

Causes of Recession and their Effects – A Historical Perspective

Adnan Omar^{#1}, Muhammed Miah^{#2}, KhurrumBhutta^{*3}

[#]Department of Management Information Systems, Southern University at New Orleans
6801 Press Drive, College of Business, New Orleans, LA 70065, USA

¹aomar@suno.edu

²mmiah@suno.edu

^{*}Ohio University
Athens, OH, USA

³bhutta@ohio.edu

Abstract—Technological innovations are used around the world to improve productivity and accuracy in various aspects of business, economy, banking, economical calculations, and international trading. The purpose of this paper is to analyze the causes of recessions in US history from 1929 until 2009. Furthermore, this study analyzes four major consequences/impacts of recession: Federal Reserve monetary policy adjustment, fiscal policy, war, and technology; detailing how they negatively or positively affect recessions. Findings from this research may provide information to those who seek to understand the current economic situation.

Keywords— Technology, Recession, Monetary policy, Unemployment, GDP.

I. INTRODUCTION

The unofficial beginning and ending dates of the national recessions have been defined by an American private nonprofit research organization known as the National Bureau of Economic Research (NBER). NBER defines a recession as "a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real gross domestic product (GDP), real income, employment, industrial production, and wholesale-retail sales" [15]. There have been as many as 47 recessions in the United States since 1790, although economists and historians dispute the nature of the 19th-century recessions [16].

Major modern economic statistics, such as unemployment and gross domestic product, were not compiled on a regular and standardized basis until after World War II. The average duration of the 11 recessions that occurred between 1945 and 2009 is 10 months, compared to 18 months for recessions that occurred between 1919 and 1945, and 22 months for recessions that occurred between 1854 and 1919. Because of the great changes in the economy over the centuries, it is difficult to compare the severity of modern recessions to earlier recessions. Recessions after World War II appear to have been less severe than earlier recessions, but the reasons for this are unclear [12].

In the 19th century, recessions frequently coincided with financial crises. The dearth of economic statistics makes determining the occurrence and severity of recessions before

the 20th century difficult, so scholars must rely on historical accounts, such as contemporary newspapers or business ledgers, to accurately gauge economic activity.

Recessions often follow external shocks to the economic system such as wars and variations in the weather affecting agriculture. Banking crises are among the most important internal shocks to the economic system. However, the recessions from 1980-1995 were affected by technological innovations. The technological acceleration after 1995, particularly in information technology (IT), with the accompanying spurt in productivity, directly contributed both to accelerated output and to holding down the inflation rate, but inflation was also held down by a substantial decline in real non-oil import prices, by low energy prices through early 1999, and by a temporary cessation in 1996-98 of inflation in real medical care prices.

The 1995-2000 productivity growth revival was fragile, both because a portion rested on unsustainably rapid output growth between 1999 and 2000, and because much of the rest was the result of a doubling in the growth rate of computer investment after 1995 that could not continue indefinitely. The web could only be invented once. Year 2000 artificially compressed the computer replacement cycle, and some IT purchases made by dot-coms early in 2001 were bankrupt. As an invention, the web provided abundant consumer surpluses but no recipe for most dot-coms to make a profit from providing free services. High-tech also included a boom in biotech and medical technology, which also provided consumer surplus without necessarily creating higher productivity, at least within the feasible scope of output measurement.

In economics, a recession is a business cycle contraction, a general downturn in economic activity. During recessions, many macroeconomic indicators vary in a similar way. Production, as measured by Gross Domestic Product (GDP), employment, investment spending, capacity utilization, household incomes, business profits and inflation all fall during recessions, while bankruptcies and the unemployment rates rise. Technology is used in many areas in economy such as the stock market, banking and mortgage systems. Technology has contributed greatly to creating recent

recessions by supplying misleading information to the stock market, providing erroneous information to the banking and mortgage systems with erroneous reports that enable people to get more credit than they can afford, and by miscalculating economic statistics.

This paper focuses on the factors affecting recessions since 1929. It reviews the recent data and analyzes them to make possible recommendations. The study furthermore categorizes the 14 recessions into 4 groups based on their causes, time accrued and severities, i.e., recessions in the 1930's, 1970's, 1980's and 2000's. Results from this study will provide factors and sub factors of recession and predictors for when the next recession will occur, and provide data that will help people use technology to benefit people in future recessions.

II. CAUSES AND EFFECTS OF RECESSION

There have been several recessions in the United States since the early 20th century. From 1929 to the present, there have been four severe and 10 mild recessions. Each recession had several causes, both major and minor, although economists believe the Federal Reserve System and fiscal policy are the causes of recession. Technology has also impacted the economy in significant ways. Figure 1 shows the causes and effects of recessions on the economy. This study categorizes recession into four groups according to severity and length of time, and discusses distinctive causes: (1) Federal Reserve monetary policy adjustment, (2) fiscal policy, (3) technology and (4) war. It also discusses distinctive effects of recession on unemployment, Gross Domestic Product (GDP) and inflation.

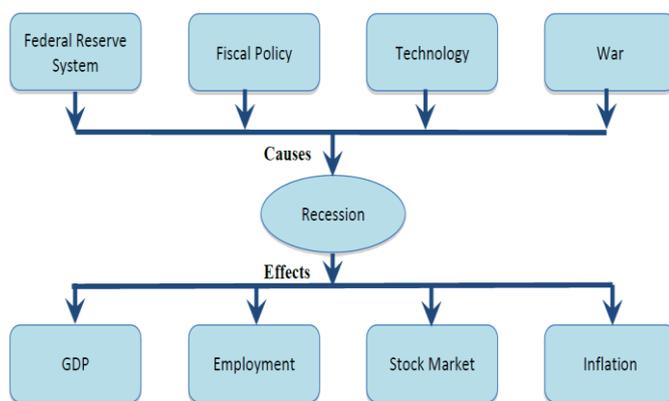


Fig.1 Recession Causes and Effects

The distinctive impacts of recession related to financial data was collected from the Federal Reserve's website [14] and also published in other sources such as Yahoo Finance, Morgan Stanley, and Trading Websites, which cited data from the Federal Reserve website. The Federal Reserve System (FRS) database has the actual and current data of interest rates, bank information, mortgage rates, GDP rates, stock market values, etc.

A. Causes

1) *Federal Reserve System Adjustment of Monetary Policy:* The FRS is the central banking system of the United States. Its duties are to conduct the nation's monetary policy, supervise and regulate banking institutions, maintain the stability of the financial system and provide financial services to depository institutions. Historically, the FRS and its policies were significant reasons behind several financial crises in the United States. One of the duties of FRS is adjusting interest rates. This policy and its effects were the main reason of the Great Depression of 1929 and the most recent recession in 2008, the Great Recession.

Errors made in the adjustment of interest rates have often been the primary causes of recession. Other factors working in tandem with interest rate adjustment errors include the Gross Domestic Product (GDP), bank interest rates, inflation, and exchange rates. Figure 2 shows the relationship between interest rates, Customer Price Index (CPI) and GDP. The FRS needs to be careful when adjusting interest rates because interest rates that are too high may cause some liquidity problems and cash flow in the economy may decline, which could create a panic in the market. On the other hand, interest rates that are too low could decrease household savings, which may create funding problems. Very low interest rates can also encourage investors to take additional risks to make more money. Figure 2 is based on the data collected from the Federal Reserve's database. This data shows the quarterly percentage changes in GDP, CPI and Federal Reserve adjusted interest rate. This data chosen is on a quarterly basis because a couple of recessions, such as the 1958 recession, were severe but lasted less than 9 months.

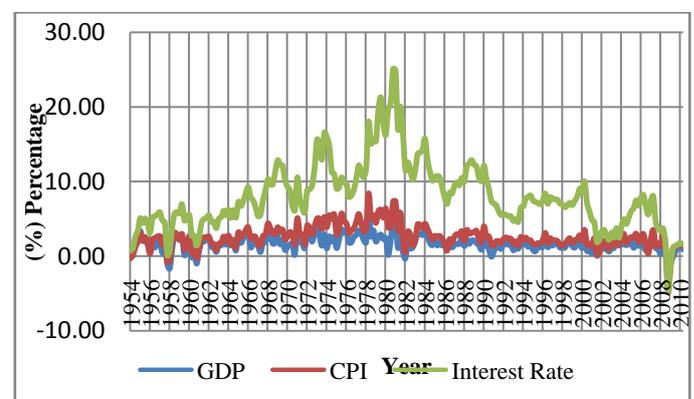


Fig. 2 GDP & CPI & Interest Rate (Source: Federal Reserve Economic Data © 2010)

As shown in figure 2, the line in green represents interest rates, red represents CPI and blue represents GDP. Each interest rate adjustment has affected CPI and GDP. As illustrated in Figure 2, when the direction of the green line is negative, CPI declines more than GDP, and therefore exacerbates the economic recession. The 1958 recession was bigger than the 1953 and 1948 recessions. The 1958 recession, caused by FRS monetary policy, was severe, although it lasted 8 months, which was a lot shorter than the 1953 and 1948

recessions. The FRS lowered interest rates on business loans in 1958, which resulted in big expansion in the business world. The savings were not equal to the demand by businesses for funds therefore money available for loans were not equal to the demand.

Figure 2 also shows the negative direction of the green line in 2008, when the government provided a stimulus package which included easing of interest rates and helping out big insurance companies and banks with bail-out money to operate their businesses that helped to get the country out of the Great Recession. Monetary adjustments in the United States usually led to a recession or at least created panic in the economy after a recession started. To help the recovery efforts, FRS historically re-adjusted the interest rates or provided a stimulus package to help the economy recover. The Federal Reserve controls the money in the market; basically the Federal Reserve is the main bank of the economy.

The collapse of the US housing bubble, which peaked in 2006, caused the values of securities tied to US real estate pricing to plummet, damaging financial institutions globally. Regarding bank solvency, declines in credit availability and damaged investor confidence had an impact on global stock markets, where securities suffered large losses during late 2008 and early 2009. Economies worldwide slowed during this period, as credit tightened and international trade declined. Critics argued that credit rating agencies and investors failed to accurately predict the risk involved with mortgage-related financial products, and that governments did not adjust their regulatory practices to address the 21st century financial markets. Governments and central banks responded with unprecedented fiscal stimulus, monetary policy expansion, and institutional bailouts. Figure 3 shows quarterly mortgage rates between 1971 and 2010. Mortgage rates data were collected quarterly from Federal Reserve Economic Database.

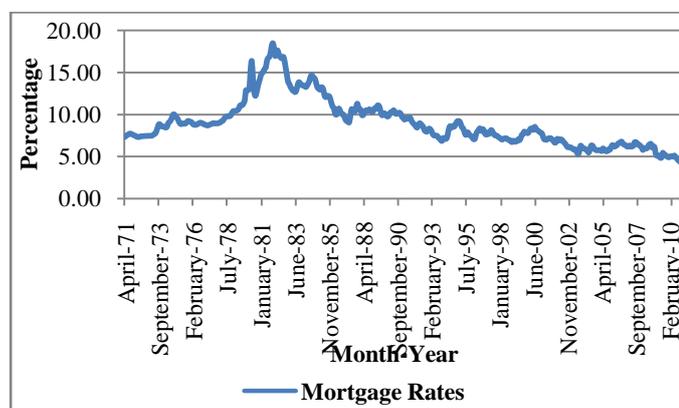


Fig. 3 Mortgage Rates (Source: Federal Reserve Economic Data © 2010)

The recession in the banking industry adversely affected the cash flow for industries. Industrial output declines when industries cannot raise funds for their expansion or operation. This in turn affects real estate and the GDP of the nation. When the mortgage rates peak, it means that the FRS adjusted interest rates on banks and/or inflation went up. The banking system led the recession when interest rates went up.

2) *Fiscal Policy*: The second biggest factor that affected recession was the fiscal policy. It is considered any changes the government makes to the national budget in order to influence a nation's economy. The approach to economic policy in the United States was rather laissez-faire until the Great Depression. The government tried to stay away from economic matters as much as possible and hoped to maintain a balanced budget.

If the economy is in recession, with unused productive capacity and unemployed workers, then increases in demand will lead mostly to more output without changing the price level. If the economy is at full employment, by contrast, a fiscal expansion will have more effect on prices and less impact on total output.

This ability of fiscal policy to affect output by affecting aggregate demand makes it a potential tool for economic stabilization. In a recession, the government can run an expansionary fiscal policy, thus helping to restore output to its normal level and to put unemployed workers back to work. During a boom, when inflation is perceived to be a greater problem than unemployment, the government can run a budget surplus, helping to slow down the economy. Such a countercyclical policy would lead to a budget that was balanced on average.

3) *Technology*: The role of technology has been growing since the 2000 recession. The misleading information and overloaded information can cause recession or affect the business more than they. In the Enron scandal, for instance, it appears that Enron had off-balance-sheet deals that were not reflected in this number and the company was said to have generated artificial trades to make its trading volume appear higher than it really was [10].

Enron closed out trades before producing its monthly risk report, and reset them the next day. The company did everything it could to inflate the Enron stock price with the alleged blessing of their accountants [10]. In November, Enron said that it had overstated earnings for the past four years and it now owed over \$6 billion [4]. The mandated sales were made in the first month of 2001 while the stock was still trading at \$60 to \$70 a share. The stock last traded at 67 cents before the company's stock was dropped from the New York Stock Exchange in 2001 [13]. The Enron case is a classic example of how a single company, through the use of technology, can have a vast impact on the stock market and on the overall national economy.

4) *War*: Wars impose substantial costs on the domestic economy. Due to excessive military spending and diversion of funds overseas, the dollar weakened in the international market. There was no equivalent amount of funds coming into the country. The economy shrank under the strain of household social spending and subsidies on one side and military expenditure on the other. Public dissatisfaction with government increased as the interest rates rose and inflationary trends ballooned.

War affects economies positively or negatively. For an instance of positive affect, World War II helped the

economy recover from the Great Depression, which was the longest and most severe depression ever experienced by the nation. Although no longer officially in the depression at the start of the war, the unemployment rate was still high, and the war helped by creating even more jobs. Unemployment went down by 19%. Thousands of men could just enlist in the military and whoever was left behind worked for it. Bigger quantities of products were produced by the extreme demand that War brought to the US. For instance of negative affect, WWII was the reason for the recession of 1945 because, after war the high demand for goods was cut off and the sudden surge of men leaving the military and entering the workforce also led to a displacement of millions of American women from the labor market.

The affluent lifestyle of the 60s in the US began to erode because of economic paralysis, which left the country economically unprepared for the Vietnam War in the 1970s. The Vietnam War strained the financial resources of the US economy. The war created a negative imbalance in the industrial sector. Factories, which were manufacturing consumer goods, had to shift their operations towards catering to the demands of the military. The most recent war is The Gulf War. Nobel Prize-winning economist Joseph Stiglitz has blamed the Iraq War for sending the United States into a recession. He believes that the war caused the credit crunch and the housing crisis that have propelled the current economic downturn [4]. The government made big investments in this war but did not get enough return, which weakened the dollar. War benefits no one, whether it is the United States or any other nation.

B. Effects

Your paper must use a page size corresponding to A4 which is 210mm (8.27") wide and 297mm (11.69") long. The margins must be set as follows:

1) *Gross Domestic Product (GDP)*: Recession means decline in Gross Domestic Product (GDP) of a country for two consecutive quarters. GDP is the value of all final goods and services produced in an economy in a given year. Final goods are those goods which are not transformed into other goods. These goods are evaluated as per their market value. When the value of all final goods and services produced in a given year declines for two consecutive quarters, this economic situation is referred to as "recession". GDP has an indirect effect on recession. The Federal Reserve economic data collected from Federal Reserve Database show percentage changes of GDP. These data give a clue about level of recession and how it affects other factors such as oil price. It is visible in real GDP, real income, employment, industrial production, and wholesale-retail sales in an economy. Figure 4 shows the annual decline in GDP percentage between 1954 and 2010, and also relationship between GDP and interest rates.

A major difference in the peak of GDP and interest rates may result in an economic downturn. Interest rates increase or decrease before the GDP rate does, as shown, when interest rates went down in 1957. The recession that occurred in 1958 lasted 39 months because the decline in GDP was high enough

to lead to the recession. Figure 4 also shows that the differences in direction of interest and GDP lines give us a significant clue about how severe the recession will be. Another example is the decline of GDP in 1999 that led to the recession of 2000. When interest rates were re-adjusted by the FRS, the economy was revived and unemployment rates declined.

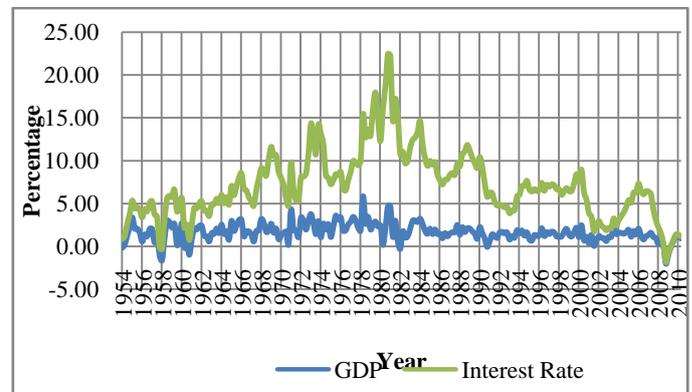


Fig 4 GDP & Interest Rate (Source: Federal Reserve Economic Data © 2010)

2) *Employment*: Employment is one of the significant indirect reasons behind a recession. In the United States, since 1929, unemployment rates were affected by the recession negatively and positively. Figure 5 shows unemployment rates since 1941. The Federal Reserve calculates the unemployment rate, which is a measurement of the prevalence of unemployment and it is calculated as a percentage by dividing the number of unemployed individuals by all individuals currently in the labor force.

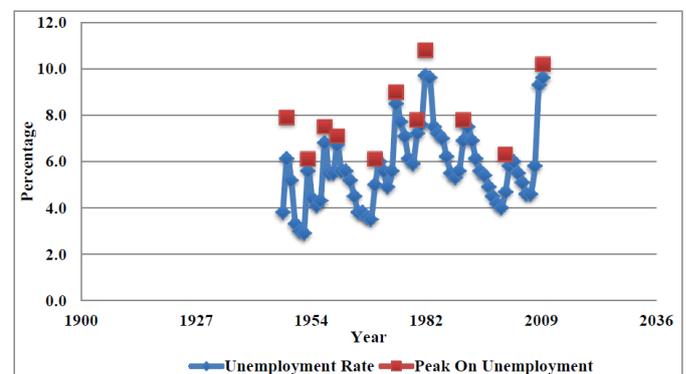


Fig 5 Unemployment Rates in Recessions (Source: Federal Reserve Economic Data © 2010)

As shown in the Figure 5, unemployment is always at its peak at the end of a recession as compared to unemployment rates, which means that recession affects unemployment negatively. In the United States, wars are the biggest causes of the unemployment. Since 1929 until late 1900s, the biggest difference of the unemployment rate and the peak of unemployment was experienced in 1945. The reason behind this was that soldiers returning from World War II swelled the size of the labor force so that it suddenly exceeded the demand for labor. In the late 20th and early 21st centuries,

unemployment was affected more by technological and monetary policies. Companies preferred to use modern technology over human labor to minimize their cost, which caused higher unemployment rates leading to a recession like the 1991 and late 2000s recessions.

When there is high unemployment in an economy, consumption and savings decline. These of course, affect businesses as well since the sales decline, diminishing the available capital for investments on new projects.

3) *Stock Market*: In Figure 6, Farmer [6] states that the stock market crash of 2008, triggered by the collapse in house prices, caused the Great Recession [11]. During the years preceding the credit market collapse, the sub-prime mortgage industry thrived. Individuals with poor credit were given access to loans they really couldn't afford. But as long as home prices were on the rise, these poor lending practices were simply ignored.

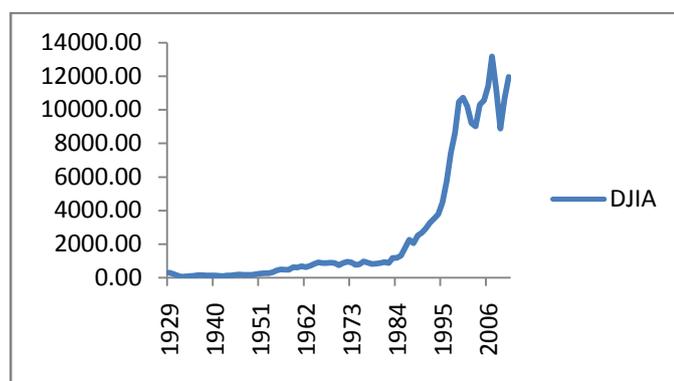


Fig 6 Dow Jones Industrial Average 1929-2011

The credit market's problems began when housing prices started to fall in 2007. Homeowners frequently found themselves with underwater loans. They owed lenders more than the home was worth. When faced with these facts, homeowners no longer feared the threat of foreclosure. Even more disturbing was the fact that some families abandoned their homes; choosing to start their lives anew elsewhere rather than worry about paying off their debts.

4) *Inflation*: Inflation is a rise in the general level of prices of goods and services in an economy over a period of time. When the general price level rises, each unit of currency buys fewer goods and services. Consequently, inflation also reflects erosion in the purchasing power of money and a loss of real value in the internal medium of exchange and unit of account in the economy [8]. Figure 7 shows the inflation rates between 1929 and 2007.

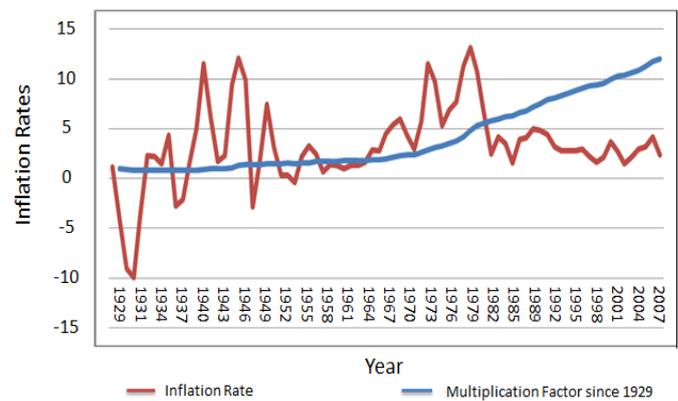


Fig 7 Inflation Rates (Source: Federal Reserve Economic Data © 2010)

The blue line shows the multiplication factor since 1929 and the red line shows inflation rate since 1929. The major recession has the biggest peak and drop in inflation rates as shown in the Figure 7. During The 1929 recession, inflation rate dropped down from 1.17 to -4.05. This drop shows the severity of recession. In the recession of 70s and 80s, the inflation rate rose up about 50% to achieve 11.45 points, which shows that in 1970s and 1980s two major recessions occurred. In the 2000s, the inflation did not change as much as it did in other major recessions, but the power of money less than before other recessions.

To assist the recovery process, central banks must establish their credibility in fighting inflation, or economic actors will make bets that the central bank will expand the money supply rapidly enough to prevent recession, even at the expense of exacerbating inflation. Thus, if a central bank has a reputation as being "soft" on inflation, when it announces a new policy of fighting inflation with restrictive monetary growth economic agents will not believe that the policy will persist; their inflationary expectations will remain high, and so will inflation. On the other hand, if the central bank has a reputation of being "tough" on inflation, then such a policy announcement will be believed and inflationary expectations will decline rapidly, thus allowing inflation itself to decrease rapidly with minimal economic disruption.

III. FINDINGS

This paper categorizes recessions into four groups by their severity and length of time as mentioned in the Causes and Effects section. In United States history, the main cause of recession has been Federal Reserve monetary policy and fiscal policy.

Table I shows the main factors that caused the major recessions in the U.S. since 1929. As shown in the table, Federal Reserve System policy and Fiscal policy are most common cause of the recessions.

The Great Depression of 1929 occurred when the US Federal Reserve limited the money supply and Britain decided to return to the Gold Standard at pre-World War I parities by the Smoot-Hawley Tariff Act. These two actions worsened the depression by seriously reducing international trade and causing retaliatory tariffs by other countries. These factors weakened the major world economies which were already

weakened by World War I. Unemployment peaked up to 24.9% and the GDP declined to 27.9%.

TABLE I
CAUSES OF RECESSION

Causes of Recession	Recession of			
	1930s	1970s	1980s	2000s
Federal Reserve System	X	X	X	X
Fiscal Policy	X	X	X	X
War	X	N/A	X	X
Technology	N/A	N/A	N/A	X

In the recession of 1973 The Federal Reserve, in an effort to combat inflation, pursued a tight monetary policy, which produced higher interest rates, and reduced the level of investment purchases. Since investment projects extend over a period of time, the higher interest rates caused a decline over an extended period of time as past investment commitments were completed and new investment projects were not undertaken. The decline in investment purchases produced a decline in GDP to 3.2% and unemployment rate peaked at 9.0%. This was the intention of the tighter monetary policy because the decline in production and the higher unemployment were supposed to discourage price increases. However, the inflation rate rose to 5.73% [9].

The primary cause of the early 1980s recession was a contractionary monetary policy as the Federal Reserve System sought to control high inflation, which did not result in control, but increased the inflation rate to 13.13% and the government tried to reduce money supply. GDP declined to 2.7%, and the unemployment rate rose to 10.8% [7].

In the Great Depression the Federal Reserve eased credit availability and decreased to interest rates more than it even had before. These low interest rates facilitated the growth of debt at all levels of the economy, especially private debt as people purchased more expensive housing.

TABLE III
EFFECTS OF RECESSIONS

Effects of Recession	Recession of			
	1930s	1970s	1980s	2000s
Unemployment Peak (%)	24.9%	9.0%	10.8%	16.7%
GDP Decline (%)	26.7%	3.2%	2.7%	4.1%
Inflation (%)	-4.05	5.73	13.13	2.36
Duration (Months)	55	16	16	36

Source: Federal Reserve Economic Data © 2010

The increase in oil prices during 2007 to 2008 contributed to the recession. It showed that oil price increases made a significant contribution to the downturn in economic growth. GDP declined to 4.1%, unemployment rate went to 16.7%, and the inflation rate dropped to 2.36% October in 2009 and

10.2% in July 2010 [3]. Table 2 shows the effects of recession based on their causes, time accrued, and severities.

Earlier, this paper discussed the major causes of recessions such as Federal Reserve System (FRS), fiscal policy, war, technology, banking system and real estate. Economists, however, have yet to determine when a recession really bottoms out. Each economist has a theory (and agenda), but there are seven key signals one should consider.

A. Federal Reserve System

The entire document should be in Times New Roman or Times font. Type 3 fonts must not be used. Other font types may be used if needed for special purposes. The key role of the Federal Reserve System is to provide stability to the economy and to achieve maximum sustainable economic growth, price stability, and low unemployment. To accomplish these goals, the Federal Reserve System uses monetary policy. The amount of money available for economic transactions ultimately affects national income, price levels, and employment. This indicator measures the amount by which federal government spending exceeds or falls short of its revenue. When the federal government runs a deficit, it borrows (by selling Treasury bills, notes, and bonds) to pay its expenses. When it has a surplus, it repays previously issued debt. Changes in taxes or government spending enacted by Congress (referred to as fiscal policy) will alter the size of the surplus or deficit and can also affect the level of economic activity.

Key to recovery: Using monetary policy, the Federal Reserve can affect the volume of money and credit available in the economy and the price of credit, i.e., interest rates. In this way, the Federal Reserve can influence the general level of prices, employment, and output [5].

B. Employment Numbers

Government-issued employment statistics are excellent for tracking the number of people employed, unemployed, in school, etc. They do not, however, give important details, such as the percentage of people who have stopped looking for work, or the numbers of people who are under-employed.

A related employment report, the so-called establishment survey, tracks the number of people on company payrolls. That number gives a better insight into the overall state of the economy.

Key to recovery: When the percentage of jobs lost levels out, growth is the next step. Employment tends to be a lagging number in a recovery. Demand may pick up before employment numbers actually start to improve [5].

C. Real Estate Market and Banking Systems

Regardless of the nature of the industry, home sales in general are an important factor in economic growth. Every house sold means more furniture bought, home repair services contracted, etc., and that money circulates throughout the region. New home sales are particularly important because the construction and sale of new homes pumps significantly more cash into the economy.

Key to recovery: Watch for the impact of falling housing prices. It is a good sign if lower prices begin to attract bargain-hunters. It is a bad sign if they incite panic and cause even more homes to be put on the market [5].

D. Personal Income and Outlays

This report tracks not only how much consumers earn, but how they spend their income, what they are spending it on, as well as how much they are saving. It is a vital glimpse into buyers' wallets. More importantly, it tracks spending on both products and services, so it gives a balanced view of the overall economy.

The monthly retail sales report provides some similar data. But because it combines consumer spending with sales to smaller companies, it is not always as reliable as an indicator. However, it comes out two weeks before the Personal Income and Outlays Report, so it is worth a look to get an earlier take on the economy.

Key to the recovery: Consumer spending is the engine of the US economy. Holiday shopping will be a vital indicator of consumers' staying power. Big retailers already seem concerned: Wal-Mart and J.C. Penny began their seasonal discounting at the start of November [5].

E. Consumer Price Index

Regardless of the nature of the industry, home sales in general are an important factor in economic growth. Every house sold means more furniture bought, home repair services contracted, etc., and that money circulates throughout the region. New home sales are particularly important because the construction and sale of new homes pumps significantly more cash into the economy.

This is the standard measure of inflation, and it comes in two sections: the overall index excludes food and oil, due to their general price volatility. It is worth monitoring both CPI measures. While many media outlets focus on the core CPI, the products not tracked in the core CPI tend to be the ones consumers cannot afford not to buy. Heavy increases in CPI can foreshadow decreased spending in other areas.

Key to the recovery: A rise in inflation would prevent the Federal Reserve from making further rate cuts. The only thing the Federal Reserve would hate more than a recession is high inflation. Unit labor costs fell in the third quarter [5].

F. Stock Market Crash

The stock market is one of the most important sources for companies to raise money. This allows businesses to be publicly traded, or raise additional financial capital for expansion by selling shares of ownership of the company in a public market. A stock market crash is often defined as a sharp dip in share prices of equities listed on the stock exchanges. In parallel with various economic factors, a reason for stock market crashes is also due to panic and investing public's loss of confidence. The stock market crash of 1929 was the most significant crash in U.S. history. Although the crash itself only lasted four days, it led to a catastrophic sell-off. The Dow Jones Industrial Average lost 80% in 1929 [1] and 50% in 2008 [2].

Key to the recovery: Although the stock market has enjoyed some historical success (some of which were fabricated or inflated by dishonest reporting) the risk involved in the stock market is unpredictable. Until the U.S. government gains a much firmer regulatory grip on the stock market activity, banks as well as individuals should steer clear of the stock market trade [5].

G. Technology

Technology has advanced in recent decades. It has improved in many different ways, has changed the way we launch new businesses, and has influenced the way in which existing businesses operate. It has a big impact on productivity by enabling businesses to increase production while simultaneously reducing the work force. The massive growth of IT companies in recent years has created a technology index in the economy.

The use of the technology has become widespread since the 1990s. This means that businesses depend on technology more than ever before. For instance, the banking industry is the biggest industry that uses technology. All banking data is controlled by using technology, and this data can be used to obtain more accurate data, especially during periods of economic uncertainty and volatility. Technology has played a major role in the economy, and particularly on recessions, since the 1990. Despite the potential usefulness of technology, however, the data on the Internet is overloaded, and a lot of inaccurate data has been posted. Technology is often used as a tool to create inaccurate data to mislead the system, as happened in the Enron case. Also, banks inflated individual loaners' income to enable them to get larger loans, which caused the housing bubble in 2007, leading to the Great Recession [5].

Key to recovery: Bank uses technology more extensively than other industries. If the right people use the technology with the right filters to process the data, the results will be positive. In unscrupulous or careless hands, however, the results can be drastic.

IV. CONCLUSIONS

In economics, a recession is a business cycle contraction, a general slowdown or downturn in economic activity. This paper discusses the recessions from 1929 to date. There is no fixed time line during which a recession will happen, and there is no fixed period for recovery. Each recession is unique in its duration, but literature suggests that individual recessions share similar causes. The distinctive factors that impact recessions include Federal Reserve monetary policy adjustments, fiscal policy, war and technology.

Lawmakers use monetary policy as a tool to reverse/limit an economic downturn; thus, the Federal Reserve monetary adjustments play a big role in every recession. One of the duties of the FRS is adjusting interest rates; which have often been as much a cause of the recession as Fiscal Policy. War plays a role in a recession because it imposes substantial costs on the domestic economy. For example, the Vietnam War strained the financial resources of the US economy whilst the

recent Gulf war has been blamed for sending the US into a recession. The housing market and the banking system often work together to affect the economy causing the value of securities tied to US real estate pricing to plummet and damaging financial institutions globally. Finally, technology can manipulate interest rates falsifying fair book values and inducing panic through media to precipitate recession as in the case of Enron. Technology plays a major role in many companies and financial institutions. If people employ technology with the right filters to process the data, the results will be positive

REFERENCES

- [1] Amadeo, K. (2012). "Stock Market Crash of 1929 Causes Effects and Facts". About.com Guide. Retrieved June 27, 2012 from <http://useconomy.about.com/od/glossary/g/Stock-Market-Crash-of-1929.htm>
- [2] Amadeo, K. (2012). "Stock Market Crash of 2008". About.com Guide. Retrieved June 27, 2012 from <http://useconomy.about.com/od/Financial-Crisis/a/Stock-Market-Crash-of-2008.htm>
- [3] Amedo, K. (2011). Why our economy is in recession now. Gross Domestic Products .
- [4] Baumann, N. (2008). Is the Economy a Casualty of War? Retrieved April 21, 2011, from Mother Johns Politics: <http://motherjones.com/politics/2008/02/economy-casualty-war>
- [5] Business Brief. (2009). Retrieved 05 20, 2011, from The end of the recession? Key indicators to watch: <http://www.businessbrief.com/the-end-of-the-recession-4-key-indicators-to-watch/>
- [6] Farmer, R. (2011) The Stock Market Crash of 2008 Caused the Great Recession: Theory and Evidence Retrieved May 30, 2012 from: <http://www.nber.org/papers/w17479>
- [7] Hanc, G. (1999). FIDC. From Federal Deposit Insurance Corporation: http://www.fdic.gov/bank/analytical/banking/1999dec/1_v12n3.pdf
- [8] Iceland, C. B. (2008). Why price stability? Retrieved 2011 йил 13-May from Central Bank Of Iceland: <http://www.sedlabanki.is/?PageID=195>
- [9] Investor, T. S. (2007). Shocked Investor. Retrieved 2011 йил 05-May from Shocked Investor: <http://shockedinvestor.blogspot.com/2007/08/inflation-rates-since-1929.html>
- [10] Kaufman, J. (2003). Enron Case. Retrieved 03 05, 2010, from The Wall Street Journal: <http://online.wsj.com/article/SB10001424052748704446704575206503300255806.html>
- [11] Money-zine.com Stock Market Crash of 2008 Retrieved May 30, 2012 from: <http://www.money-zine.com/Investing/Stocks/Stock-Market-Crash-of-2008/>
- [12] Moore, G. H. (1986). Appendix A The Development and Role of the National Bureau of Economic Research's Business Cycle Chronologies. Chicago: University of Chicago Press.
- [13] Natta, D. V. (2002). ENRON'S COLLAPSE: THE APPOINTEES; Several Administration Officials Held Enron Shares. Retrieved 04 17, 2010, from New York Times: <http://www.nytimes.com/2002/01/18/business/enron-s-collapse-appointees-several-administration-officials-held-enron-shares.html?pagewanted=all&src=pm>
- [14] Reserve, F. (2010). Economic Data. Retrieved 03 22, 2010, from Federal Reserve Economic Data: <http://research.stlouisfed.org/fred2/categories/32299>
- [15] New York Times (2010). Retrieved 04 2, 2011, from New York Times: http://topics.nytimes.com/top/reference/timestopics/subjects/r/recession_and_depression/index.html
- [16] Zarnotvitz, V. (1996). Business Cycles: Theory, History, Indicators, and Forecasting. Chicago: University of Chicago Press.