

## ABSTRACT

Peyton Morris Ethridge

What is the best way to define a recession, including when it started, and how does the country repair the situation?

(Under the Direction of Dr. Harrison Hartman)

I discuss the two distinct approaches one might use in defining an economic recession based on different key economic factors. The paper will also look at the historical data of the United States during the early 2000s recession, and discuss the similarities and differences of economic factors that were seen. It argues that the United States is indeed in a recession based on both definitions. However, one method is indeed superior to the other when one is identifying the timing of the current recession. I will compare and contrast the levels of economic factors, which are used in defining a recession, between the two methods. These factors will include unemployment levels, interest rates, output, lending habits of the banking system, GNI, and the quarterly growth of GDP. Further, the paper will convey the effects of a recession on the financial markets, most importantly those of the stock market. Finally, it will show the attempts of the Federal Reserve to reverse the recent events through monetary policy, and demonstrate the acts of reversal of the government through fiscal policy. It will disclose that the U.S. government must correct the credit and financial markets before it can amend unemployment, housing crisis, and output through production, among other things.

INDEX WORDS: Economic factors, Recession, Monetary policy, Fiscal policy, Stock Markets, Unemployment rates, Commercial Banks, Real GDP

WHAT IS THE BEST WAY TO DEFINE A RECESSION AND HOW DOES THE COUNTRY  
REPAIR THE SITUATION?

by

Peyton Morris Ethridge

A Thesis Submitted to the Honors Council of the University of Georgia in Partial Fulfillment of  
the Requirement for the Degree

BACHELOR OF BUSINESS ADMINISTRATION

in ECONOMICS

with HIGHEST HONORS

Athens, Georgia

2009

WHAT IS THE BEST WAY TO DEFINE A RECESSION, AND HOW DOES THE  
COUNTRY REPAIR THE SITUATION?

by

PEYTON MORRIS ETHRIDGE

Approved:

Dr. Harrison Hartman  
Faculty Research Mentor

Date: May 5<sup>th</sup>, 2009

Approved:

Dr. David Robinson  
Reader

Date: May 1<sup>st</sup>, 2009

Approved:

Dr. David S. Williams  
Director, Honors Program, Foundation Fellows and  
Center for Undergraduate Research Opportunities

Date: May 8<sup>th</sup>, 2009

Approved:

Dr. Pamela Kleiber  
Associate Director, Honors Program and  
Center for Undergraduate Research Opportunities

Date: May 8<sup>th</sup>, 2009

## TABLE OF CONTENTS

	Page
LIST OF FIGURES.....	iv
CHAPTERS	
1 INTRODUCTION.....	1
2 HOW AND WHEN DID THE ECONOMIC CRISIS START?.....	4
3 WHAT IS THE BEST WAY TO DEFINE A RECESSION?.....	11
4 FINANCIAL MARKETS AS A BY PRODUCT OF THE RECESSION.....	22
5 HOW DO WE REPAIR THE CURRENT ECONOMIC CRISIS?.....	25
WORKS CITED .....	32

## LIST OF FIGURES

	Page
Figure 3.1: Unemployment Rates.....	14
Figure 3.2: Comparison of GDP Among Relevant Countries.....	16
Figure 5.1: The GDP Gap Without a Stimulus.....	30
Figure 5.2: The Unemployment Rate Without a Stimulus.....	31

## CHAPTER 1 INTRODUCTION

The economy of the United States has been essentially strong throughout its history. Nonetheless, several times, the citizens have witnessed economic downturns and even failures. The majority of people today recognize the Great Depression as the worst economic situation in our history. Not only has the United States seen a depression, but there have been numerous recessions as well, the most recent of which we are experiencing at present.

It is well-documented that the United States is in an economic recession. However, much debate has been over the exact start of the recent economic troubles. Furthermore, one needs to address just how the United States got itself into the current crisis. When deciding whether the United States is in a recession, one can use fundamentally two methods in determining the onset: the National Bureau of Economic Research, NBER method, and the traditional method of back-to-back quarters of negative growth in real Gross Domestic Product. Each method has its positives and negatives; however, the beginning of the current recession can be best described and determined by the National Bureau of Economic Research's (NBER) definition.

Another key element in today's economic crisis is the side effects caused by the recession, most importantly the financial markets, including the stock market. Several of the policies and packages will be executed to solve the financial markets (stock markets) and the credit markets of the current situation. If we resolve the financial and credit markets, the economy can turn around more quickly than if nothing was enabled at all. The paramount side

effects are the ever-falling stock market, the stagnant credit lines, job losses, and the lower standard of living for millions of United States citizens. One could even say that primary home losses are a side effect, but one would probably suggest that home foreclosures are a cause of the crisis. Which policies should the federal government implement, and should they be directed first at the financial side of the crisis or at the economic side?

The current recession involves many key sectors in the economy both domestic and abroad. According to several economists, the current recession, globally, is the worst ever witnessed. Thus, the Obama Administration must try to correct, or at least speed up, the current economic recession. The federal government, including the Federal Reserve, the Treasury, and the current presidential administration, along with essential economic individuals, must correct the current economic crisis. Two main policies which have and/or will be implemented are monetary and fiscal policy, each of which will have many subsectors. The implementation of certain fiscal and monetary policy will be determined by past recessions both domestically and globally. The last statement means that the federal government will look at past recessions, both in the United States and elsewhere, to determine what policies have worked and which have failed. The current administration and federal government agencies have proposed and will continue to propose policies that have worked in previous economic down swings. Not only will the economic advisory board to the President and the Federal Reserve, Fed, look at the policies used in previous recessions in the United States, but they will certainly survey economic policy disasters, such as Japan for most of the 1990's. Fiscal and monetary policy will be needed to restore regularity more quick than if nothing was implemented. Nonetheless, some policies to resolve the crisis are better suited than others. It will take time in order to determine which

policies and stimulus packages have worked and which ones have not. However, the government can use past policy disasters, like those implemented in Japan in the 1990's, and past recession successes to determine the best policies.

I will discuss the present recession from the time economists think it began to the current data that are available, April 2009. A key point will be how and why the current crisis began, as well as the fiscal and monetary policies needed to quicken and lessen the impact a long-term recession might have. It is not enough to discuss how the current recession began, but exactly when it began. The timing of the current recession is key to understanding the correct policies needed and where to apply the policies, whether it be to the financial markets or economic side of the current crisis, which include unemployment rates, inflation, interest rates, etc. Thus, the bodies implementing policies and stimulus packages must identify the realm to amend first. While there are two predominant methods to identifying a recession; as well as, several packages and policies to amend the problems, the best way to identify a recession is the National Bureau of Economic Research definition while utilizing fiscal and monetary policy, with respect to Japan's 1990's recession, to correct the financial and credit markets before we can rectify the economic factors associated with a recession.



## CHAPTER 2 HOW AND WHEN DID THE ECONOMIC CRISIS START?

A recession is a contraction phase of the business cycle. The National Bureau of Economic Research (NBER) describes it as a "significant decline in economic spending spread across the country, lasting more than a couple months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales" (<http://www.nber.org>). But can we determine the causes of economic recession?

This is an age of expertise. Humanity has never been better educated, more technologically equipped, better connected — seemingly more informed — and yet since late last year, it's found itself being sucked into an economic vortex. How did we get here? Trying to figure that out will keep historians and other social scientists in work for years to come.

Surely the most disturbing aspect of the economic downturn is the way in which it has simply arrived, like an unwanted guest. One moment we're borrowing and spending, the sky is blue, things are going well, the next, it's doom and gloom, America's car makers — the biggest household names you can think of — are on the verge of going out of business, banks are teetering, investment houses are falling over and the Western world is in danger of being crushed by its debt.

During the week of March 11, 2009, parts of the American media were fascinated by a televised confrontation between the satirist Jon Stewart and a former hedge fund manager turned

financial talk-show host Jim Cramer. Stewart attacked Cramer and his cable network CNBC for promoting America's financial sector, talking up the market when it should have been skeptical, and for failing to hold the leading figures of the investment community to account. Essentially, Stewart's point was: "Why didn't you know something was amiss? Aren't you there to tell us, to warn us?" ( [thedailyshow.com](http://thedailyshow.com), p. 1). Thus, the main question on every taxpayer's mind is, how did the US economy turn to a multi-year recession?

Even before the stock market reached its high of over 14,000 in October 2007, there was a crisis brewing in the U.S. housing market. Housing prices had already started to decline, but housing prices had been at historic highs for several years. Banks had been making loans to individuals without the usual 20% down payment that had been traditionally required. They were also charging a higher interest rate for these loans to make up for the increased risk. The loans were often adjustable rate mortgage loans (ARM). This type of mortgage loan does not have a fixed interest rate. Instead, the interest rate changes as market interest rates change.

Bush and Clinton seemed to agree that the credit practices of Fannie Mae and Freddie Mac were bound to create problems that could not be overcome easily. The discussion I was listening to about this issue assumed that both Bush and Clinton were "unable" to fix this problem, although both spoke about it regularly. In the early 1990's, the role of Fannie Mae and Freddie Mac was changed from helping the underprivileged to buy a home, to guaranteeing banks that wrote loans to anyone and everyone who wanted to buy a home.

Fannie Mae and Freddie Mac began buying loans from banks, packaging those loans, and selling them to investors, known as securitized loans. Since bank interest rates were so low,

banks and mortgage brokers soon realized that they could not make their money collecting interest. So, they began the transition to selling loans to consumers based on closing costs. So long as the consumer could meet and pay for the required closing costs, then the bank could write a loan to the consumer. If that loan to the consumer was for a home, then the bank could sell those loans to Fannie Mae and Freddie Mac, which would then package a group of loans to sell to investors.

Since banks were selling loans only for the closing costs and selling the loans to a third-party investor, banks stopped looking at whether an individual could afford the loans being given to the consumer. If I can only afford \$900 per month on my mortgage, what makes anyone believe that I can repay a mortgage worth \$1200 per month? Within the system as it was constructed, the bank could not care less if I could afford to pay \$1200 per month. It only cared that it could sell me the loan, get its closing costs, and then pass the liability of my problem loan to a third-party investor. The third-party investor, Freddie Mac or Fannie Mae, would own the loans, and did care if they could get a high price for the property. A high price meant they could recover their money and interest if the homeowner went into bankruptcy. Because the bank had no financial interest in my ability to repay the loan, it did not concern themselves with writing loans that could not be afforded by consumers.

The supply of houses is simply too great and overpriced (but falling). All this stems from monetary policy, fundamentally set by the Fed, that made credit so cheap. Cheap money (money as debt) is a breeding ground for malinvestment. Cheap money leads to bad investment, only if the lenders loan to risky individuals. Since banks had low interest rates, they could lend out

money to more risky individuals. The Fed, concerned about global sell-off in the world's markets, in January 2008, due to global investors panicking about a US recession, dropped rates by a very bold 75 basis points just before US markets opened after the Martin Luther King holiday of 2008. If the Fed doesn't keep lowering rates, liquidity in the economy freezes. If they do, it inevitably builds new bubbles and causes inflation (inflation, by the way, has been kept somewhat in check by importing cheap goods from abroad). That too will change. Nonetheless, the Fed keep interest rates low during 2008, so the nation would remain out of an economic recession. By having low interest rates, the money supply could expand, and a low interest rate would help those who held ARMs. George Soros remarked, "The current crisis is not only the bust that follows the housing boom, it's basically the end of a 60-year period of continuing credit expansion based on the dollar as the reserve currency" (Evans and Kennedy, 2008, p. 1).

Existing home sales fell in December 2007, falling by the largest amount in about 25 years. The median home price dropped for the entire year, a first in four decades. The bad news about a rotting housing market just keeps getting worse. According to Bob Willis of Bloomberg, "The median price of a new home decreased 9.3 percent from January 2008 to January 2009 to \$206,500, the lowest in five years. Sales of new homes were down 45 percent from December 2007. For the full year of 2008, sales fell a record 38 percent to 482,000, the fewest since 1982. The median price for all of 2008 fell 7 percent, the most since 1970, to \$230,600" (2009, p. 1).

Thus, with mortgages far too easy to purchase and very little scrutiny, bad mortgages ran rampant, leading to the real estate bubble. Consumers who took advantage of a mortgage they could not repay contributed to our problem. "Flippers" used shaky data to arrange credit for

sight-unseen real estate with the intent to sell before the first payment was ever made. Risky mortgages were bundled into securities and sold on Wall Street. Big funds, frenzied for a higher rate of return, ignored the risks. All resulted in a “perfect storm.” This was followed up by lack of oversight by the Federal Reserve.

When the real estate bubble began to pop in remote areas of the country and banks started to realize that home foreclosures were on the rise, banks reacted by stopping consumer loans for big-ticket purchases, such as homes, cars, furniture and electronics. The economy began to contract, as consumers could no longer drive the economy unimpeded. It took business a little while to notice the contraction of business. Most assumed the contraction in sales was more related to the price of gasoline, without noticing that the problems ran deeper than that. Most business managers assumed that once the price of gasoline dropped back to its historical threshold, all would recover. But gasoline prices only masked the real problem---the lack of consumer credit.

Hence, the credit market, including the vital credit line of our nation, collapsed due to commercial banks' horrific lending habits. I would say the current recession could have been prevented in large part, if housing prices had not declined. In this way, banks could take over a foreclosed house as collateral. Thus, a house which has risen in value will not hurt the banks if one forecloses.

Over the last couple years, many consumers were burned badly by the state of the economy and the failing of many of the banks people have relied upon for generations. According to Mattioli, at the beginning of 2007, the United States had five investment banks,

through which a lot of investment transactions occurred. By the end of 2008, there were zero investment banks in the United States. The investment banks that did not fail outright, changed their charters to commercial banks, thereby eliminating all investment banks in the U.S. by the end of (2008, p. 1).

Where people got hurt the worst in the recent economic meltdown was when banks stopped loaning money to consumers and businesses. Banker fears turned our economy on its ear, erasing positive growth and replacing it with recession. Bankers started to question the viability of their competitors and stopped loaning money to them. Suddenly, when major banking institutions could no longer get money to loan to their own clients, banks began to turn off the business credit and consumer credit tap. Many knew the state of the economy was uprooted when General Electric could no longer receive loans to float their production cycles. We also knew that the situation was getting bad when banks started freezing credit lines to the automakers. And when California could not get loans to carry the state through the course of a single economic year, we knew it was ready to hit the fan. “Gov. Arnold Schwarzenegger, a Republican, said at a news conference on Friday that the state 'is not out of the woods yet' and in a few weeks could run out of cash to pay for basic services” (Archibold, 2008, p. 1).

When consumers could no longer get loans for major purchases, the economy began to contract significantly, as manufacturers could no longer sell products already in inventory. As major manufacturers begin to fall by the wayside, the ripple effects hurt hundreds of other businesses, employing thousands. For every automaker that falls, companies that produce tires,

car seats, carpet, radios, and automotive parts will also have to lay off people. The automaker is the easiest example to show the ripple effects of a crumbling economy.

As consumers became unable to get loans for the things they desired to purchase, manufacturers and retailers began to struggle under slowing sales, which further complicated the issue, because banks began to realize that their business clients were having a harder time paying back business loans. When the automakers' customers cannot get consumer loans and the automakers cannot get loans to keep them afloat during this economic downturn, the automakers are forced to lay off people. Along with the automakers laying off people, parts suppliers and dealerships also have to lay off people.

When consumers cannot borrow money to buy consumer goods, this slows sales at major manufacturers and major retailers. Slowed sales lead to more layoffs and fewer jobs. Slowed sales also lead to lower stock prices and fewer stock dividends, referred to as the financial side of the problem. Is there a light at the end of the tunnel? Certainly there is, although it is a bit hard to see right now. Every down cycle in an economy ends with an up cycle. It is just that we have yet to discern a bottom in this economic downturn, so it is hard to predict when recovery will come. I am an optimist by nature. I see good days ahead, although those good days will necessarily be preceded by some pain.

### CHAPTER 3 WHAT IS THE BEST WAY TO DEFINE A RECESSION?

The common textbook definition of a recession is two consecutive quarters of negative real GDP growth. Technically, that's correct; however, the National Bureau of Economic Research's definition should be the method of identifying a recession. For example, at the beginning of this decade, we never had two straight quarters of falling GDP. Three out of five were negative, yet it certainly felt like a recession. The National Bureau of Economic Research is the widely-regarded outfit in charge of dating business cycles. While they regard quarterly GDP as "the single best measure of aggregate economic activity," NBER prefers to use monthly numbers to pinpoint the precise beginning and ending of business cycles. One must compare and contrast the two dominant methods for defining a national recession in order to clearly see the best approach.

According to Sean O'Grady, "The world's stock markets suffered another round of declines this month as the body regarded as the arbiter of US recessions said the American economy's 73-month economic expansion ended in December 2007" (2008, p. 1). The news came as surveys of business confidence across continents displayed further catastrophic declines. Nonetheless, the textbook definition of back-to-back quarters of negative real GDP growth did not occur until the third and fourth quarter of 2008, despite many media outlets declaring the United States in a recession at the beginning of 2008.



The US economy decreased at an annualized rate of 0.5 per cent in the third quarter of 2008, having grown by an annualized 2.8 per cent in the second quarter. Furthermore, the Bureau of Economic Research released fourth quarter statistics on March 27, 2009, stating that real GDP decreased at a annualized rate of 6.3% ([www.bea.gov](http://www.bea.gov)). This does qualify as a recession according to the common definition of two successive quarters of negative growth. The US National Bureau of Economic Research's business cycle dating committee employs a much more flexible definition of recession, as "a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in production, employment, real income, and other indicators. A recession begins when the economy reaches a peak of activity" (O'Grady, 2008, p. 1).

On the first of December 2008 the National Bureau of Economic Research (NBER) announced that according to their methodology the United States economy was in a recession and had been since December 2007. The media immediately ballyhooed this announcement as "It's now official! We're in a recession!" The media did not reveal that the NBER's concept of a recession is different from the standard definition of a recession as a period in which gross domestic product has declined in real (inflation-adjusted and seasonally-adjusted) terms for two quarters in a row, since at that time the real GDP had declined for only one quarter. According to the preliminary estimates from the Bureau of Economic Analysis, there was no basis for the declaration of a standard definition recession which refers to output. But should the NBER's definition be the standard?

There has been a nasty outbreak of the word “recession”. Newspapers are full of stories about which of the big economies will be first to dip into recession as a result of the credit crunch. The answer depends largely on what you mean by “recession”. Most economists assume that it implies a fall in real GDP. But this has created a lot of confusion: the standard definition of recession needs rethinking. In the second quarter of this year, America’s GDP rose at a surprisingly robust annualized rate of 2.8%, while output in the euro area and Japan fell, and Britain’s was flat. Many economists reckon that both Japan and the euro area could see a second consecutive quarter of decline in the third quarter of 2008, while the United States would only have one quarter of negative real GDP growth. This, according to a widely used rule of thumb, would put Japan and the euro area in recession, a fate which America would so far have avoided. But on measures other than GDP, America has been the economic laggard over the past year. A key point is contrived. By strictly looking at unemployment rates over the past 18 months, one can clearly see that the economy of the United States has been in a recession for longer than the end of 2008. According to the Bureau of Labor Statistics, the unemployment rate for November 2007 was 4.7%. By August 2008, the rate had reached a level of 6.2% until it catapulted to 7.2% by the end of 2008 (Bureau of Labor Statistics). Glancing at the statistics, one can clearly evaluate that the United States was in a recession long before December 2008, when the nation finally reached back-to-back quarters of negative real GDP growth. The graph below shows the unemployment rate, which is currently at 8.5%, since 1999.

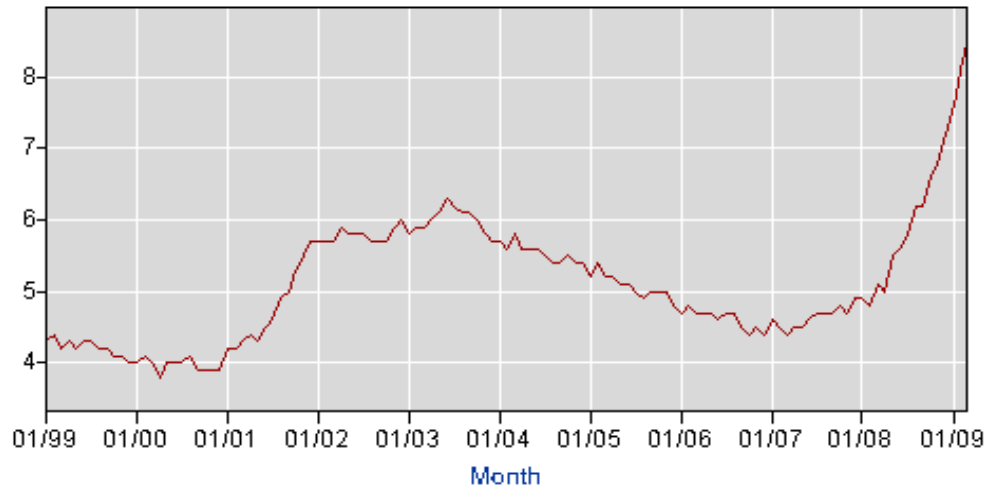


Figure 3.1 Unemployment Rates  
 Source: Bureau of Labor Statistics 2009

The National Bureau of Economic Research uses special guidelines in determining a recession:

The committee places particular emphasis on two monthly measures of activity across the entire economy: (1) personal income less transfer payments, in real terms and (2) employment. In addition, the committee refers to two indicators with coverage primarily of manufacturing and goods: (3) industrial production and (4) the volume of sales of the manufacturing and wholesale-retail sectors adjusted for price changes. The committee also looks at monthly estimates of real GDP such as those prepared by Macroeconomic Advisors. Although these indicators are the most important measures considered by the NBER in developing its business cycle chronology, there is no fixed rule about which other measures contribute information to the process. ([www.nber.org](http://www.nber.org))

One drastic statistic, clear from monthly indicators, was that manufacturing in the US contracted in November 2008 at the fastest pace in 26 years, putting American factories at the sharp end of a global industrial slump, according to the Arizona-based Institute for Supply Management's factory index. At 36.2, the reading is at its lowest level since 1982. A reading of 50 is the dividing line between expansion and contraction. Similar measures from China, the UK, the euro area, and Russia also all dropped to record lows ([www.bea.gov](http://www.bea.gov)). Undoubtedly, surveying monthly data can help determine the start of a recession precisely and more efficiently than strictly waiting for back-to-back quarters of negative growth.

The chart looks at several different ways to judge the severity of the economic slowdown since the start of the credit crunch in August 2007. “On GDP growth, America has outperformed Europe and Japan. Other countries have so far published figures only for July, but their jobless rates have barely moved over the past year: Japan’s has risen by only 0.2%, the euro area’s has fallen slightly (though in absolute terms it is still a bit higher than America’s)” (Redefining Recession, p.1) Another yardstick, GDP per head, takes account of the fact that America’s population is rising rapidly, whereas Japan’s has started to shrink. Even though the United States' GDP has risen since 2007, it has seen the lowest increase per capita than any other major country. Japan's GDP has not grown like the United States due to the fact there population is decreasing. “Since the third quarter of 2007 America’s average income per person has barely increased; Japan’s has enjoyed the biggest gain” (Redefining Recession, p. 1).

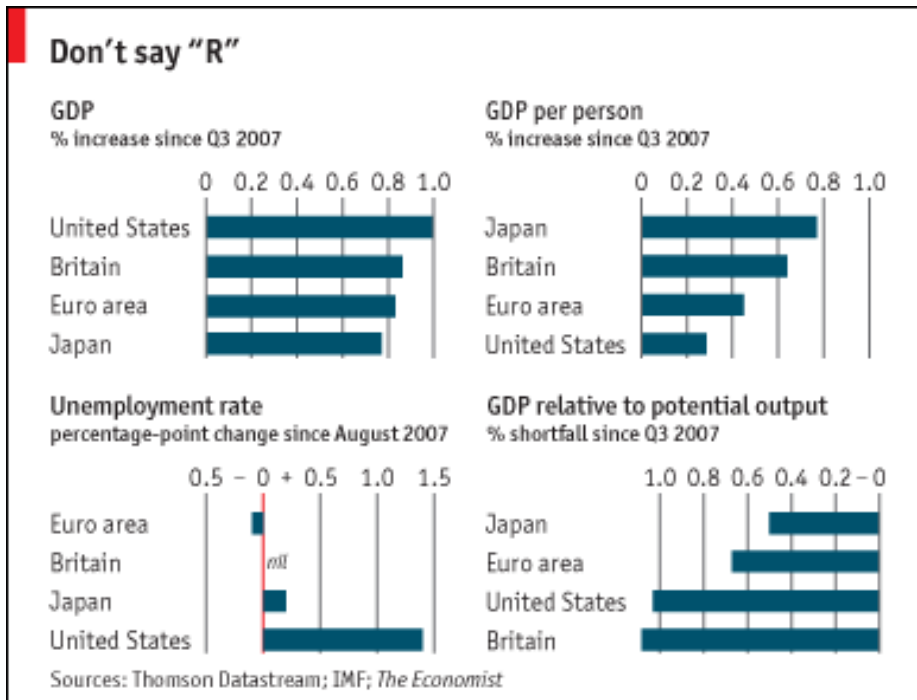


Figure 3.2 Comparison of GDP Among Relevant Countries  
 Source: "Redefining Recession" (2008, p. 1)

To the average person, a large rise in unemployment means a recession. By contrast, the economists' rule that a recession is defined by two consecutive quarters of falling GDP is silly. If an economy grows by 2% in one quarter and then contracts by 0.5% in each of the next two quarters, it is deemed to be in recession. But if GDP contracts by 2% in one quarter, rises by 0.5% in the next, then falls by 2% in the third, it escapes, even though the economy is obviously weaker. In fact, America's GDP did not decline for two consecutive quarters during the 2001 recession (www.bea.gov).

However, it is not just the "two-quarter" rule that is flawed; GDP figures themselves can be misleading. The first problem is that they are subject to large revisions. An analysis by Kevin Daly, an economist at Goldman Sachs, finds that "since 1999, America's quarterly GDP growth

has on average been revised down by an annualized 0.4 percentage points between the first and final estimates. In contrast, figures in the euro area and Britain have been revised up by an average of 0.5 percentage points. Indeed, there is good reason to believe that America's recent growth will be revised down. An alternative measure, gross domestic income (GDI), should, in theory, be identical to GDP. Yet real GDI has risen by a mere 0.1% since the third quarter of 2007, well below the 1% gain in GDP. A study by economists at the Federal Reserve found that "GDI is often more reliable than GDP in spotting the start of a recession" (Redefining Recession, p. 1).

The NBER approach is retrospective. They wait until sufficient data are available to avoid the need for major revisions. In particular, in determining the date of a peak in activity, and thus the onset of recession, the NBER waits until they are confident that, even in the event that activity begins to rise again immediately, it has declined enough to meet the criterion of depth. As a result, the NBER waits to identify a peak until many months after it actually occurs. Nonetheless, the National Bureau of Economic Research's idea of using monthly indicators is more accurate in defining a recession than basing the decision solely on real GDP, which can be flawed. I would rather wait three months to ensure the economy is indeed in a recession and claim the nation as such, than have situations before-mentioned where the nation is certainly digressing, but never reaches consecutive quarters of negative growth. The main concern with the textbook definition is a country can have a calendar year of two quarters of negative real Gross Domestic Product; however, as long as the quarters are not consecutive the country never enters into a recession, even if the unemployment rates skyrocket and manufacturing numbers plummet.

Contrary to monthly indicators used by the NBER, the textbook definition of a recession, before-mentioned, is two consecutive quarters of negative real GDP growth. Thus, a recession is a national event, by definition. And statistical aberrations or one-time events can almost never create a recession. For example, if there were to be movement of economic activity (measured or real) around January 1, 2000, it could create the appearance of only one quarter of negative growth. For a recession to occur the real economy must decline. Therefore, a national crisis could render damage to one quarter drastically, but as long as the country's GDP grew by .0001% the next, it would not be in a recession.

The NBER has a specific general model of the economy that presumes there are internally generated cycles for the economy. It then seeks to identify peaks and troughs for the economy. The period from when the economy peaks to when it reaches a trough is the NBER notion of a recession. Likewise the period from a trough to a peak is a period of expansion. In practice the NBER cannot identify a peak when it occurs and typically waits until the economy is declining to say when the peak occurred and hence when a recession started according to their notion of a recession. Many think much in this methodology is patently absurd. The argument is that: the economy often reaches a plateau before going on to further growth. The economy could be on a plateau for some time and then experience an outside shock such as the passage of trade protection legislation in an important trading partner nation. The economy could experience a decline, but the period of the plateau might be completely unrelated to that decline, however, the NBER methodology would identify the beginning of the plateau period as the beginning of the recession. In many ways the NBER procedure is much like the procedures engaged in by the

chartist investors in the stock market. There is no reason for the NBER dating of recessions and expansions to be considered official.

This point is valid in many aspects. The National Bureau of Economic Research does base recessions on peaks and troughs; however, it waits until it has clear, precise data before declaring when a recession occurred. Of course the NBER may be slow to announce for certain the beginning of a nationwide recession, but as of December 1, 2008, the textbook definition declared the United States to not be in one at all. According to most sources, the NBER uses peaks and troughs for determining a recession, and would most assuredly use distinct judgment before lumping periods of stagnant growth in real GDP with peaks and troughs.

Further illustrating the textbook definition, in the past the NBER's dating was just some harmless pontificating. In the present malaise it may be seriously harmful. In the past, actual recession occurred because businesses decreased their investment in plant and equipment, since they did not expect to need additional capacities. In the current situation the only major components of aggregate demand and investment in the national income accounts that have been decreasing are residential housing construction and consumer purchases of motor vehicles. Business investment in plant and equipment had not been declining up to September 2008. Promoting the notion that there is an across-the-board decline in all economic sectors will discourage business investment and bring about a real decline in the economy. However, as mentioned in chapter two, the root of the problem in creating the recession was the housing bubble. Starting in September 2008 many commercial banks collapsed the credit markets. Up until September, many banks were still lending to businesses for investment, but with the credit



crunch in September 2008, investments in plant and equipment declined as well. Therefore, if the housing market, unemployment rates, and GNI (gross national income) peaked at the end of 2007, then the start of the recession should be based on indicators that lead to and prove the economic crisis rather than indicators that are merely by-products of these.

Some people believe that because NBER looks at a number of different indicators besides real GDP, the NBER assessment of the economy is superior to looking only at real GDP to define a recession. Some suggest that makes no more sense than if the NBER made pronouncements about population growth by looking not only at population censuses but at a variety of other statistics such as television sales, driver's licenses and telephone lines. If one is concerned about population, one should use the best population estimates. If there is information that could improve those estimates, then it should be included. If NBER has a better index of economic production than real GDP; then it should be published rather than mixing up notions of production and unemployment. In my opinion, the NBER approach does not just mix up notions of unemployment and production, it clearly states its indicators and uses sound judgment before declaring the start of a recession. It is evident that the United States was in a downswing way before the 4<sup>th</sup> quarter of 2008. Thus, how can a nation wait until back-to-back quarters of negative real GDP to declare, when other indicators clearly show the economy to be in a recession?

To conclude the main points from above, of the monthly indicators to which the NBER gives primary attention, the most important is jobs, more specifically payment employment (Labor Department's Bureau of Labor Statistics). It peaked in December 2007, and has been

declining ever since. Of the quarterly indicators, the most important is aggregate economic activity, more specifically, output. The Commerce Department's Bureau of Economic Analysis computes two measures of output: Gross Domestic Product (GDP) and Gross National Income (GNI). The two should be the same in theory, but differ in practice due to measurement errors. GDP receives far more public attention, in part because its advance estimate comes out first, but in fact has no claim to be a more accurate measure of output than does National Income. The statistics currently available show that GNI peaked in Quarter 3 of 2007, whereas GDP peaked in Quarter 2 of 2008. The NBER's method concludes that the peak of most indicators, whether monthly or quarterly, happened in December 2007. The only factor which did not peak in December 2007 was real GDP, which happens to be the basis for declaring a recession via back-to-back quarters.

## CHAPTER 4 FINANCIAL MARKETS AS A BY PRODUCT OF THE RECESSION

During a recession, many sides of the economy are affected including the financial markets. However, most citizens are familiar with the economic factors that affect the nation. These factors include unemployment rates, retail sales, interest rates, taxation, national debt, and money supply. Nonetheless, many will argue that in order to amend an economic recession of a nation, the government must first attack and repair the financial side of the economy. When discussing the financials, one must clearly include the aspects of the stock market.

How will the recession affect the stock market? What does the recession mean to the stock market? What will happen to the stock market because of the recession? How is the stock market impacted because of the recession? Generally speaking the recession has a strong effect on the stock market, considered the main aspect of a country's financial market. According to Michael Panzner, “In an intriguing research exercise, the chief investment strategist of Standard & Poor's, Sam Stovall, has taken a probing look at what happened to the stock market during the last 11 recessions, dating back to 1945, and offers up some telling disclosures. For starters, recessions, as you might expect, can be devastating to the stock market, with the S&P 500 in one instance — between March and November 2001 — falling more than 49%” (2007, p. 1)

In July 2007, the Dow Jones Industrial Average (DJIA) closed, for the first time, at 14,000, a record high. The Dow is composed of 30 stocks of the major corporations doing business in the United States. It is generally considered to be a barometer of the state of the stock

market and the state of the economy. By October 2007, the DJIA hit an all-time record above 14,000. During March, 2009, the DJIA closed at a 12-year low at less than half that record high.

A market that is going down is a bear market, inducing investors into an obvious panic about their retirement portfolios. Business is slow and everyone is hanging on to their money. Thus, when the stock market drops by as much as 50 percent, a clear message is conveyed: a decline in real GDP growth and recession.

The first thing one should know is a little bit about the psychology of the stock market. Two words explain what moves the market – investor expectations. When people and institutions who own stock hear good news about the economy, they buy stock because good economic news means corporations will be able to make and sell their products, and jobs will be plentiful. Buying stock means the price of the stock will go up and so will the stock market and one of its key indicators, the Dow Jones. However, when there is abominable economic news, the opposite happens. Investors in the market get spooked and sell their stock. When there are more sellers than buyers because the sellers are afraid that the corporations in which they own stock will not perform as well as they hope, then the stock market goes down.

Think of all the bad economic news we have received over the past year. It started with the subprime mortgage crisis, moved to the collapse of the Wall Street investment banks and big insurance companies like A.I.G., to massive unemployment and job layoffs. No wonder the Dow Jones has fallen so far.

As I mentioned, the stock market is an important indicator of economic health. Many more Americans now have money invested in the stock market than at any time in the past. Many business owners have funded retirement plans through purchases of stock for 401(k) retirement plans. Some small businesses have retirement plans like the SEP-IRA or the SIMPLE-IRA that they help fund for themselves and employees. The Dow Jones has dropped to half the value it had in July 2007. That means that retirement plans for owners and employees may have dropped in value by as much as 40% - 50%. According to the Fed, American consumers have lost \$11 trillion dollars in their net worth over the last one year (Kalita, 2009, p. 1). To correct the current recession, the United States government must stabilize the financial and credit markets at the outset.

## CHAPTER 5 HOW DO WE REPAIR THE CURRENT ECONOMIC RECESSION?

In the midst of all this, foreclosures of homes are rampant. Gas prices have moderated but are still high. No one could/can get credit. Home prices have declined 30%-40% but no one can sell a house, and huge inventories of houses are on the market. The American auto industry has been in trouble for a long time, and the economic crisis has made it worse. Car sales have dropped at the big three automakers by 30%-50%, and the auto industry needed and received a bailout in order to survive. We don't yet know if that bailout is going to work.

Furthermore, unemployment has risen to highs not seen in many years and job layoffs continue to plague the nation, stretching from the automobile industry to the small business. This is where we find ourselves economically. The federal government is putting a variety of plans into effect to try to stimulate the economy and repair the financial system. These plans will not work overnight. However, the first priority is to get the credit markets lending again. That is likely to be the first step that will help businesses and individuals.

While they seemed to help markets this week, short-term solutions do nothing but worsen enormous problems that have been decades in the making. In the end, increasing the money supply, economic stimulus plans, tax rebates and the like will weaken our dollar by increasing prices. Inflation combined with stagnant growth is a killer. In our modern bizarre world, making debt less expensive is the solution. Nonetheless, cheap money only solves the problem if banks lend to those who can afford the loan. If banks lend to risky investors to improve investment and

then sale the loans to third-party investors, it will only worsen the current crisis. Thus, the United States government needs to use policies which stimulate growth, not let it stagnate, by improving the credit markets and financial markets first.

In my view, policy traction will be the deciding factor shaping the timing and strength of recovery. I think that fiscal stimulus, repair of the financial system and monetary ease will help to promote positive US growth late in 2009 and sustainable recovery starting in 2010. The key to policy traction lies in breaking the credit crunch, with sequencing flowing from funding to credit markets. Traditional estimates of the effects on the economy of fiscal stimulus may overstate the impact for two reasons. As their net worth declines and looks increasingly uncertain, consumers may save much of coming tax cuts. Moreover, tight credit may limit the “multiplier” effects of spending programs. Restarting credit markets, repairing viable lenders’ balance sheets and liquidating others, and foreclosure mitigation are essential. Evidence on credit availability is mixed: Fewer banks tightened lending standards in January for the first time in three years, but small businesses report that credit is harder to get than in nearly 30 years.

I believe the United States should address the current crisis by using advice from David Laidler on Canada's crisis. Laidler suggests the government should give banks more liquidity than it wants. He states, “This will push financial institutions into becoming more aggressive lenders, as they dispose of excess cash holdings. The central bank could also enter the open market to buy assets directly from the non-bank public, furthering goal of getting liquidity into hands of households and firms” (2000, p. 1).

“In the early 1990s, the Bank of Japan made a similar mistake and failed to take advantage of the opportunities for aggressive monetary expansion provided by a fiscal stimulus program, thus helping ensure that the 1990s became a lost decade” (Laidler, 2000, pg. 1). Japan's fatal mistake, economists now mostly agree, was “regulators' refusal to confront the stockpiled bad debt and in some cases encouraging banks to hide it. Such decisions not only sickened the banks and their clients further by allowing bad debt to get worse but also inhibited those banks from making fresh loans to healthy companies” (Failo, p. 1). It seems the United States needs/has implemented fiscal packages unlike Japan in the 1990's to stimulate the economy by helping the credit and financial markets first. Japan's stock market collapse began in January 1990 and continued throughout that year. The property market followed, with a lag. “Yet the Bank of Japan did not try to prevent this financial crash from damaging the real economy by cutting interest rates, as the U.S. Federal Reserve has done spectacularly during the past several months. To the contrary, Japan's central bank used its monetary policy as if to make sure that the country's asset-price bubble had truly burst: It carried on raising interest rates until September 1990 and did not make its first cut until July 1991, 17 months after the financial crisis began” (Emmott, p. 1).

In the early 1990's, Japan's financial markets were the first to go, followed by the credit crunch. Japan's main problem was they allowed bad, zombie, banks to exist without being transparent to the problem. When Japan threw money at the ailing banks, these banks hoarded all the money. Even with zero interest rates, the government could not convince companies to borrow or invest. The main mistake by Japan was allowing ailing, bad banks to exist for as long as they did.



Over the decades since the Depression, a consensus had developed among economists that fiscal policy was an ineffective tool in combating recessions compared with monetary policy, that is, the ability of the Federal Reserve to make more money available -- thereby increasing demand -- by lowering interest rates. The stimulus passed in 2008 was held up as an example of the shortcomings of fiscal policy. It consisted primarily of tax rebates, and surveys showed that much of the extra money was saved or used to pay debts, neither of which generates direct economic activity.

But in the most dire situations, monetary policy can cease to have traction, when banks are so shocked that they are unwilling or unable to make new loans even if a central bank provides the money with no interest charges at all. The United States appeared to be in such a "liquidity trap" in the winter of 2008 and early 2009, as the credit crisis that followed Wall Street's implosion barely eased even as the Fed virtually reduced the rate to zero percent. Thus, when the nation is near a liquidity trap, then how effective are monetary and fiscal policies?

The new liquidity created must be injected into the real economy by way of financial intermediaries, such as banks. In a liquidity trap, banks are unwilling to lend, so the central bank's newly-created liquidity is trapped behind unwilling lenders. Krugman states, "In a liquidity trap, conventional monetary policy— open-market purchases of short-term government debt — has lost effectiveness, since you can not push rates below zero" (2008, p. 3). The bottom line is quite striking: aside from some qualifications, when the economy is in a liquidity trap, "Government spending should expand up until the point at which full employment is restored" (Krugman, 2008, p. 1).

The United States is trying to use monetary policies and fiscal packages to stimulate the

nation's economy. The stimulus packages need to provide money to commercial banks in order to help alleviate the credit crunch. Further, the government needs to ease the burden of the stock market. These two aspects of the recession can be executed by the stimulus packages and bailout. The stimulus package under the Obama Administration will be approximately \$790 billion dollars, with 65% going towards spending and 35% to tax cuts for 95% of Americans. This package is in addition to the \$700 billion bailout which went to try and resurrect the credit crunch by helping commercial banks receive money for loans for private investment (Simpkins, p. 1). By looking at the graphs below one can see that the U.S. government must use the bailout and stimulus packages to first help the credit markets with lending and the financial markets with the stock market, for retirement plans, and corporations. These plans can help lessen and quicken the current recession without long-term effects like those seen in Japan 1990's.

---

## The GDP Gap, 1965 to 2015

---

(Percent)

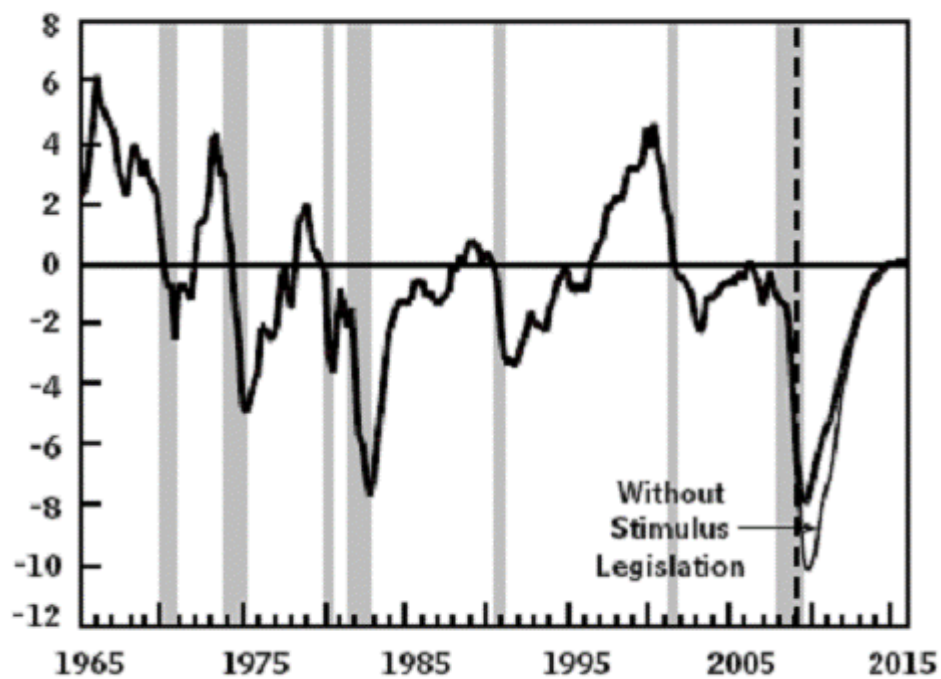


Figure 5.1 The GDP Gap Without a Stimulus

Source: EconBrowser (March 23, 2009)

---

## The Unemployment Rate

---

(Percent)

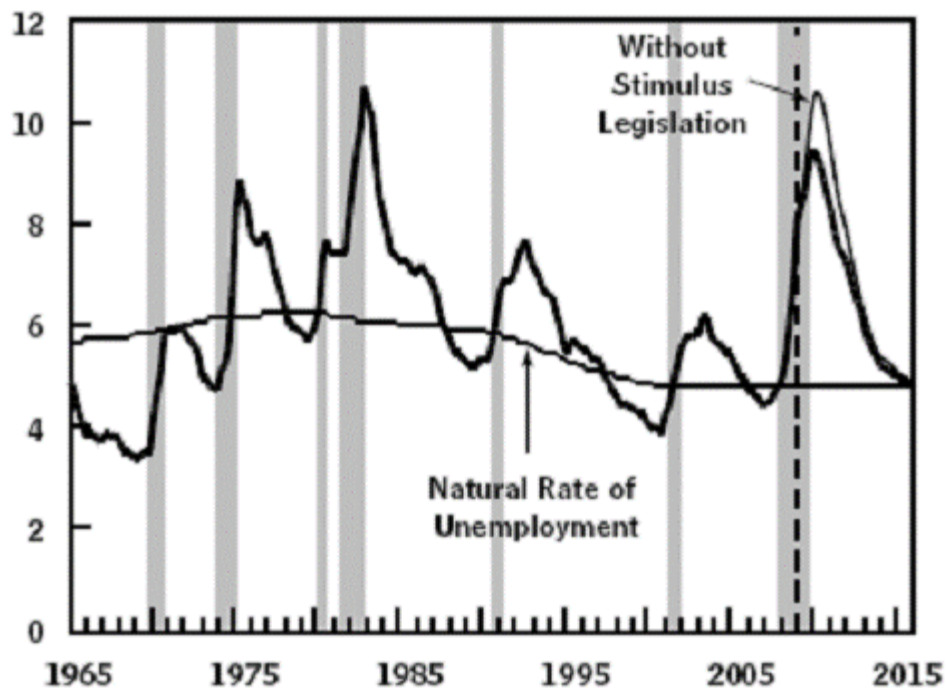


Figure 5.2 The Unemployment Rate Without a Stimulus

Source: EconBrowser (March 23, 2009)

## WORKS CITED

Archibold, Randal, "California May Ask US for Loan," The New York Times, October 3, 2008,

[http://www.nytimes.com/2008/10/04/us/04calif.html\\_r=1&partner=permalink&exprod=](http://www.nytimes.com/2008/10/04/us/04calif.html_r=1&partner=permalink&exprod=)

[permalink.](#)

Bureau of Economic Reseach, [www.bea.ovg](http://www.bea.ovg)

Bureau of Labor Statistics, [www.bls.gov](http://www.bls.gov)

EconBrowser, [http://www.econbrowser.com/archives/2009/03/the\\_stimulus\\_pa.html](http://www.econbrowser.com/archives/2009/03/the_stimulus_pa.html)

Emmott, Bill, "Learning from Japan's Economic Downturn," The San Diego Union-Tribune,

March 30, 2008, <http://www.signonsandiego.com/uniontrib/20080330/>

[news\\_mz1e30emmott.html](#)

Evans, Edward, and Kennedy, Simon, "Soros Seeks End of Dollar-Backed Credit Expansion,"

Bloomberg, January 23, 2008, <http://www.thetruthseeker.co.uk/article.asp?ID=7912>

Failo, Anthony, "What Not to Do in a Financial Crisis: U.S. Learns from Japan," The

Washington Post, September 17, 2008, <http://www.washingtonpost.com/wp->

[dyn/content/article/2008/09/16/AR2008091603199.html](#)

Laidler, David, "Next Steps for Monetary and Fiscal Policy," The Progressive Economic Forum, March 27, 2009, <http://www.progressive-economics.ca/2009/02/27/next-steps-for-monetary-and-fiscal-policy/>

Kalita, Mitra, "Americans See 18% of Wealth Vanished," The Wall Street Journal, March 13, 2009, <http://online.wsj.com/article/SB123687371369308675.html>

Krugman, Paul, "Optimal Fiscal Policy in a Liquidity Trap," The New York Times, December 29, 2008, <http://krugman.blogs.nytimes.com/2008/12/29/optimal-fiscal-policy-in-a-liquidity-trap-ultra-wonkish/>

Mattioli, Dana, "M.B.A.s Veer Off Path to Big Finance Jobs," Wall Street Journal, November 18, 2008, <http://online.wsj.com/article/SB122697125541435813.html>

National Bureau of Economic Research, [www.nber.org](http://www.nber.org)

O'Grady, Sean, "US Entered a Recession a Year Ago, Says NBER," The Independent, December 2, 2008, <http://www.independent.co.uk/news/business/news/us-entered-recession-a-year-ago-says-nber-1047335.html>

Panzner, Michael, "Does a Bad Economy Equal a Bad Stock Market?" Seeking Alpha, December 28, 2007, <http://seekingalpha.com/article/58507-does-a-bad-economy-equal-a-bad-stock-market>

“Redefining Recession,” The Economist, September 11, 2008,

[http://www.economist.com/finance/economicsfocus/PrinterFriendly.cfm?  
story\\_id=12207987](http://www.economist.com/finance/economicsfocus/PrinterFriendly.cfm?story_id=12207987)

Simpkins, Jason, “Obama Unveils Economic Team, Plans 2009 Stimulus Package,” Money

Morning, February 19, 2009, [http://www.moneymorning.com/2008/11/25/obama-  
stimulus/](http://www.moneymorning.com/2008/11/25/obama-stimulus/)

Stewart, Jon, The Daily Show, March 11, 2009,

[http://www.thedailyshow.com/video/index.jhtml? videoId=220524&title=jim-cramer-  
battle](http://www.thedailyshow.com/video/index.jhtml?videoId=220524&title=jim-cramer-battle)

Willis, Bob, “US New-Home Sales Fall to Lowest Level on Record,” Bloomberg, January 29,

2009, <http://www.bloomberg.com/apps/news?pid=20601087&refer>