2008 Economic Crisis Analysis

Golmohammadpoor Azar, Kamran and Mansori, Massoud

Urmia University

9 April 2011

Urmia University

Faculty of Economics and Management

Paper Title: 2008 Economic Crisis Analysis
(The Macroeconomic Approach)

Author: Kamran Golmohammadpoor Azar
Economics Student at Urmia University

Advisor: Masoud Mansouri
Assistant Professor of Economics, Urmia University

Email:
k.golmohammadpoor@gmail.com
masoud.mans@gmail.com

Phone:
Kamran Golmohammadpoor Azar: +98 914 833 14 30
Dr Masoud Mansouri: +98 914 141 13 60

Address:
Kamran Golmohammadpoor Azar, Faculty of Economics and Management, Urmia University, Urmia, Iran
Dr Masoud Mansouri, Faculty of Economics and Management, Urmia University, Urmia, Iran

Abstract

Recent economic crisis started from the American Housing. In 2005, the price of housing started to grow and for gaining more profit, the banks inclined to housing and provided applicants with lots of facilities. With the burst of price bubbles, intense reduction of prices occurred in the housing market and the loan recipients did not have any motives to repay their loans. Therefore, the credit- providing and official organs that had given lots of facilities to the housing sector faced crisis. This recession rapidly spread to other economic sectors and shortly infected Europe and Japan, and also influenced other countries with respect to their dependence on America's economy.

This paper, with an approach to macroeconomics and IS-LM model, analyzes the recent crisis.

Key words: Economic crisis, Macroeconomics, IS-LM Model, America Economy

Introduction

In 1776, Adam Smith (1723-1790) the British economist, simultaneous independence of Ameriac published his great economics book, Wealth of Nations. Nowadays we know Adam Smith as the father of modern economics. It is true that Smith established modern economics but some other nearly economists like John Maynard Keynes and Freidman revolted in economics. It is marvelous that every revolution in economics is following an economic crisis.

All over the economic history of the world, Recessions, Depressions and economic downturns have been experienced. In the economics sources, there are several theories about economic economic fluctuations which are developed during the past centuries. Economists like Schmpeter (Schmpeter, 1939) are arguing that business cycles can be predicted, but some others like Mankiw (Mankiw, 1997) and Romer (Romer, 2006) are saying no. Karl Marx (1818-1883), great German economist and sociologist believed in that recessions and economic crisis are the nature of the capitalism economic system.

It is natural that after any great crisis – strategic crisis, political or economic – new theories will be submitted. The Great Depression that was one of the world's largest downturns in economic history, inspired John Maynard Keynes to develop his revolutionary theory. He argued that, economy can be recovered by boosting consumer spending. The Great Depression was overcome by several Keynes inspired economic programs and simulation between 1933 and 1935.

Most of economists are comparing recession of 2007-2009 with the Great Depression. Some researchers like Even and Feldman (2009) assert that the current crisis, at least from the financial viewpoint is considered the worse since 1929. Recent crisis started from the American Housing. It rapidly spread to other economic sectors and shortly infected Europe and Japan, and also influenced other countries with respect to their dependence on American's economy. At this paper we want to illustrate that how the recent crisis started and how solved. And whether new theories are necessary or not?

Model

What is crisis?

Crisis is one of the serious processes of the actual risk. Every security threat contains "potential" and "actual" process. Potential process of the security threat involves "tension" and "challenge" and actual process includes "warning", "risk" and "crisis" (Figure 1).

Figure 1: Security Threats Stages

Source: Hossein Gharib, Political and Economic Ettelaat , 255-256

Crisis is a very important concept in discussions of economics science, political and strategic and has many examples. In the economic field, it involves rapid and dramatic rise of prices, production expanded reducing, sharp rise of unemployment, a sharp reduction in income, sharp reduction in the value of securities and etc. In the political field, it contains social revolts increasing, developed gap between government and citizens and in the field of strategic, crisis has examples such as military and coercive regime dealing with social groups or neighboring countries and other countries. So, when the word of "crisis" is used, it means that the security threat is in the last process its existence.

Structural change is considered as one of the main consequences of the crisis. After emergence of the crisis, if there dos not be any measure to its roots and to make decisions about structural changes, crisis re-emergence should be expected. Necessity of structural changes is to prevent similar crises repetition or other crises. Crisis lead to new theories and also these theories create new structures. So, theories are result of crises and on the other hand, they are facing to the theoretical and practical challenges and crises. It is clear that theoretical challenges affects to new structures and newer structures occur. So, this process is continuous and permanent (Figure 2).

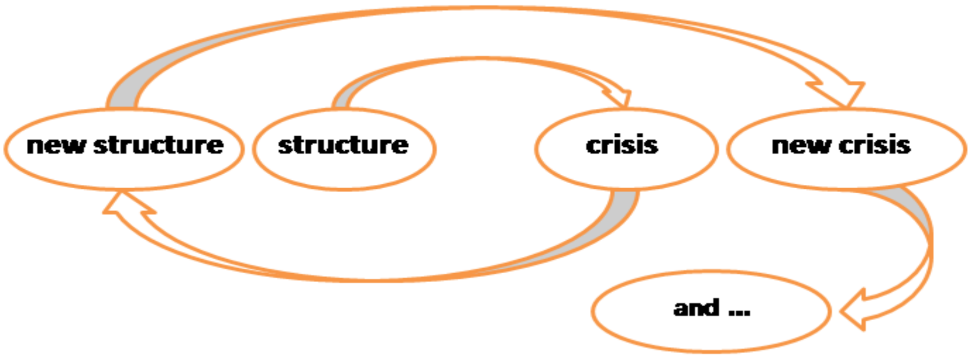

Figure 2: Crises and Occurring New Structures are Continuous and Permanent

Source: Author

Economic fluctuations and business cycles

In 1776, Adam Smith (1723-1790) by publishing his great economics book, Wealth of Nations, established Modern Economics. But from creation of capitalism economic system Recessions and Depressions and economic downturns have been experienced. Karl Marks (1818-1883), great German economist and sociologist believed in that recessions and economic crises are the nature of the capitalism economic system. Economists as Schumpeter (Schumpeter, 1939) are arguing that business cycles can be predicted, but some others like Mankiw (Mankiw, 2007) and Romer (Romer, 2006) are saying no. There is no doubt, however, that the Great Depression was one of the world's largest downturns in economic history. It inspired John Maynard Keynes to develop his revolutionary theory. He argued that economy can be recovered by boosting consumer spending. The Great Depression was overcome by several Keynes inspired economic programs and stimulation between 1933 and 1935.Several recessions and economic downturns had occurred since then. There is little doubt that, the relevance of Keynsian economics is being questioned during every economic downturn in the previous century. A result of that is the rather influential works of authors such as Fausto Vicarelly and Paul Krugman. In 2007 new recessions started. Many economists are comparing recession of 2007-2009 with the Great Depression. Many governments have already adopted fiscal stimulus plans and lowered interest rates as close to zero (Funa, University of Ljubljana, 2009).

Economic fluctuations are referring to the business cycle, which occur over longer periods and cover periods of economic expansion and economic stagnation. Usually, these fluctuations are measured by the growth of real GDP (gross domestic product). As the term implies, a **business cycle** is a period of up and down motion in aggregate measures of current economic output and income. Figure 1 illustrates a hypothetical business cycle. When most businesses are operating at capacity level, the real GNP is growing rapidly, and the unemployment is low, **boom** condition exists. Boom conditions result in a high level of economic activity. As aggregate business conditions slow, the economy begins the contraction phase of a business cycle. During the contraction, the sales of most business will fall, real GNP will grow at slow rate perhaps decline, and unemployment in the aggregate labor market will raise. When economic activity is low and unemployment is high, these conditions are referred as e **recession**, or if they are quite serious a **depression**. After the rescission reaches bottom and economic conditions begin to improve, the economy begins an expansionary stage. During the expansion phase, business sales will rise, GNP will grow rapidly, and the unemployment rate will decline. The expansion blossoms into another boom. But the boom will eventually peter out and turn to a contraction, beginning the cycle anew (Figure 3) (Gwartney, 1976). Schumpeter also proposed four types of business cycles, which however did not enjoy much support. These four types are called; Kitchin inventory cycle (period of 3 to 5 years), Juglar cycle (period of 7 to 11 years) which is usually taken as the business cycle, Kuznets cycle (period of 15 to 25 years) and Kondratiev wave (period of 45 to 60 years) which is sometimes as well referred to as long technological cycle (Funa, University of Ljubljana, 2009).

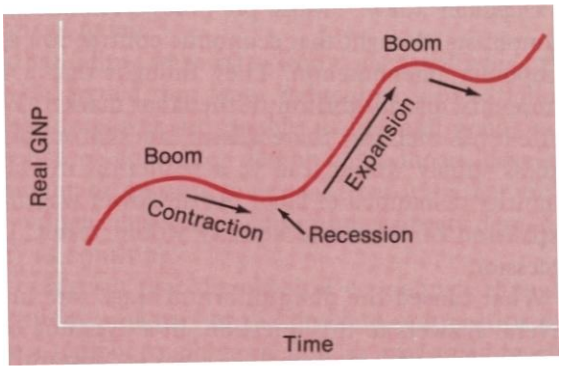

Figure 3: Business Cycle

Economic crisis of this kind usually entail two components, a financial crisis and a real economic crisis developing in its wake. The financial crisis stems from a failure in the functioning of the financial system. It is manifested in tremendous monetary losses, in the crash of financial institutions, in the loss of trust in the system, and in low financial supply (a slowdown in the flow of money). The lack of financial oxygen causes increasingly more companies to cancel projects and lay off workers. At the same time, the blow to private savings on the capital market and the loss of employment security cause the public to reduce spending on goods and services. Thus the real economic crisis is created, expressed in a sharp downturn of consumption and product, a rise in business bankruptcies, a reduction in the nations' income from tax revenues, a sharp increase in unemployment, a rise in poverty, and so on.(Shmuel Even and Nizan Feldman,2009)

How did the recent crisis start?

After September 11, 2001, recession was predicted in America (Gharib, 2008). Economic researchers such as Rathkopf argue that more attention to the terrorism and less to the finance and economy is the main reason of the current economic crisis (2008). In the years before the crisis, the Federal Reserve's expansionary monetary policy reduced interest rate. It seems that this policy was adopted in front of economy and market horror after the event September 11,

2011. Policy "a house for every American" that was a policies of the American President of that era with interest rate decline and international geopolitical risks increased real assets prices such as land, building, precious metals (including gold and silver), industrial metals and even oil.

Figure 4 illustrates home prices situation from 1950 to 2008. The average annual investment return from 1950-2000 was less than one-half of 1% per year, after adjusting for inflation. The home price index was set to start at 100 in 1950. So, a $100 investment in a home in 1950 was worth $104 in inflation-adjusted in 1997.

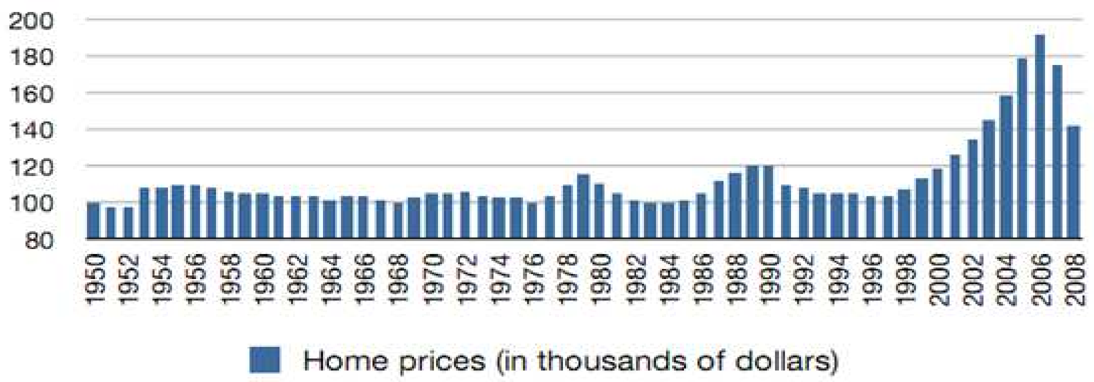

Figure 4: The history of housing as an investment

Source: USA Today According To Economist Robert Shiller, Yale University

In economics, it is axiom that every economic institution and firm (such as banks and credit and finance foundations) wants to maximize own profit. So banks and financial foundations invested in housing for gaining more profit. Hosing banks reduced down payments from 30% of whole home price to 10% and thirty years loan rates from 5% to 3% such that after three years, they can adjust interest rate to the subprime mortgage loans and daytime interest rate. Housing Banks in lending to customers to greedy more profits did not observe criteria relating to customers financial ability and their repay power because if they were not able to pay their loans, banks could take ownership of their homes and through this gain more profits.

Figure 5: the Bubble Decade

Source: USA today according to Economist Robbert Shiller, Yale University

The housing bubble began in 1998, peaked in 2006 and burst in 2007 (Figure 5).

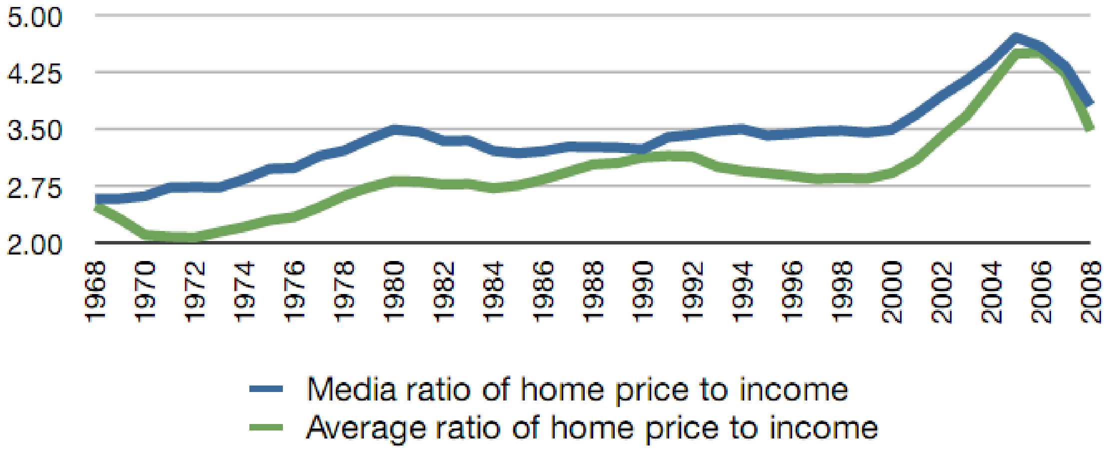

Figure 6: Home Prices as a Multiple of Income

Source: USA Today, according to Census Bureau, A&P/Case-Shiller Home Price Indices

How far can home prices fall. A long way, if prices return their traditional level. Historically, home prices have been equal to about three times average household income. In 2005, they peaked at 4.5 times income (Figure 6).

Economists also measure home prices based on how much it would cost to rent the house. Historically, homes cost about 20 times what it would cost to rent the home for a year. A house that rents for $10,000 a year – about $830 per month – would be worth about $200,000.

In 2005 and 2006, home prices peaked at unprecedented levels – 32 years' worth of annual rents. In other words, a house that could fetch $830-a-month in rents was selling for

$320,000, far above traditional value of $200,000. As shown in Figure 7 (Dennis Cauchon, USA Today).

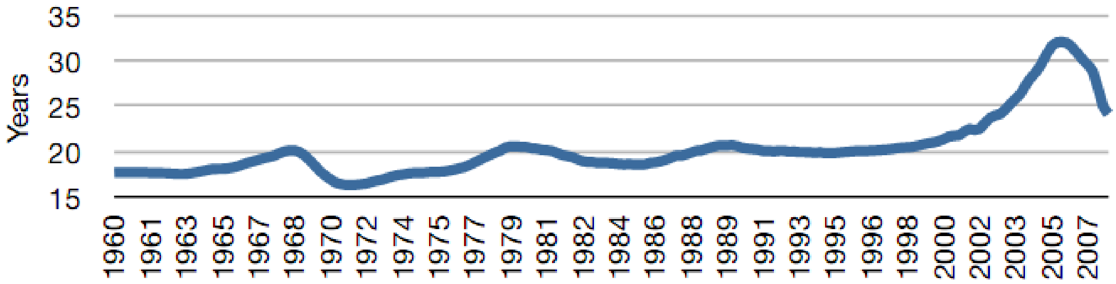

Figure 7: Home Prices as Multiple of Annual Rent

Source: USA Today according to Economist Morris Davis, University of Washington

The traditional 20% down payment became a thing of past during the housing boom, especially for first-time buyers. In 2007, 45% of first-time buyers used "no money down" loans, a mortgage that essentially did not exist before the late 1990s. Millions also obtained adjustable-rate mortgages (ARMS) that offered low interest rates at the beginning but later re-set at much higher rates, causing homeowners' monthly payments to soar.

Table 1: How did prices get so high in the first place?

Median downpayment	1989	2007
All buyers	20%	9%
Repeat buyers	23%	16%
First-time buyers	10%	2%

Source: USA Today According To National Association of Realtors

Table 1 shows down payments that homebuyers used in 2007 compared with 1989. It illustrates that banks took a great risk than before.

A typical bank puts about 9% of its money into its business, a leverage ratio of 11-to-1. Lehman Brothers, the failed investment bank, have a leverage ratio of 30-to-1, meaning it borrowed and invested $30 for every $1 of the company's own money. During the housing boom, home buyers leveraged small down payments into big mortgages to buy more expensive houses than they could otherwise afford.

Levergages increased the risk to the homeowners and borrowers. Jus as important, it magnified profits. The investment return on a home depends on the amont of equity, not the purchase price. Some homeowners doubled and tripled their investment every year during the housing bubble, a tribute to the power of leverage. Small down payments, low interest payments, adjustable-rate mortgages and interest-only payment options made buying a home affordable to low- income people who had prevoisly rented. A rising tide of easy lending made the $1 million McMansion and the $750,000 beachfront condominium hot commodities. New homes got bigger and more expensive across the board. The largest growth came in homes costing $200,000 to 300,000. Sales of inexpensive homes plummeted after 2002 as high-risk mortgages proliferated.

Customers thought that if after three years interest rate incresed and they could not pay their loans, they can sell their houses thus they can gain more profits. After fisrt three years, bank for covering loan risks, increased interest rates from 3% to 5% and even 7%. In front of this, borrowers who were not able to pay loans, decided to sell their houses. Accordind to high interest rate, they did not find customer. So home prices start to fall and the bubble burst.

By bursting the bubble, borrowers did not pay their loans and banks faced to empty houses. Thus banks failed one afte another and crisis spread to other parts of America economy and recession started.

The Economic Crisis around the World

According to David Rathkopf (Rathkopf, 2009) these 13 countries probably will damage: Mexico, Pakistan, Ukraine, Turkey, Egypt, Iran, Russia, Venezuela, Argentina, Indonesia, Philippines, China and North Korea. During the crisis, ILO anticipated that global unemployment levels could reach from 29 million to 59 million in 2009[1] (ILO and GMG, 2009).

Given the dominant economic position of the United State in the global economy, the US economic crisis that started in 2007 impacted both developed and developing economies and the panic situation that has prevailed since then has affected both credit markets and trade flows and consequently, has caused global recession (Akhtar Hassain, 2009). Figure 3 shows the movement of real GDP in the United States in period the beginning of the year 2007 and until the beginning of the year 2009. The shaded areas indicate the period of U.S. recession that started in December 2007. Once the recession started, the real GDP was at about 11,640 billions of chained dollars. The curve demonstrates slow growth and rather stable GDP until August. According to BEA (Bureau of Economic Analyses) GDP decreased at annual rate of about 5.5% during the first quarter of 2009 (Funa, University of Ljubljana, 2009).From the start of 2008 until April 2009 unemployment in the United States shot up from 4.9 to 8.9 percent. In May 2009 the number of those who claimed unemployment benefits reached a peak of 6.66 million. In March 2009, 130,831 bankruptcies were declared in the United States – a rise of 46 percent compared with March 2008 and of 81 percent compared with March 2007. From the beginning of 2009 until the middle of April, 25 banks failed in the United States, compared with 25 for all of 2008, and three for 2007. As a result of the crisis in the large economic sectors, the situation of other countries has worsened as well, and some have

[1] refer to the GMG and ILO Fact Sheet on the Impact of the Economic Crisis on Immigration Policies.

required assistance from the International Monetary Fund. In the first quarter of 2009 GDP in the US dropped 1.6 percent (compared whit the previous quarter). Other developed countries are experiencing a dramatic economic low. In Germany, for example, in the first quarter of 2009 the GDP dropped 3.8 percent (compared with the previous quarter); in Italy, 2.4 percent; in Britain, 1.9 percent; and in the France, 1.2 percent (Shmuel Even and Nizan Feldman, 2009).

Responses to the Crises around the World

In response, following the advice of the IMF in particular, many developed and developing countries have implemented discretionary fiscal and monetary measures to revive their recessionary economies (Akhtar Hassain, 2009).

Monetary policy[2]

According to Economist Richard Swain (Swain, 2009, University of Sydney) the sharp decrease in consumer spending and business confidence that resulted from the financial crisis, reflected by falls in real personal consumption of 3.8% (3rd Qtr 2008) and 4.3% (4th Qtr 2008) for the United States economy, led to significant shift to the left of The IS curve in an IS-LM model. The result in the short-run was a substantial decrease in output and if the target interest rate had been maintained, output would have declined further to Y" as shown in figure 8.

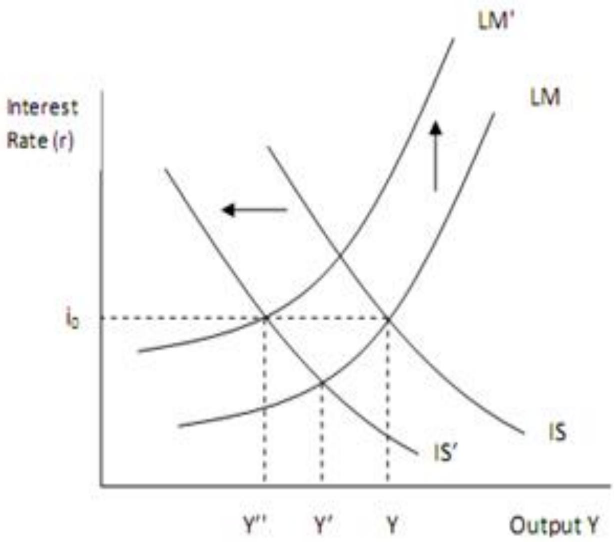

Figure 8

[2] Monetary Policy includes Conventional Monetary Policies and Non-Conventional Monetary Policies. Non-Conventional Monetary Policies collectively known as quantitative easing. At this paper we emphasis Conventional Monetary Policies.

Conventional monetary policies have been pursued in a co-ordinated effort to stimulate growth and stabilise the the global financial system with Central Banks cutting their policy interest rates dramatically since September 2007. For example, the Federal Reserve (0-0.25%), the Bank of Japan (0.1%), the Bank of England (0.5%) all reduced their policy rate targets to near zero.

By reducing real interest rates the Central Banks helped stimulate domestic demand through the six channels of the transmission mechanism. In Australia, the Reserve Bank of Australia (RBA) increased liquidity in the overnight cash market through numerous open-market purchases thereby lowering the interest rate through a downward shift of the LM curve. This helped offset the leftward shift of the IS curve, encouraging the maintenance of output levels at Y''' in the short-run as indicated in figure 9.

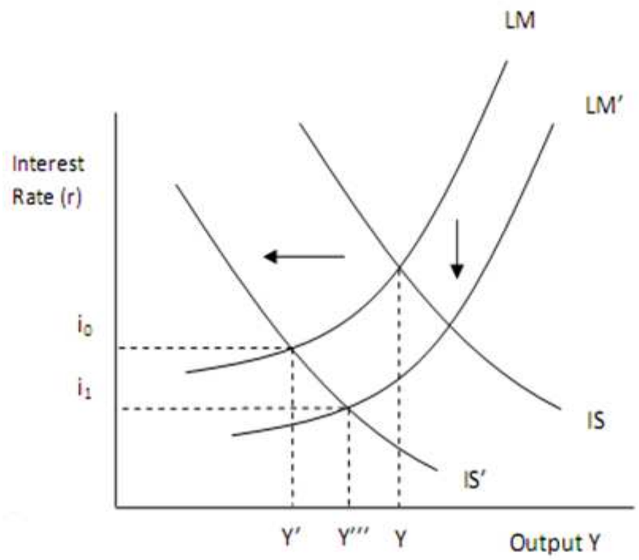

Figure 9

The expansionary measure was also appropriate because the interest rate cuts countered the upwards pressure on real interest rates from an upwards shift of the LM curve due to increased risk aversion and risk premiums helping maintain investment and output levels. For example, the RBA's 100 basis point cuts in December 2008 and February 2009 were very appropriate due to the reluctance of Australia's domestic banks to reduce interest rates because the breakdown of credit markets caused an increase in term premia and credit and liquidity spreads.

Fiscal Policy

Governments around the world have enacted expansionary fiscal policy to mitigate the impact of the economic crisis. The United States Government has responded with a number of spending initiatives worth 1.1% of GDP to stimulate aggregate demand. Other governments have also responded in kind, with the UK, French, German and Japanese governments passing discretionary spending initiatives worth 1.5%, 1.3%, 20.% and 2.5 of domestic GDP respectively whilst in Australia, a $42 billion Economic Stimulus Plan including targeted cash payments of $8.7 billion and $12.2 billion in December 2008 and February 2009 and a $22bn nation building plan has been implemented.

Such spending initiatives were appropriate if not vital. The first reason is that an increase in net government spending leads to a rightward shift of the IS curve implying higher output. Secondly, the appropriate use of traditional monetary policies led many countries to fall in to a liquidity trap were monetary policy can not stimulate investment further. The reason is once nominal interest rates are near zero any change in the money supply shifting the LM curve downwards will have no effect on output as shown in figure 10.

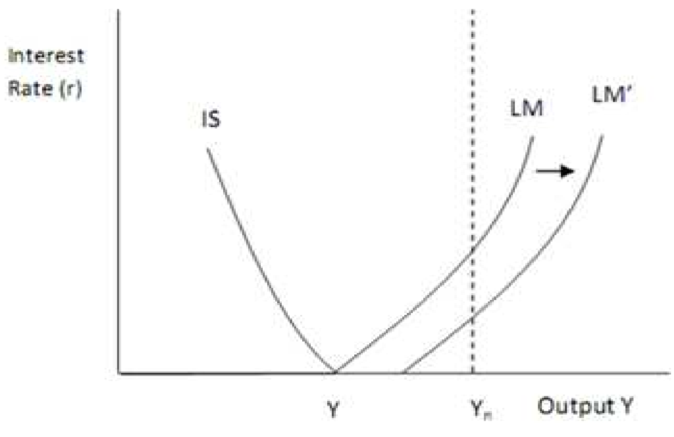

Figure 10

Moreover, the situation implies that output is below the natural level of output meaning a downwards revision of inflationary expectations. This posed a significant risk to economies as an increase in deflation when nominal interest rates are zero increases the real interest rate by Fisher's equation[3]. The higher interest rate then shifts the IS curve and hence the AS curve left and down respectively, placing an economy in a vicious downward cycle as shown in figure 11. Thus, the fiscal expansions adopted were appropriate to avoid deflation, the consequence of which were seen in the major economic problems in Japan in the 1990s.

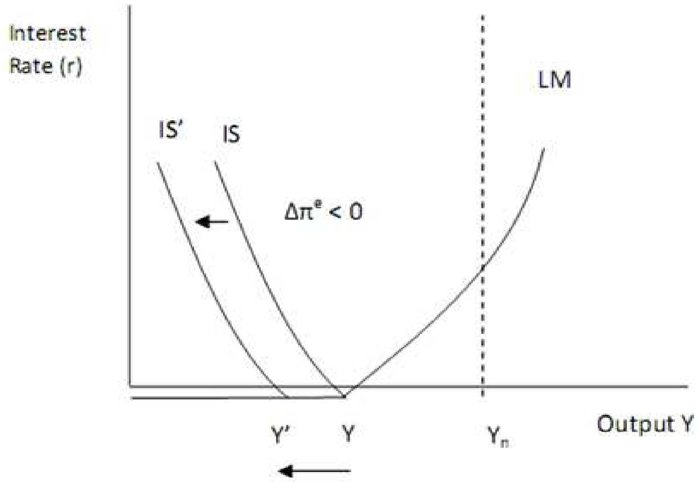

Figure 11

Expansionary fiscal policies have been implemented successfully to avert any onset of a liquidity or deflationary crisis and increase aggregate demand emphasising the appropriateness of the fiscal responses. For example, fiscal expansions were used successfully between 1950-1970 for demand management in Australia and a budged deficit of $4.6 billion after the 1982-83 recession helped the economy recover. In 1989-1990 a fiscal expansions contributed to Australia achieving growth of over 3.5% throughout the 1990. Moreover, fiscal expansions in the United States in 2001 reduced both the duration and extend of the recession following the Tech bubble burst and pump-priming measures by the Japanese Government helped stimulate a stagnant domestic economy in 1999, whit real GDP growth rate reaching 0.6%.

Conclusion

This recession showed however economic theories are developed, new theories are necessary, at least in the financial sector. Moreover, relationship between economies of countries increases risks and threats; when a great economy like America economy is facing to a crisis, it is not only for that country. It could be global. So, new theories in international finance and economics are predicted.

[3] $r = i - \pi$; where r - real interest; i - nominal interest rate; π - inflation rate.

References

1. Even, Shumel; Feldman, Nizan; Implacations of the global Economic crisis, 2009

2. Funan, Lura; University of Lyublgana ; Undergraduate thesis; The relevance of Keynesian economics in times of economic crisis; 2009

3. Hossain, Akhtar; The US financial crisis, Global Recession and Monetary Policy: An Assessment from the East Asian Prespective; University of Newcastle, 2009

4. Swain, Richard; Policy Responses to the Global Financial Crisis, University of Sydney, RBA Economics Competition, 2009

5. Cauchon, Dennis, Why Home Values May Take Decates to Recover, USA Today, 2009

6. Mankiw, N. Gregory, Macroeconomics (Ebook), fifth edition

7. Rahmani, Teimour, Macroeconomics, Baradaran Publish, 2009

8. Rathkopf, David; Shojaei, Kaveh, Payame Otaghe Urmia, March-April 2009

9. Heidarianpoor, American Economy domina, Kaveh, Payame Otaghe Urmia, March-April 2009

10. Solutions in some Selected Countries for Contrasting to the Financial Crisis, Iran Trading Development Organization, 2009

11. Broucks, John; Ivanes, Robbert; Jirvand, Abdollah, Macroeconomic Policy in Theory and Practice, Ketabe Mehrbane Nashr, 2005

12. Ghadiri Asli, Bagher, History of Economic Thought, Tehran University Publish, 1990

13. Gharagozlu, Mohammad, Socialism, the Main Alternative of the Neo Liberalism and Keynsysm, Economic and Political Ettelaat, 259-260, 2009

14. Lashkari, Mohammad, World financial Crisis and its impact on the Iran Economy, Economic and Political Ettelaat, 259-260 2009

15. Gharagozlu, Mohammad, Kynsysm instead of neo liberalism, , Economic and Political Ettelaat, 261-262, 2009

16. Blanchard, Oliver; Zobeiri, Hoda, continuance of Global Economy Improving, Economic and Political Ettelaat, 265,266, 2009

17. Namazi, Hossein, Current West Economic Crisis, IRI science House, 2009

18. Gharib, Hossein, Environmental Crisis and Structural Changes, , Economic and Political Ettelaat, 255-256, 2009