% from 1981 to 1982. As a guide we can project 2.8 million job losses (an additional 850,000) using the 2001 example, or 4.1 million cuts (an additional 2.2 million) using the 1982 example. If we factor in December's likely job losses, we can expect 350,000 to 1.7 million **more** job reductions, respectively.

The recent increase in unemployment will take some time to affect profitability, but there are already indications that profit declines are bottoming. The third quarter of 2008 actually saw a 6% increase in non-financial corporate profits<sup>29</sup> (which has even been revised higher since the preliminary estimate). Leading the way has been the “Other Durable Goods”, Petroleum, and Wholesale Trade segments.

The Petroleum segment should not be able to hold its profitability once oil price declines are factored in (even with a

majority of oil sales hedged there will still be accelerating declines in oil revenues moving away from the higher hedge prices). The increase in “Other Durable Goods” profit (which includes mining in primary metals, transportation equipment and furniture) can be interpreted as a bottoming of prices within the segment's component industries. While not necessarily a sign of strength, it, at least, indicates a potential change in trend.

Wholesale profit improvement is the most intriguing and potentially the most significant. When non-financial profit growth began to falter in 2005 and 2006, it was “Other Non-Durable Good” (textiles, plastic, rubber & printing), “Other Non-Financial” (agriculture, mining, construction, real estate, health care, food service), and Wholesale Trade that led the decline. The first two are likely casualties of the housing bust. But the wholesale trade segment was likely done in by rising inflation, which was eventually passed to the retail trade segment (which started to decline in early 2007). So the transmission of inflation, just as our models suggested, exacerbated an already weakening economy.

We can interpret a turnaround in wholesale profits as the abatement of inflationary pressures due to the short-term Philips Curve transformation (June 2008 Special Report, Page 6). As that transformation filters its way through the economy it will help increase PCE and take some of the pressure off employment.

The combination of lower inflation plus the coming positive affect on profits due to cost cutting sets up the recovery scenario. We can now predict that total unemployment will significantly exceed (in percentage terms) the 2001 – 2003 period due to the lag time in realization of cost savings from job cuts, and settle near the 1981 – 1982 period.

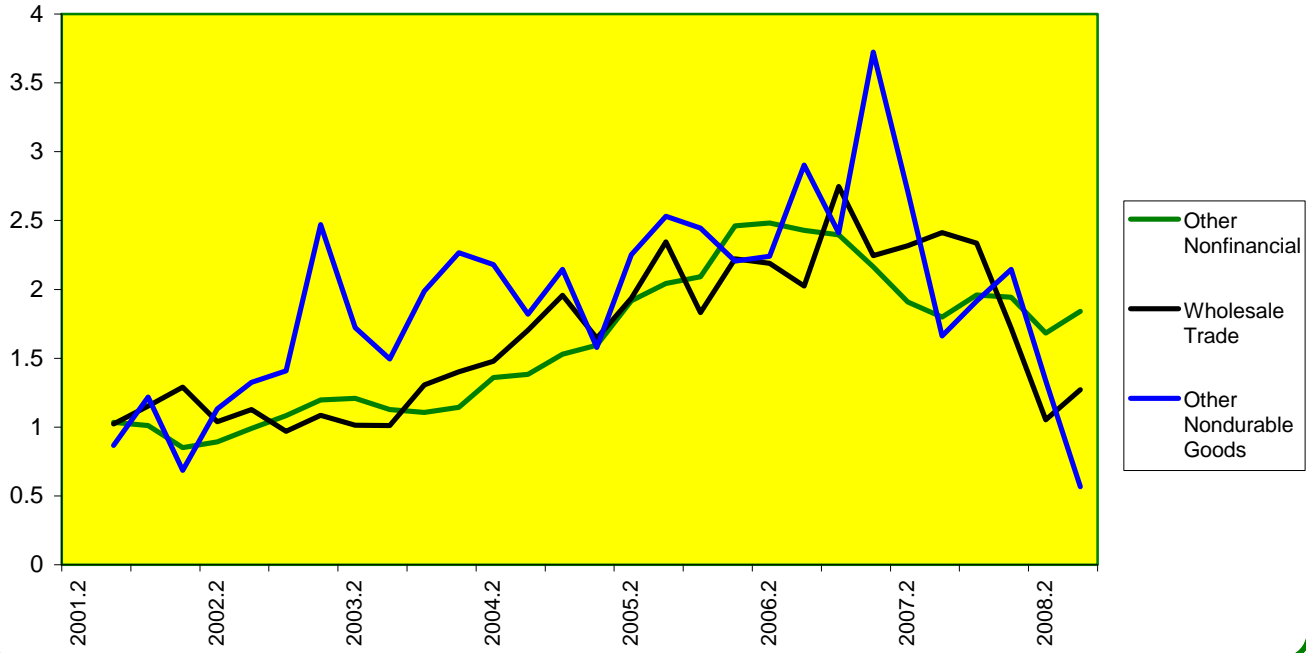


That produces a recession on par with that time, as we predicted in November 2007.

Using the labor market as a scorecard, the enormous reduction in employment is greatly outpacing the decline in overall income – even factoring a 5% decline in fourth quarter 2008 GDP. The net increase in profitability from that cost cutting is in

process, and the only significant variable for a shift to recovery is the time it will take for that change in trend to become widely accepted as stable. From our analysis of the data we can conclude that the change in trend will likely occur toward the end of the first quarter of 2009, and its acceptance a few months after.

**Chart 4-1: Profit by Sector, Index, 2001 = 1.0**





## Part 5 Policy Wildcards and Worries

Since the investment bank meltdown in the middle of September 2008, the Federal Reserve System has taken the following unprecedented and massive actions<sup>30</sup>:

1. \$400 billion into the Term Auction credit, the emergency “temporary” credit made available in late December 2007. Originally slated at \$20 billion.
2. \$192 billion in loans, including \$81 billion in primary credit to the banking system, \$45 billion to brokerages and investment banks, \$25 billion for money market funds holding asset-backed commercial paper, and \$40 billion in direct credit to AIG.
3. \$325 billion was used to purchase commercial paper outright.
4. \$26 billion to purchase assets from Bear Stearns (under the aptly-named, newly created SPV Maiden Lane LLC).
5. \$20 billion to purchase mortgage-backed holdings from AIG (under the aptly-named, newly created SPV Maiden Lane II LLC).
6. \$28 billion to purchase collateralized debt obligations (credit derivatives) from counterparties unable to recover losses through credit default swaps written by AIG (under the aptly-named, newly created SPV Maiden Lane III LLC). The Fed took losing assets off the hands of financial institutions that were counting on AIG to pay up.
7. \$558 billion in credit was swapped with banks and brokers for asset-backed securities (the most “toxic”) as collateral for the Fed credit – Fed credit counts as cash for capital reserve calculations.

In order to pay for the \$1.3 trillion, 148% increase in Fed assets, the Fed simply created liabilities:

1. \$808 billion in deposits for banks.
2. \$113 billion in deposits for the US Treasury.
3. \$289 billion in supplemental financing deposits for the US Treasury.
4. \$47 billion in reverse repos (collateralized by US Treasuries).
5. \$57 billion in brand-new Federal Reserve notes, also known as dollars.

The net affect of the new \$2.2 trillion Federal Reserve System is that well over \$1 trillion in money was printed through the creation of deposit liabilities just in the three months since September. Publicly the Fed has stated its actions were meant to get the banking system lending again. What was left unsaid was that such an undertaking will not be successful without first undertaking a massive recapitalization of the banking system. Beyond that, again not talked about publicly, is a concerted effort to fend off deflation by bridging the liquidity gap.

Without a shortage of money deflation cannot take hold. By throwing every available minted dollar and deposit creation

at the banking system the Fed is, at the very least, guaranteeing there will be no shortage of money.

Since October the Fed and the Treasury Department have paid little attention to how banks were using their emergency funds. A good example was the “surprise” change in TARP focus. Originally designed to purchase troubled mortgage assets, it quickly evolved (or devolved) into a preferred stock binge. Fed officials and Treasury policymakers knew full well that pushing the banking system to increase credit was impossible given the lack of sufficient capital. The collapse of commercial paper financing was too great to



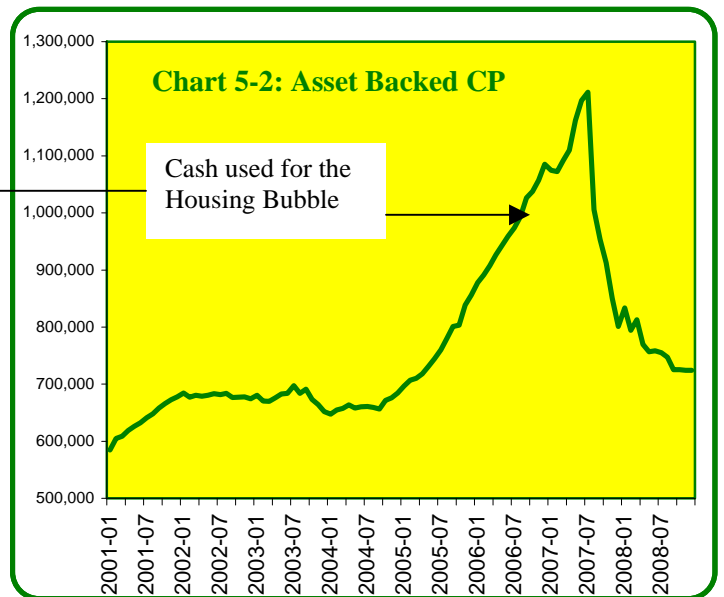
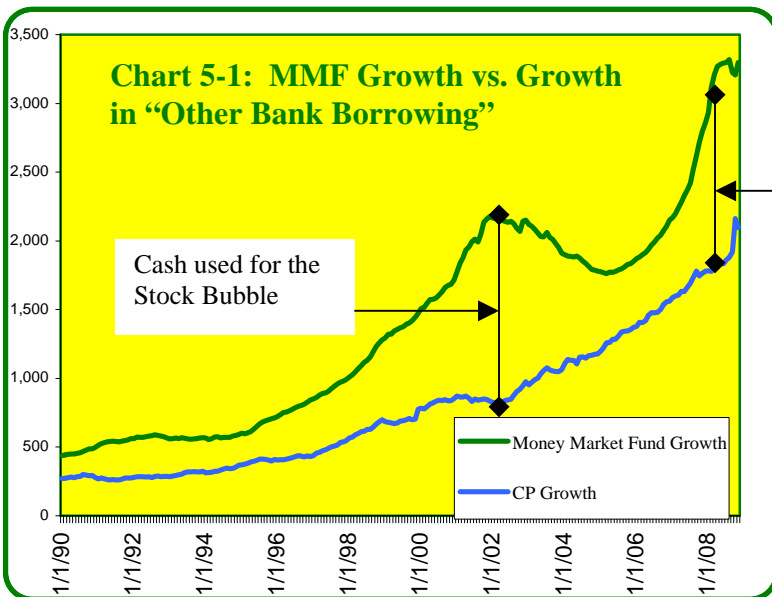
fix by removing toxic assets. Preferred stocks offer more bang for the new bucks, but only in the context of a recapitalization.

The Fed’s entire policy has been a concerted effort to ensure liquidity for current needs, without any regard to stimulating loan growth. By keeping Fed liquidity high the likelihood of a money squeeze would diminish, but that would not have been saleable to the public. In fact, staring at the scope of the leverage problem after the collapse of Lehman Brothers, policymakers knew that the amount of money needed to restore liquid markets would be too immense to undertake by conventional means. And that required the sales job.

In embarking upon the path of quantitative easing, the Fed is being forced to fix one of its longstanding mistakes. Allowing money to flow outside of the banking system in the early 1990’s (June 2008 Special Report, Page 8) through mutual funds the Fed unwittingly created an extra banking risk for which it and its members were utterly unprepared. Instead of accessing public capital through deposits, which are guaranteed and regulated, banks would now have to access public capital through an intermediate step, mutual funds. The process of accessing capital through mutual funds is commercial paper - mutual fund managers now sit between banks and the public’s money.

The explosion in mutual funds forced banks to increasingly rely on commercial paper, creating a steadily growing maturity mismatch between bank assets and bank liabilities. A precursor to the auction-rate securities debacle, banks were funding long-term assets with very short maturities (30 to 90 days). Such a system produces great efficiency since short maturities carry lower costs but it puts a huge premium on liquidity, as the auction-rate market learned in February 2008<sup>31</sup> and the banking system in September 2008. Neither market accounted for the increase in liquidity risk; yield spreads were far too narrow. Participants were not fully aware of the consequences of liquidity since there was no experience outside of the growth phase.

The current banking crisis is essentially a crisis of confidence manifesting through the intermediation of mutual fund managers. Unable to make a judgment of the true exposure of banks and brokers to toxic derivatives, managers stopped using money market funds to fund financial short-term liabilities. Most of the confusion in the estimation of risk was due to the highly evident mismatch between official statements and reality – the Fed and banking officials would proclaim everything was fine at the same time steadily increasing the scope and scale of their “temporary” measures. Trust is the vital link in the chain of liquidity, and, now given that extra step in





banks' liability financing, the behavior of financial players created increasing mistrust. Bank and brokerage CEO's were very active assuring markets that the worst had passed. The "all is well" slogan may have been effective for the public-at-large, but it only fostered rising wariness among professional managers. Instead of having a calming effect their public face of confidence backfired by further jeopardizing incrementally larger amounts of short-term financing by not coming clean with full disclosure.

Much of the handbook written by and for Fed policymakers had become outdated. As an institution, the Fed's own actions throughout the previous thirty years has forced the institution itself away from the margins. By enacting measures that lured, and in some cases forced, money outside the balance sheets of the banking system it reduced its own effectiveness. The asset bubbles were simply beyond the control of the Fed (June 2008 Special Report, Page 15), and nothing was ever done to regulate what we called in August 2007 the shadow banking system.

Rather than updating the Fed's playbook for a crisis, it simply sat complacent. There was no study or outline for new procedures in the face of the obvious existential change in the structure of bank liabilities. Now that commercial paper was the dominant source of marginal funding (not based on size, but based on maturity) there was no consideration given by officials on how to handle a crisis amongst insiders. When a crisis did appear, the Fed just dusted off its manual from the 1930's, and began to publicly proclaim that all was well. Every action and statement was designed to calm the public, keep enough confidence to forestall a systemic run on deposits.

But the problems were not coming from the deposit segment of liabilities. Professional mutual fund managers were sophisticated enough, and familiar enough with bank financing, to see through to the core of the

problem. The public campaign of confidence could not work – only full disclosure **and** the same deal as depositors could. The extra step of commercial paper intermediation of financial intermediation broke loose an increasing amount of the safeguards created after the Great Depression: depositors became indirect bondholders.

The purpose of the FDIC is to guarantee enough deposits so that confidence remains in the face of a crisis, keeping the crisis from threatening the whole system. But there is no such guarantee for debt holders. As a consequence of allowing bank financing to migrate into the shadow banking system, regulatory safeguards such as the FDIC were applied to a decreasing proportion of financial balance sheets. The risks of a crisis spinning out of control increased as that process took place, but no effort (through reserve requirements) was made to counteract the increase in risk. In fact, Alan Greenspan encouraged riskier behavior<sup>32</sup>.

By March 2008, when Bear Stearns failed and a bailout was orchestrated<sup>33</sup>, the Fed believed that such an implicit guarantee of Bear's assets would inspire increasing trust, closing the liquidity gap. It only fostered more apprehension. The Fed had used all its credibility in its misaligned public campaign. Instead of being reassured the Fed would find a way to guarantee bondholders, it alluded to the increasing realization that the crisis was far beyond what officials were willing to talk about publicly, or that no one really had a good idea just how big the scale of the crisis was.

For years institutions were allowed to push riskier and riskier assets (that they sold themselves as safe) off balance sheets and into Structured Investment Vehicles (SIV). Technically SIV's were separate mini-banks, a legal and technical separation that allowed them to do what banks could not: apply unimaginable leverage.



The credit crisis's first victim was commercial paper tied to SIV's and asset-backed securities. In August 2007 the biggest source of funding for these derivative multipliers dried up. There was an almost immediate collateral effect on commercial paper for financial institutions, and the Fed swung into action. As we detailed in our November 2007 Special Report, the Fed action restored confidence with the *public*, but did little to assuage money fund managers. The increased liquidity provided did thaw commercial paper for banks (temporarily), but did nothing for asset-backed issuers.

There was no thought given to the ramifications (and foreshadowing) of what was happening at the time – a full collapse of the mini-bank system was in process. By the end of 2007 major commercial banks were forced to repatriate SIV assets<sup>34</sup>, not through a comprehensive Fed solution, but out of it necessity. Unable to raise short-term liabilities for them, foreshadowing the meltdown in September 2008, the banking system hoped that hiding the assets within their own capital structure would be enough to end the run.

The efforts to increase capitalization (from sovereign wealth funds) in the wake of the move should have been a warning to shore up the entire systems' finances. If new capitalization was required to replace the commercial paper funding for asset-backed securities, wouldn't the same issues arise of the larger system once asset-backed securities were repatriated? Perhaps the Fed hoped that sovereign wealth funds were large enough to do the job, provided that they had an ever-increasing appetite for risk. The fact that external fund options ceased around the time of IndyMac's failure should have been enough to force the Fed to review its actions, maybe even move to finally address the cause of the crisis.

The Fed's own response was a \$20 billion pledge at its discount window<sup>35</sup>. Again a token pledge in the face of trillions of

dollars of toxic assets, a public move meant to inspire calm but little concrete action toward resolution. The public mostly bought it (especially stock investors over the summer), but the money fund managers knew better.

The decided lack of leadership and ignorance of policymakers is reminiscent of the Fed of the late 1960's and 1970's (and the Japanese response to the collapse of Sanyo). Without fully understanding the problem the 1970's Fed embarked upon misguided and half-hearted policies that doomed the period to stagflation. The current Fed iteration seems to be headed on the same path, as the curious case of Lehman Brothers suggests.

Reversing itself from a position of trying to inspire confidence through escalating measures and bailouts (Fannie and Freddie), the Fed suddenly decided a tough, laissez faire approach was needed. Out of nowhere moral hazard became the most significant risk when it was paid no attention just weeks before. On September 15, 2008, Lehman Brothers was allowed to fail<sup>36</sup> but only a day later AIG was bailed out<sup>37</sup>, then Washington Mutual was shepherded into a clumsy takeover<sup>38</sup>. Moral hazard only applied to Lehman?

Confidence in the Fed plummeted, and confusion reined from the obvious inconsistency. In one move it lost all of its remaining credibility, including the public's confidence. The entire episode demonstrated an utter lack of leadership and an open ignorance of fundamental banking principles –the commercial paper market for banks collapsed almost immediately (falling by \$238 billion from September 15 through October 22, an incredible 30% decline). In one move it triggered the run it had been trying to avoid.

The point of rehashing the crisis is not to suggest credible alternative actions that could have been taken to avert or abate the banking collapse (such speculation is



irrelevant to this discussion and could take an entire report or two itself), but to suggest that the agency now at the center of it may not be best suited to managing a recovery. The astronomical liability creation we detailed at the beginning of this section means the Fed has committed itself to bridging the liquidity crisis well into the future. By doing so it has staked the recovery of the banking system on its ability to understand the implications and ramifications of its own actions, and its ability to execute (let alone understand) a complicated and interconnected drawdown of those policies.

Some observers may give praise to the fact the central bank did anything at all – the Bank of Japan sat idle while deflation set in. Any positive sentiment is short-lived since we now have to worry whether the Fed will be able to unwind its measures in a timely and correct manner.

It is common knowledge that printing money in such huge quantities will lead to inflation (you have to go back to Germany in the 1920's<sup>39</sup> to see such a massive infusion of new cash, and to the Confederate States in 1862<sup>40</sup> for a similar example in the US), but the Fed does have two factors in its favor.

The first is the Philips Curve. Over the short run, economic weakness caused by an increase in the general rate of unemployment will reduce inflationary pressures. While it will not hold over the long run, the economic weakness of the recession has bought the Fed time. The second is the destruction of money. Losses created by declining prices in credit derivatives and counterparty payment defaults, not to mention more conventional losses from actual loans like mortgages and credit cards, offsets some of the increase in money supply.

Where we are most concerned is the Fed's ability to understand its actions in those contexts and ability to execute a proper,

coordinated policy. As our narrative retelling of the pre-crisis period suggests, we are not really convinced that it is up to the task.

The margin for error is not very wide: withdraw its liquidity too soon and economic growth will suffer at precisely the time it cannot afford renewed weakness, withdraw it too slowly or late and inflation will return with a vengeance.

One of the key aspects of its liquidity policy will be the price distortions from the liquidity gap. Valuations of derivatives and other assets have been temporarily reduced from a lack of buyers rather than a fundamental representation of reduced cash flow potential. Reductions in the distortion will have an affect on bank liquidity that is, at this time, near impossible to predict. If the housing market suddenly improves, the prices of these assets will rise, improving non-Fed liquidity throughout the system. But what if the housing market uptrend is short-lived, akin to a fool's rally in the stock market. How will the Fed respond? If it withdraws liquidity during the rally it will have sewn the seeds of a new crisis, and risks a double-dip recession.

Selling a trillion dollars of assets will be difficult enough in terms of maintaining stable money supply. But the Fed will also have to consider asset price distortions from its actions. Selling assets back to the markets in huge quantities will have unforeseen, secondary affects. The imbalance in the supply of credit and cash those sales will create may move pricing so far from a fundamental basis as to create another credit dislocation.

From its own history, and from the political reality of the time, we believe that it is more likely the Fed will err on the side of employment as it did time and again during the 1970's. In weighing those risks in a political and social context (without real leadership how can we expect that it will apply another, more appropriate context) it



will likely be highly cautious in removing its liquidity. But in any event, the probability of the Fed correctly navigating the banking system through such a hazardous and extremely narrow channel is not good enough to believe in a trouble-free recovery.

There is also the fiscal wildcard in the form of enormous stimulus. President-elect Obama has promised infrastructure spending and upgrades that will create/save 3 million jobs, costing between \$850 billion and \$1 trillion<sup>41</sup> (the Keynesian stimulus we alluded to in the introduction). And has furthered upped the ante by suggesting that trillion dollar deficits will have to become commonplace<sup>42</sup>. The history of political interventions into the economy is littered with warnings to such a policy, but unfortunately skewed viewpoints (more concerned with politics rather than effectiveness) prevail. Lost in the history of the “greatest” stimulus package ever conceived, the New Deal, is its architect’s own performance review. In 1939 FDR’s Treasury Secretary Henry Morgenthau lamented<sup>43</sup>:

“We are spending more than we have ever spent before and it does not work. We have never made good on our promises . . . I say after eight years of this administration we have just as much unemployment as when we started . . . And an enormous debt to boot!”

The stimulus will, however, have profound secondary impacts on the recovery. Such a huge boost to the deficit will force the Federal Reserve to seek even more massive funding. While foreign investors are content to hold US government debt at less than one percent now, that will not be the case when the turmoil has passed. Safety will not be the primary concern of those investors if inflation again becomes an issue or if the dollar renews its slide (due to the 148% increase in the volume of them). And those dangers apply the exorbitant debt that

already exists, let alone any trillion dollar yearly additions.

In the context of forcing the economy to recover, any government action that does not increase the efficiency of corporate profits will fail in its goals (from the evidence in Part 3). The Japanese example offers a perfect parallel. Despite years of government-paid infrastructure spending the economy continued to its long-descent into stagnation and depression. There was no concerted effort to improve the ability of companies to make money, or to close unprofitable companies in an effort to free capital to be used more efficiently.

Efficient use of capital also applies to government-sponsored bailouts. Throwing money at inefficient companies or industries did little to improve the economic prospects of Japan. The auto industry provides another good analogy to a broader economy. Unable to improve profitability because of an inflexible cost structure, it languishes in perpetual weakness. Without addressing that fundamental imbalance, removing the inflexibility to affect costs, handing out money to the industry will only increase the time to its demise. Keeping inefficient enterprises afloat only increases the overall inefficiency of capital and business – erecting a ceiling on growth across the entire economy. Done long enough and wide enough it can produce a lost decade.

We have no doubt that spending on infrastructure is necessary, and that some of the improvements will have some impact on future economic efficiency. But the time it will take to realize such gains puts it out of the context of a recovery. Instead the competition for capital will increase its cost at a time when that cost is of the utmost importance. The net affect of the New Deal was to deprive private industry of the capital it needed to fund sustainable economic projects in favor of temporary government projects. It is no wonder the increase in employment was temporary, and that there was little appreciable impact on consumer



spending<sup>44</sup>. As more and more politicians, such as the chief economist of the IMF<sup>45</sup>, decry the need to stimulate demand, they should look to the lesson of the Great Depression and the Lost Decade to see that

the *only* way to stimulate demand is through sustainable employment created by profitable enterprises.

## Part 6 The Market Deleverages

The panic in the stock market can be traced directly to the shortage of capital created by the collapse of the commercial paper market. Without that vital source of short-term capital banks and brokers were forced to raise cash from any and all sources. While that may have meant direct sales of stocks, the larger effect was a cascading removal of leverage.

Hedge funds and other leveraged asset vehicles were dependent on short-term debt to maintain asset levels. Again, mismatched maturities of assets and liabilities forced selling of all asset classes when the debt funding dried up. The consequence was a massive rush to sell those classes without regard to fundamental value. While the stock market was affected, so too was every conceivable asset market. From aluminum to copper to foreign equities, the prices of assets exposed to Wall Street leverage collapsed in panic.

Even the price of gold exhibited the strain of the cash shortage. During times of economic turmoil the price of gold typically rises as investors seek its relative safety. That did happen in the last two weeks of September as the crisis began to unfold, rising above \$900/ounce<sup>46</sup>. But by the second week of October, just as the panic in stocks was reaching its peak, the price of gold collapsed, falling nearly 22% in less than three weeks – not quite the expected result. The price of gold remained near that low while the stock market continued to fall and the scale of the crisis seemed to worsen by the day. Until mid-November gold

stayed under pressure, bottoming not too far ahead of the bottom in stocks.

Since that time the price of gold has rebounded sharply, flirting with the \$900/ounce mark again. That movement suggests that the pressure of institutional selling due to deleveraging has decreased significantly.

We can also see that trend in Chart 6-1. As the demand for collateral exchanges with the Federal Reserve intensified (the need for funding to replace the loss of commercial paper) the price of stocks and other assets declined significantly. The collapse of asset prices forced margin calls that created additional selling. Once the credit markets stabilized from the increase in liquidity, as the Fed used its balance sheet to fill the liquidity gap, asset prices stopped falling. Even the mid-December slump in stocks corresponds to a slight decrease in financial commercial paper, and a subsequent increase in activity at the Fed window.

During the panic there was little attention paid to fundamental valuations. Panic and margin calls (all those sell offs taking place in the last 30 minutes of trading days) held investors' attention, as economic realities were completely disregarded as secondary issues. Now that the pressure of institutional selling has diminished the economy has moved back into the forefront. The market's ability to hold its value in the face of downright awful news (such as December 5, 2008, when the Labor Dept announced 533,000 jobs were lost in November, but the



Dow finished higher by 259 points<sup>47</sup>) is a strong indication that the deleveraging forced the market too far down.

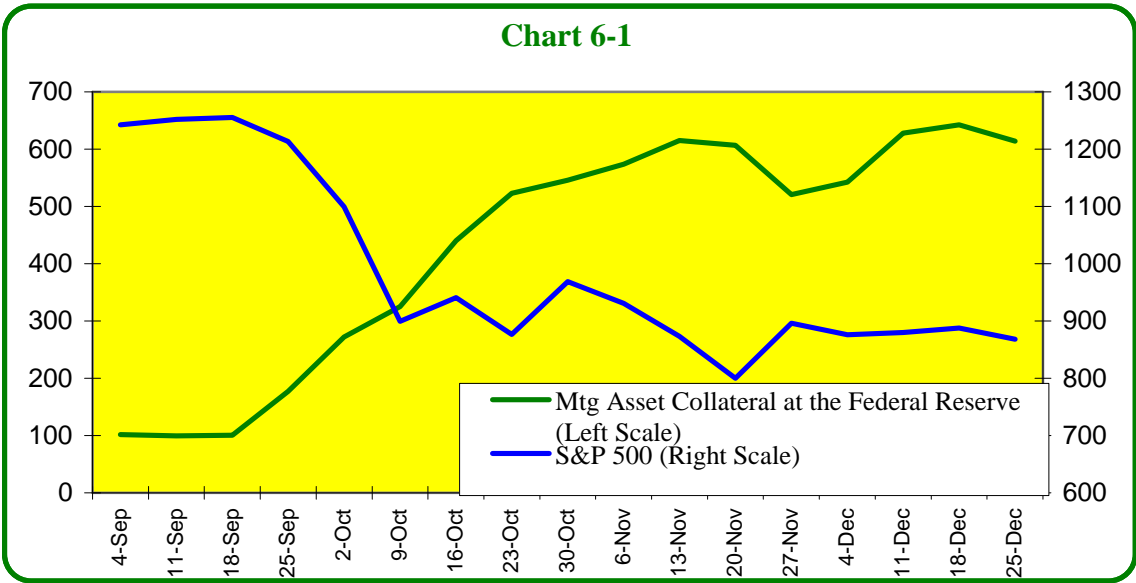
There are also strong fundamental indications that stocks are undervalued as a group. The first is Chart 6-2, the relationship between stock prices and the economy. Even factoring a 5% decline in real GDP for the fourth quarter, stocks are at their lowest relative value since before the underpinnings of the dot-com bubble began in 1995.

In addition, the yield curve of treasuries and non-treasuries have steepened<sup>48</sup>. An inverted yield curve has correctly predicted economic contraction for decades, on average within six quarters of the inversion. The yield curve inverted in August 2006, and the recession began about fifteen months later. It also indicates the relative duration of the contraction and its recovery. The curve returned to a positive slope in July 2007 and has continued to steepen since

then. That indicates an economic recovery in the first part of 2009.

Given the depth of market sentiment any sign of a solid recovery (regardless of the imposition of stimulus) would cause an immediate and decided rally. The flight to quality since the panic has overwhelmed the concerns of a massive increase in treasury debt. Treasuries up to six months in maturity are yielding next to zero - the growing pool of money market assets flow to treasuries as a replacement for financial commercial paper. And the amount of money funds has continued to increase to new records<sup>49</sup> as cash has flow from stocks to cash. Those funds will eventually seek opportunities for better returns over the longer-term. With interest rates historically low there are no viable alternate assets – stocks will again be the preeminent liquid asset once confidence in a recovery becomes widespread. Without the pressure from institutional selling there will be nothing standing in the way of that rally.

As the amount of mortgage derivatives used as collateral for Fed credit rose, the S&P 500 declined. When that exchange declined the market recovered. It can be used as a measure of deleveraging.





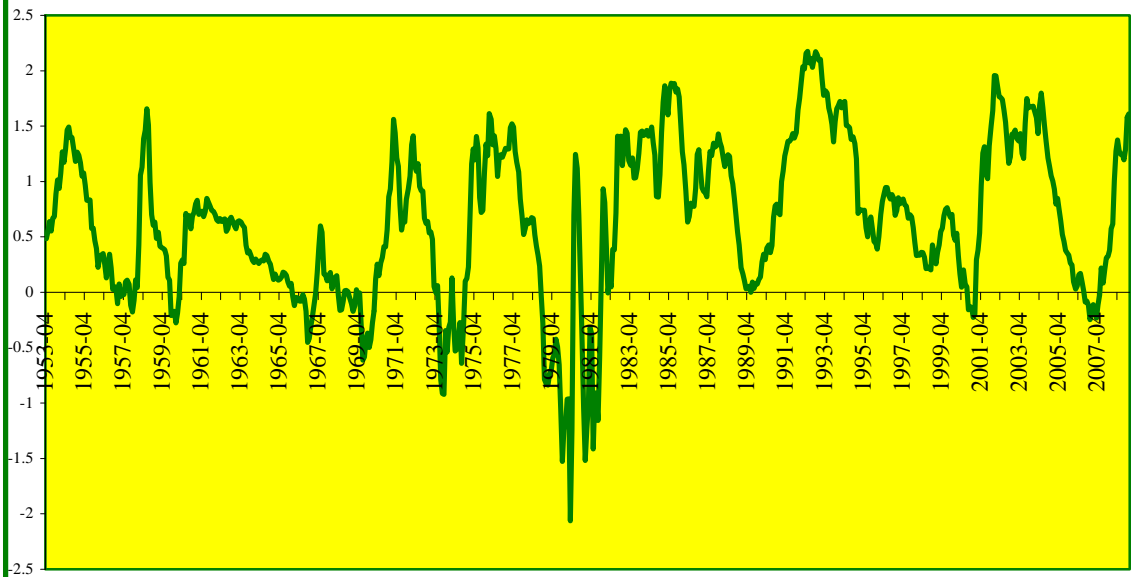
The stock market is at its lowest relative value to the economy since 1994 – before the equity bubble.

Chart 6-3 shows the average slope of the Treasury yield curve. Each inversion precedes a recession, while steepening precedes each recovery. The action of the curve in 1980 shows the double dip well – its steepening was very short-lived, and the overall inversion was lengthy, matching the length of the contraction.

CHART 6-2: S&P 500 vs. GDP



CHART 6-3: Yield Curve Slope





## Conclusions

From all the data we have collected since October, we have reached the following conclusions:

1. The economy is not likely to repeat the Japanese scenario. The qualities that were/are unquestionably missing from Japanese businesses and banks are being displayed by their American counterparts. The US banking system, because of its reliance on public money, has an expanding potential capital base vs. the Japanese closed system that saw its capital base shrink over time. In the US, as the liquidity gap recedes credit growth will be able to return.

Japanese businesses have not been able, even after sixteen years, to return to a model of increasing profitability. Emphasis on social pressure has kept business from taking the steps necessary to reestablish efficiency, an emphasis American businesses do not have. American corporations respond with relative quickness and determination to restore profitability, often to the shortsighted chagrin of politicians.

Finally, without a shortage of credit and cash deflation will not be able to take hold. The disastrous effects of deflation can force an economy into drastic action (the US in the early 1930's) or a slow, seemingly unending decline (Japan in the 1990's and 2000's). Absent deflationary pressures, the US economy can return to growth after the dislocation from inefficiency has passed.

2. Marginal economic activity is directed by corporate profitability. How efficient corporations are in making money determines the level of business spending, unemployment and consumer spending (with other variables playing a significant part). During a sustained period of slowing or diminishing profitability, corporate business responds by cutting major cost components at a rate greater than revenue declines, eventually restoring profitability.

The return of the increasing profitability trend begins the recovery process. While other factors can contribute to the degree and slope of the recovery, its basis is formed in the profitability function.

3. Based on the performance of the labor market we can predict that the economy is currently experiencing the heaviest part of the contraction. The first quarter of 2009 will not see growth, but the pace of the decline, especially close to March and April, should improve.
4. In order to finally deal with a misaligned regulatory system that fundamentally altered the liability structure of the banking system, the Federal Reserve has printed over \$1.3 trillion new dollars. Hoping to close a liquidity gap, thereby forestalling deflationary pressures, it has increased the size of its own operating assets and liabilities by 148% in the space of three months. At some point in the future those assets need to be sold back



to the financial system. How they are sold will go a long way in determining future money supply growth.

Any missteps can push the economy into a second contraction, or unleash 1970's-style structural consumption inflation. Judging by its past performance, including its recent actions, there is not a lot to be confident about. While those mistakes can have negative effects, the lag time involved means that the Fed cannot affect a recovery in its beginning stages, but will definitely have an affect just as the economy is looking to regain solid fundamental growth.

Added to that pressure will be any stimulus monster that the Federal Government creates. A corporate tax cut will add to the positive momentum of profitability, but the longer-term collateral affects will only add to the Fed's already difficult task of funding the economic/bailout mess. If such a tax cut cannot be enacted without packaging it with "stimulus" spending, then it will not be beneficial over the long run. The profitability trend can form without the stimulus, but the deleterious affects of new deficits will create significant future inefficiencies.

5. Institutional selling pressure has decreased significantly since the middle of November. Gold prices and activity at the Fed's discount window suggest that need for cash is receding. Without that selling pressure, and with money returning from alternate investments, a strong rally should propel the stock market significantly off its lows.

The recovery may not be as robust as most would like but it will still be solid enough to change investor sentiment. Weakness in the banking system will continue well through 2009 as liquidity slowly becomes more widespread. That weakness in credit growth will depress the positive affects of increasing employment on consumption, and keep business spending at more modest levels through inefficiency created by the lack of sufficient funding. But as the overall profitability of corporate business increases, the pressures on liquidity (probability of loss) will recede. If policymakers in Washington find a way not to mess up too much, 2010 could potentially be a solid year.

However, it may be too much to ask for politicians and policymakers. While the recovery is forming and progressing, the need for solid analysis will be at a high premium. The failure of "economists" to recognize a contraction that was already present seems to have forced them to overcompensate on the downside – very much like the failure of analysts to cut earnings forecasts during downturns and then compensating by being reluctant to increase earnings forecasts during the recovery. While the economy is in a state of changing dynamics, economic predictions from these "experts" will be of little value.

The stakes for investors will be greatest during the period of rising organic, non-Fed liquidity. Understanding how the extraordinary measures enacted during the Panic of 2008 unwind will be key to understanding where the markets are heading over the near term. If a positive profitability trend continues to build unencumbered then a normal stock market recovery will unfold. If that trend is upset by policy then the potential for hyperinflation or another contraction will increase significantly.



## Endnotes

- <sup>1</sup> “Despite Actions Fed Sees Downturn Lasting”, Associated Press through MSNBC. January 6, 2009.  
<http://www.msnbc.msn.com/id/28525508/>
- <sup>2</sup> “The Economic Outlook and The Fed’s Roles in Monetary Policy and Financial Stability”, Text of a Speech by Philadelphia Fed President Charles Plosser. January 8, 2008.  
[http://www.philadelphiafed.org/publications/speeches/plosser/2008/01-08-08\\_main-line-chamber-commerce.cfm](http://www.philadelphiafed.org/publications/speeches/plosser/2008/01-08-08_main-line-chamber-commerce.cfm)
- <sup>3</sup> “Choices made in 2009 will shape the globe’s destiny”, Martin Wolf. Financial Times via FT.com, January 6, 2009.  
[http://www.ft.com/cms/s/0/4f5c5ba2-dc22-11dd-b07e-000077b07658.html?nclick\\_check=1](http://www.ft.com/cms/s/0/4f5c5ba2-dc22-11dd-b07e-000077b07658.html?nclick_check=1)
- <sup>4</sup> “Aftermath of Financial Crisis”, Reinhart and Rogoff. American Economic Association through Harvard University, January 3, 2009.  
<http://www.economics.harvard.edu/faculty/rogooff/files/Aftermath.pdf>
- <sup>5</sup> Japanese Loan Assets provided by the Bank of Japan, Financial Institutions Accounts series.  
[http://www.boj.or.jp/en/theme/research/stat/asli\\_fi/index.htm](http://www.boj.or.jp/en/theme/research/stat/asli_fi/index.htm)
- <sup>6</sup> Japanese Loan Assets provided by the Bank of Japan, Policy Interest Rates and Money Market Rates in Major Economies.  
<http://www.boj.or.jp/en/theme/research/stat/etc/index.htm>
- <sup>7</sup> Japanese Loan Assets provided by the Bank of Japan, Financial Institutions Accounts series.  
[http://www.boj.or.jp/en/theme/research/stat/asli\\_fi/index.htm](http://www.boj.or.jp/en/theme/research/stat/asli_fi/index.htm)
- <sup>8</sup> Japanese Loan Assets provided by the Bank of Japan, Financial Institutions Accounts series.  
[http://www.boj.or.jp/en/theme/research/stat/asli\\_fi/index.htm](http://www.boj.or.jp/en/theme/research/stat/asli_fi/index.htm)
- <sup>9</sup> Japanese Loan Assets provided by the Bank of Japan, Financial Institutions Accounts series.  
[http://www.boj.or.jp/en/theme/research/stat/asli\\_fi/index.htm](http://www.boj.or.jp/en/theme/research/stat/asli_fi/index.htm)
- <sup>10</sup> Japanese GDE Expenditures provided by the Cabinet Office of the Prime Minister, SNA Statistics.  
<http://www.esri.cao.go.jp/en/sna/qe052-2/gdemenuabr.html>
- <sup>11</sup> Japanese GDE Expenditures provided by the Cabinet Office of the Prime Minister, SNA Statistics.  
<http://www.esri.cao.go.jp/en/sna/qe052-2/gdemenuabr.html>
- <sup>12</sup> Employment data provided by the Statistics Bureau, Ministry of Internal Affairs and Communications, Japan.  
<http://www.stat.go.jp/english/data/roudou/Ingindex.htm>
- <sup>13</sup> Foreign Exchange data provided by the Board of Governors of the Federal Reserve System, Release H10.  
<http://www.federalreserve.gov/releases/h10/Hist>
- <sup>14</sup> “Japanese Deficit to Grow Sharply”, Andrew Pollack. The New York Times, February 20, 1995.  
<http://query.nytimes.com/gst/fullpage.html?res=990CEEDE143DF933A15751C0A963958260&sec=&spoon=&pagewanted=all>
- <sup>15</sup> Japanese GDE Expenditures provided by the Cabinet Office of the Prime Minister, SNA Statistics.  
<http://www.esri.cao.go.jp/en/sna/qe052-2/gdemenuabr.html>
- <sup>16</sup> “Germany Risks Japanese-style Lost Decade”, Anatole Kaletsky. The Times via TimesOnline, November 14, 2005.  
<http://business.timesonline.co.uk/tol/business/economics/article590062.ece>
- <sup>17</sup> Statement by the Governor. The Bank of Japan, November 3, 1997.  
<http://www.boj.or.jp/en/type/press/danwa/dan9711a.htm>
- <sup>18</sup> “Aggressive Action Contrasts with Japan”, Oxford Analytica. International Herald Tribune, New York Times Online, September 26, 2008.  
<http://www.iht.com/articles/2008/09/26/news/26oxan-Japan-.php>
- <sup>19</sup> “Financial Assistances Under Blanket Guarantee System”, News Release 87-2002. Deposit Insurance Corporation of Japan, March 6, 2003.  
[http://www.dic.go.jp/english/e\\_new/2003/2003.3.26a.pdf](http://www.dic.go.jp/english/e_new/2003/2003.3.26a.pdf)
- <sup>20</sup> Japanese Loan Assets provided by the Bank of Japan, Financial Institutions Accounts series.



[http://www.boj.or.jp/en/theme/research/stat/asli\\_fi/index.htm](http://www.boj.or.jp/en/theme/research/stat/asli_fi/index.htm)

<sup>21</sup> “An Analysis: Quantitative Easing Policy Was Effective in Buoying the Japanese Economy”, Nariyasu Yamasawa. Japan Center for Economic Research, August 24, 2006.

<http://www.jcer.or.jp/eng/pdf/kenho2e.pdf>

<sup>22</sup> Japanese Loan Assets provided by the Bank of Japan, Financial Institutions Accounts series.

[http://www.boj.or.jp/en/theme/research/stat/asli\\_fi/index.htm](http://www.boj.or.jp/en/theme/research/stat/asli_fi/index.htm)

<sup>23</sup> Commercial Paper Statistics provided by the Board of Governors of the Federal Reserve System, Release CP.

<http://www.federalreserve.gov/releases/cp/>

<sup>24</sup> “Concepts and Definitions”, Labor Force Survey of the Statistics Bureau of the Ministry of Internal Affairs and Communication, Japan.

<http://www.stat.go.jp/english/data/roudou/pdf/2.pdf>

<sup>25</sup> “Tokyo May be Getting the Message: Just Pull the Plug”, Thornton, Moffet, et al. BusinessWeek via BWonline, December 1, 1997.

<http://www.businessweek.com/archives/1997/b3555088.arc.htm>

<sup>26</sup> All regression variables from The Federal Reserve, The Bureau of Economic Analysis and the Bureau of Labor Statistics.

<sup>27</sup> Corporate Profit statistics provided by The Bureau of Economic Analysis, US Department of Commerce.

<http://www.bea.gov/national/index.htm#corporate>

<sup>28</sup> Employment statistics provided by The Bureau of Labor Statistics, US Department of Labor.

<http://www.bls.gov/ces/home.htm>

<sup>29</sup> Corporate Profit statistics provided by The Bureau of Economic Analysis, US Department of Commerce.

<http://www.bea.gov/national/index.htm#corporate>

<sup>30</sup> Factors Affecting Reserve Balances provided by the Board of Governors of the Federal Reserve System, Release H.4.1.

<http://www.federalreserve.gov/releases/h41/>

<sup>31</sup> “Auction-Bond Failures Roil Munis, Pushing Rates Up”, Martin Z. Braun. Bloomberg.com, February 13, 2008.

<http://www.bloomberg.com/apps/news?pid=20601087&sid=aVE0T47ZqK5c&refer=home>

<sup>32</sup> “Search For a Scapegoat Finds Greenspan”, Irwin Stelzer. TimesOnline, August 5, 2007.

<http://business.timesonline.co.uk/tol/business/columnists/article2198062.ece>

<sup>33</sup> “Red Flags in Bear Stearns’ Collapse”, Waggoner & Lynch. USA Today, March 19, 2008.

[http://www.usatoday.com/money/industries/banking/2008-03-17-bear-stearns-bailout\\_N.htm](http://www.usatoday.com/money/industries/banking/2008-03-17-bear-stearns-bailout_N.htm)

<sup>34</sup> “Why This Superfund is Bad News”, Jeremy Batstone-Carr. MoneyWeek.com, October 22, 2007.

<http://www.moneyweek.com/news-and-charts/economics/why-this-super-fund-is-bad-news.aspx>

<sup>35</sup> Factors Affecting Reserve Balances provided by the Board of Governors of the Federal Reserve System, Release H.4.1.

<http://www.federalreserve.gov/releases/h41/>

<sup>36</sup> “Lehman Files for Bankruptcy; Merrill is Sold”, Andrew Ross Sorkin. The New York Times, September 14, 2008.

<http://www.nytimes.com/2008/09/15/business/15lehman.html?pagewanted=all>

<sup>37</sup> “U.S. to Take Over AIG in \$85 Billion Bailout; Central Banks Inject Cash as Credit Dries Up”, Karnitshnig, Solomon, Plevin and Hilsenrath. The Wall Street Journal, September 16, 2008.

<http://online.wsj.com/article/SB122156561931242905.html>

<sup>38</sup> “WaMu Is Seized, Sold Off to J.P. Morgan, In Largest Failure in U.S. Banking History”, Sidel, Enrich and Fitzpatrick. The Wall Street Journal, September 26, 2008.

[http://online.wsj.com/article/SB122238415586576687.html?mod=special\\_page\\_campaign2008\\_mostpop](http://online.wsj.com/article/SB122238415586576687.html?mod=special_page_campaign2008_mostpop)

<sup>39</sup> “Loads of Money”, The Economist Print Edition. The Economist.com, December 23, 1999.

[http://www.economist.com/displaystory.cfm?story\\_id=347363](http://www.economist.com/displaystory.cfm?story_id=347363)

<sup>40</sup> “Monetary Policy in the Confederacy”, Eric Nielsen. Economic History, The Federal Reserve Bank of Richmond, Fall 2005.

[http://www.richmondfed.org/publications/research/region\\_focus/2005/fall/pdf/economic\\_history.pdf](http://www.richmondfed.org/publications/research/region_focus/2005/fall/pdf/economic_history.pdf)

<sup>41</sup> “Obama Increases Jobs Goal to 3 Million”, Associated Press. USA Today, December 20, 2008.

[http://www.usatoday.com/news/washington/2008-12-20-obama-jobs\\_N.htm](http://www.usatoday.com/news/washington/2008-12-20-obama-jobs_N.htm)



<sup>42</sup> “Obama Warns of Prospect for Trillion-Dollar Deficits”, Jeff Zeleny and Edmund Andrews. The New York Times, January 6, 2009.

<http://www.nytimes.com/2009/01/07/us/politics/07obama.html>

<sup>43</sup> Burton Folsom, Jr., *New Deal or Raw Deal?* (New York: Simon & Schuster, 2008), p. 2.

<sup>44</sup> GDP & Component statistics provided by the Bureau of Economic Analysis, US Department of Commerce.

<http://www.bea.gov/national/index.htm#corporate>

<sup>45</sup> “IMF Criticizes the UK’s VAT Tax Cut”. BBC News, December 23, 2008.

<http://news.bbc.co.uk/2/hi/business/7797478.stm>

<sup>46</sup> Gold & Commodity Prices provided by [www.thefinancials.com](http://www.thefinancials.com).

<http://b2b.thefinancials.com/>

<sup>47</sup> Stock Market Update, Briefing.com, December 5, 2008.

[http://www.briefing.com/GeneralContent/Investor/Active/ArchiveSearch/ArchiveSearchInvestor.aspx?PageName=Stock Market Update&Date=Dec-5-2008](http://www.briefing.com/GeneralContent/Investor/Active/ArchiveSearch/ArchiveSearchInvestor.aspx?PageName=Stock%20Market%20Update&Date=Dec-5-2008)

<sup>48</sup> Interest Rate data provided by the Board of Governors of the Federal Reserve System, Release H.15.

<http://www.federalreserve.gov/releases/h15/update/>

<sup>49</sup> Money Market Fund data provided by the Board of Governors of the Federal Reserve System, Release H.6.

<http://www.federalreserve.gov/releases/h6/>

Atlantic Capital Management of Florida, Inc., is an SEC registered investment advisor. Atlantic Capital's Form ADV, Parts I & II, are available upon request or online at [www.adviserinfo.sec.gov](http://www.adviserinfo.sec.gov). Atlantic Capital's Disclosure Statement is also available upon request. All research and analysis is done by ACM staff. All Special Research Reports are for educational purposes ONLY. These reports do not take into account specific investment criteria of individual clients. All opinions expressed are current opinions as of the date indicated on the reports and may be changed without notice. Information obtained from various sources is believed to be reliable but ACM makes no guarantee of the accuracy or completeness of such information. No investment recommendations are given or implied. Past performance is no guarantee of future results.

© 2009 Atlantic Capital Management.



**ATLANTIC CAPITAL MANAGEMENT**

580 VILLAGE BLVD, SUITE 315

WEST PALM BEACH, FL 33409

(561) 686-6844

[www.acminstitutional.com](http://www.acminstitutional.com)