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History of Economic Thought

The Forgotten Austrian Economics Language

Elena Bianca Vieru[1]

Abstract: In light of the current events, namely the crisis that economy has to face for quite some years now, plenty of questions are raised, not only among specialists in the field but also among ordinary people as they prove to be most impoverished by these imbalances. Thus, this paper aims, as a first objective, to explain, from a general perspective and using an inductive-subjective methodology based on a brief survey as well as on observation, two of the most important causes that, according to the Austrian Business Cycle Theory, are the leading motives for triggering crises. We are referring particularly to an excessive **state interventionism** manifested throughout its **expansionary monetary policy.** Secondly, we seek to establish the interconnections between these elements and the case of the Great Depression as well as the current recession. The results we came across point out towards the same pattern designed by the Austrian economists, although the circumstances are, each time, different. Hence, the contribution of this paper consists of handling the details that surround the subject by extracting only the essential aspects regarding the triggering of crises; we refer to the main ideas that need to be underlined for a better comprehension of the topic.

Keywords: Austrian School; crisis; business cycle; Great Depression.

JEL Classification: B13, B25, E20, E32, E40, E50, N12.

1. Introduction

„*The great inflations of our age are not acts of God. They are man-made or, to say it bluntly, government-made. They are the offshoots of doctrines that ascribe to governments the magic power of creating wealth out of nothing and of making people happy by raising the "national income.*" (Mises, 1953, p. 1)

We chose to use a quote from Mises' *Theory of Money and Credit* as a starting point for our analysis because we consider it to be quite relevant when trying to synthesize the general Austrian point of view regarding the triggering of crises. Hence, the economic imbalances contain precious information that, if used properly, is able to lead the way towards prosperity. From this point of view, crises

[1] PhD Student, Alexandru Ioan Cuza University of Iasi, Romania and Lorraine University, Nancy, France, Bureau d'Economie Théorique et Appliquée (BETA), Address: 11 Carol I Blvd, Iasi 700506, Romania, Tel: +40 (232) 201000, Fax: +40 (232) 201121, Corresponding author: vieru_elena_bianca@yahoo.com.

should be viewed as meaningful lessons. They manage to reveal significant clues regarding the crucial aspects of an imbalance and how to overcome them, in the future. Unfortunately, these relevant details are neglected or ignored. Once the crisis vanishes, the triggering causes are as good as forgotten, therefore, the measures that would help avoid further imbalances are completely abandoned. It seems as if only quite a few have eyes to actually observe and subsequently preach them.

Nevertheless, it is quite certain that every crisis is different and, without any doubt, every time we have to deal with new, challenging and persistent factors. However, the pattern is, in most cases, the same although the circumstances could be and, in most cases, are, indeed, different. This skeleton dresses each time new clothes, under the form of various factors, which determine the particularity of every situation. Just as on the operating table of a surgeon are placed various tools which will be used during the procedure, from the same chain of ideas, we can talk about the case of economists who use certain economic indicators, which take the place of the medical utensils, to analyze and determine the disease known under the name of crises. To this analogy we could add the experience, as well as the particular type of work embraced by every doctor who, most certainly, differs from the others from his branch. Thus, the economic tools used for operating and recovering the economic apparatus differ from one doctrine to the other. The present "operation" finds its path under the aegis of the Austrian School of economics, more specifically, it is accomplished through the vision of the Austrian Business Cycle Theory. Although, philosophically speaking, we breathe the same economic air, the key answer stands in the perspective from which we analyze the situation.

The particularity of their approach manifested through a totally different manner regarding the onset of crises, altogether with the recommended therapeutics, a point of view which carries a distinct mark compared with the one chosen by most of the mainstream economists nowadays, led us to deciding upon this topic. Our first preoccupation, the case of the 1929-1933 crisis is, without any doubt, a particular one as it is the most violent of its kind. Although the phenomenon that unleashed itself during that period is a very complex one and it determined economists all over the world to unbury the past and develop complex studies in order to find precise answers, the inflicts are countless and it is quite difficult to determine an accurate ongoing of the events. The same problematic stands upon nowadays economic issues. Thus, it determined us to try and answer, as clearly and simply[1] as possible, to the following questions: *Under which circumstances did the economists belonging to the Austrian School, particularly the deans Ludwig von*

[1] We are using the word simply because we want to induce the idea that this article is not addressed only to specialist but to ordinary people as well; their understanding of the situation is crucial and might be considered as one of the saving solutions.

Mises and Friedrich August Hayek, managed to observe the clues and launch warning signals before the actual triggering of the Great Depression started? And, to what extent did the contemporary Austrian economists follow the path marked by their predecessors considering the foreseeing of the current events?

For someone who understands how a healthy economic mechanism should function and who, under these given conditions, masters a rather well developed spirit of observation it is easy to solve the puzzle containing the direction towards which to tip the balance. The hints that predicted the 1929 depression as well as the 2007 - present recession were, in the opinion of Austrian economists, quite obvious and revealed themselves particularly under the form of two important elements.

The first clue is related to the **expansionist monetary policy** that led to a deterioration of credit and brought a high level of inflation. The second sign derives from the implementation of a series of protectionist measures or, in other words, the embrace of excessive **state interventionism**.

2. Predictions, Then Crisis

It is now a wider and wider accepted the fact that two of the most influential economists of their times who truly managed to foresee the 1929 crisis were part of the Austrian School of Economics. While Irving Fischer and John Maynard Keynes were overflowing with optimism, arguing that global economy is flourishing, Mises and Hayek were the ones who were launching alarm signals, warning that U.S. economy is on the verge of a big collapse. Therefore, in the late 1920s, Mises (1953, 2006) was convinced that a crisis is lurking just around the corner. His conviction was drawn from the fact that U.S. economy had known a series of technological innovations that increased productivity and thus turned into an expanding supply of consumer goods, a rising stock market and a massive real estate boom; and all this was happening while prices roses by 2% per year. In his opinion, it was undoubtedly the hands of Central Banks maneuvering the reins of monetary policy[1]. Meanwhile, Mises realized that the credit expansion, performed abusively during that period, would lead sooner or later to an economic disaster: "*The economic consequences of credit expansion are due to the fact that it distorts one of the items of the speculator's and investor's calculation, namely, interest rates. He who does not see through this, falls victim to an illusion; his plans turn out wrong because they were based on falsified data. Nothing but a perfect familiarity with economic theory and a careful scrutiny of current monetary and*

[1] For Austrians, economic regulation is always destructive of prosperity because it misallocates resources and it disturbs the natural way in which a market economy functions.

credit phenomena can save a man from being deceived and lured into malinvestments" (Mises, 1953, pp. 251-252).

The Misesian perspective is, from certain points of view, different from the Hayekian one. However, we will not insist upon this particular aspect as it does not represent the focus point of our research. The significant part consist of the fact that both of them manage to submit, quite clearly, the mechanism through which monetary expansion, accompanied by loans that exceed the rate of voluntary saving, can determine a misallocation of resources, particularly affecting the structure of capital.

According to Hayek (1931, 1933), when the quantity of money is increased, the new money is injected in some particular way, either via Central Banks through freshly printed money or via Commercial Banks through the channel of fractional reserves system, actions which temporarily distort relative prices causing the price system to communicate false information about consumer preferences and resource availabilities. Hayek also showed, along his research, that money-induced movements in the interest rate prove to affect the capital structure. The cluster of these circumstances would eventually lead to an economic collapse. His theory is rather complex and detailed and it does not represent the purpose of this paper as it deserves a separate approach.

For Mises and Hayek, the trade cycle theory was an attempt to integrate an understanding of a complex capital structure into a monetary exchange economy (Boettke, 2001, p. 34). Nevertheless, a very brief representation of the mechanism elaborated by the Austrian economists would look like this: **State -> FED -> Commercial Banks -> Capitalists -> Erroneous Investment -> Depression**.[1]

The general pattern that sprung under the form of the already mentioned interventionist monetary policy can fit the present recession as well. The crisis erupted when the U.S. real estate bubble exploded in 2007. Commercial banks, hungry for maximizing their profits, began to give „identity card only" credit (to use the Romanian version) to customers who were not capable of carrying such a credit. Thus, a large number of *subprime loans*[2] were launched, most of them having a mortgage nature. We are referring to those types of loans that bared a high degree of risk as they were granted without any warranty and a prior verification of their worthiness. This cheap currency, once launched on the market, led to a boom in the real estate, encouraging the „trend" of having more properties than can be occupied. Looking from an aggregate perspective, *lax standards for approving loans*, *the initial beneficial terms* and *the long-term projections of growth in the real estate sector* were the factors that determined the bubble burst. Housing prices

[1] See in this context Vieru (2011).

[2] Subprime loans are the type of loans given to people who either have a repayment history, or have poor financial possibilities, in terms of conventional banks.

recorded a noteworthy increase between 1997-2006, particularly an increase of 124%. Compared with the average annual income, the average price of housing increased approximately from 3 to 4,6 times more in 2006. High-risk mortgage loans (the subprime) increased from 5% in 1994 to 20% in 2006. The use of new types of loans, the so called NINJA (No Income No Job No Assets) had led to real problems. As a consequence of the real estate bubble burst, all those who were drawn into investing in this sector have suffered enormously. The panic signs determined financial institutions to realize the subprime mortgage loses and tried to follow a series of recovery measures. But it was already too late.

Not many alarm signals were launched before 2006 as there were quite a few who benefited from the situation. However, before the onset of the crisis, Shostak (2003) was launching a rather rhetorical question whether the housing bubble that was forming during that period might be considered a myth or a reality. As a continuation, Mayer (2003) further developed the housing bubble problematic, exposing the grave situation towards which the economy was heading. The data analysis comes to support their arguments.

Further, White (2006, p. 1) pointed out that *"...persistently easy monetary conditions can lead to the cumulative build-up over time of significant deviations from historical norms—whether in terms of debt levels, saving ratios, asset prices or other indicators of 'imbalances.*" White is followed by other Austrian economists, like Taylor (2007) or Reisman (2007) who discover and further explained the mechanism behind the triggering of crises, with particular interest on the Great Recession that exploded in 2007.

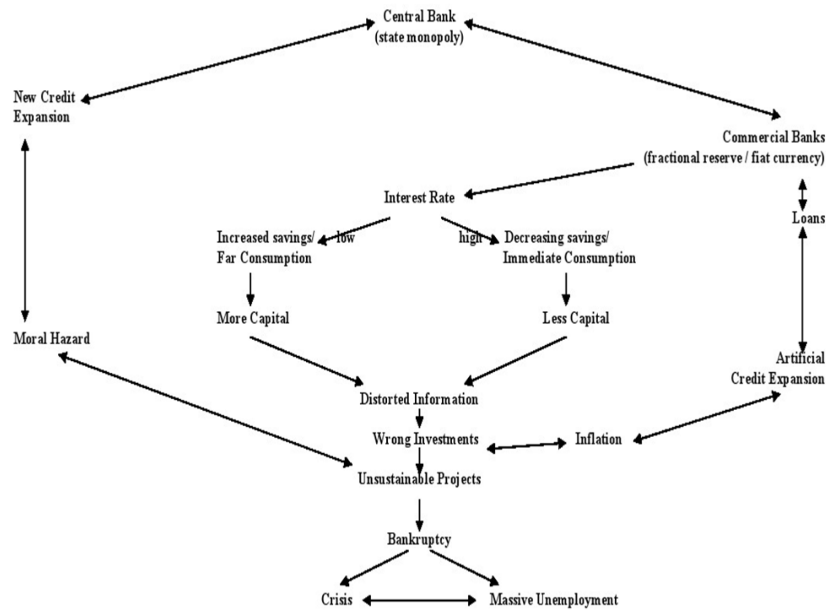

Figure 1. Austrian Business Cycle

Source: own creation

Therefore, the main problem that determined the triggering of the studied crises, the key element, was undoubtedly artificial credit expansion. Why is it named artificial? What does this expansion basically entails? The explanation is rather simple and easy to follow.

3. The Answer: Austrian Business Cycle

Artificial credit expansion is considered to be an artificial one as it doesn't have a correspondent increase in the voluntary savings of population. Doubtless, in a healthy economic environment investment is financed out of loans granted by banks and based on the resources drawn from citizen's voluntary savings. We are referring to the term deposits, meaning the money that population is willing to give up, temporarily and consciously, in exchange for the benefits arising from interest.

By granting credits out of resources that are part of demand deposits, interest rate, a true market signal, is going below its natural and normal value. Therefore entrepreneurs have to face distorted information about consumer preferences related both to consumption and to the action of saving. Consequently, we can admit, without any doubt, the fact that this leads to erroneous investment which eventually prove unprofitable and mark the way towards massive unemployment

and severe crises. This was, in a very brief manner, the story behind the outbreak of the analyzed crises.[1]

Our first focus represents the twenties, or better known as the Roaring Twenties[2], a period that can best be described as the time when the United States embarked on the vessel of progress and innovation. This was the time when the impetuous started to unleash itself; it was the pre-crisis phase that lasted roughly eight years. The blame for the great number of investment errors can be casted upon the expansionary monetary policy supported by the FED during the 1920s. The cluster of failed entrepreneurship plans as well as the elaborated bailout system brought upon the worst crisis that the XXth century came to know. The first and most relevant period for our hypothesis is 1921-1925. That is, most certainly, when the highest amount of injections took place as the level of commercial bank inflation increased with over 37% in money supply, precisely $6.9 billion. The years 1925-1929 revealed a lower level of inflation, when compared to the previous period, but it can still be view as a significant perturbation as it provided an increase of 15.3%, meaning $3.9 billion in money supply. The origins of these substantial injections were laid by the increase in total reserves which registered an augmentation of 35.6% in the 1921-1925 period and of 8.7% between 1925-1929. The discrepancy was due to an augmentation from 11.7:1 to 12.5:1 in the reserve ratio which, consequently, determined the creation of several dollars in deposits corresponding to every dollar held as a reserve.[3]

Having a constant fear of deflation, which was considered as an enormous impediment on the path that was leading towards industrial development and, nevertheless, economic progress, casted a veil upon Coolidge's', Hoover's and then Roosevelt's' eyes, urging them to take the economic reins and to guide them towards a higher amount of involvement manifested through a lowering of the level of interest rates below their natural values (Robbins, 1934). Thereby, by maintaining a depreciated level of the refinancing rate, FED borrowed massively during the twenties, continuously feeding the impetuous of inflation and not of prosperity as they thought they would. Without any doubt, the first answers regarding the recognition of the triggering of crises come from FED and its functioning mechanism. However, the most consistent ones can be found if we dig the commercial banks underneath's; and here we place a significant accent on how they manage to juggle with the two totally different types of deposits, the time and demand ones. These jugglers are viewed as primarily responsible for the massive monetary inflation of the 1920s (White, 2010). The explanation is rather simple as it comes from the required reserve ceiling. Hence, while demand deposits required a reserve of 10%, time deposits claimed only 3%. Consequently, while demand

[1] See in this context Mises (1953, 2006).

[2] For details concerning the Roaring Twenties see for example Robbins (1934) and Rothbard (1972).

[3] All data are taken from Rothbard's America's Great Depression (1972).

deposits increased by only 30.8% during 1921-1929, time deposits grew double in value by no more and no less than 72.3% (Rothbard, 1972, p. 99).

From this first main cause that we described above derives implicitly a second one. Both are tightly related and might be considered as one and the same as the expansionist procedure derives from the state involvement, it is recommended to discuss them separately. Hence, according to the business cycle theory, a hypothesis first formulated by Mises and then upgraded by Hayek, crises like the 1929 one cannot be caused by individual trading decisions, but they stay in the shadow of Central Bank (in the case of U.S. we are referring to the FED) action to issue money without coverage.

There is one important aspect that we should strongly take into consideration, an issue that is still raising numerous questions, namely the level of governmental interventionism during the 1920s period. The same problem keeps economy in chains nowadays also. It has been proven that, during the period of the Great Depression, this level reached high quotas, higher than before. One of the proofs is the fact that a special governmental agency had been created precisely to prevent crises or other associated problems such as for example banking panics. This agency we are talking about is the Federal Reserve Board (FED) and it had and still has the role of lender of last resort for banks. Its main purpose was therefore to prevent collapses and "save" the economy from recessions. However, Austrian economists manage to reveal how its role proved to be the exact opposite as: „*Before the establishment of the Federal Reserve System, national banks were not legally permitted to pay interest on time deposits, and so this category was confined to the less important state banks and savings banks. The Federal Reserve Act permitted the national banks to pay interest on time deposits. Moreover, before establishment of the Federal Reserve System, banks had been required to keep the same minimum reserve against time as against demand deposits. While the Federal Reserve Act cut the required reserve ratio roughly in half, it reduced required reserves against time deposits to 5 percent and, in 1917, to 3 percent.*" (Rothbard, 1972, p. 100). Therefore, according to Austrian School economists, namely Rothbard (1972), Robbins (1934), White (2010) and Smiley (2008), the evil unleashed itself once the invention of FED took place.[1]

The reason for the boom and the inevitable depression was due to the monetary policy played by FED before and after 1929. Under the influence of some economists, including Irving Fisher, the FED sought stabilization of the general price level on the ground that both inflation and deflation were harmful. Given the expansion of goods and services during the Roaring Twenties, the level of prices

[1] It is confined by the Austrian economists that, since the creation of the Federal Reserve System, the value of the dollar declined around 98% and that the blame should not fall on the shoulders of the market but on the ones belonging to the central bank, whose institutional logic carries it on an inflationary wave of counterfeit money.

was expected to decline slowly, and this would have probably happened if it weren't for FEDs intervention in such a complex system called economic mechanism.

The cause that determined the authorities to pump additional amounts of money and credit in the market, thus leading to a monetary expansion, was clearly the thought that the decline in prices might be a sign of "bad"[1] deflation. The intention was seeking to prevent prices from falling. The problem was that it wasn't the case to adopt those measures as the falling prices were a simple consequence of the fast development of economy. Therefore, under these circumstances, the results were disastrous. Hence, banks were able to lend the newly baked money by lowering interest rates below what Austrian economists call their natural, wicksellian[2] level. Since the monetary expansion prevented prices from falling, no inflation appeared to be harmful. Therefore, the extent of monetary inflation was well hidden by the apparently stable level of prices. However, the distorted investment and the savings-investment imbalance were as real as possible.

By the late 1928 and the early 1929, FED had eventually woken up from its beautiful dream and displayed concern regarding the fact that its expansionist monetary policy was threatening a significant increase in the price level. Along with that came the fear concerning the collapse of the currency, an immediate consequence of an ill economy which was fed with hyperinflation. Monetary breaks were finally pulled and by the end of 1929 the stock, investment and real estate markets went down the drain, one after another. The real crisis had begun.

What can be inferred from the ideas mentioned above is that the magnitude of crises can be predicted by monitoring the level of inflation through the involvement of central and commercial banks; the former operates with interest rates while the latter uses both the time and demand deposits under the same basis. These are the leading anticipative methods known and used by Austrian economists, the ones that have been used, as well, by Mises and Hayek to foresee the Great Depression.

Following the same pattern, inside the current economic events, the main accusation brought by the Austrian economists is linked to the action of artificial credit expansion. The many investment errors that caused the current crisis sprang from the monetary expansion that took place during the tenure of Alan Greenspan

[1] According to their oppinion, the deflation is a real threat to the industries as a low price level is not able to support the production process by giving entrepreneurs their anticipated profit.

[2] The idea behind the equilibrium interest rate was advanced by the Swedish economist Knut Wicksell who argued that an increase in the normal price level had their origins in an excessive increases in the monetary base. Through the natural rate concept, his purpose became to clearify the mechanism behind the expansionist maneuvres as well as to disentangle the root of the conections between the monetary base, banks' credit expansion, aggregate demand, and inflation. Wicksell based his theory on a comparison between the marginal product of capital and the cost behind money borrowing.

at the Fed. The old fear concerning the prospect of a possible deflation, following the bust of "dot.com" from 2000 and the events that took place on September 9, 2001, determined the Fed to revive the credit decision through a series of interest rate cuts in the interbank market, cuts that have gone from 6.5% in November 2000 and arrived in July 2003 to 1%. This incredibly small amount remained at the same value for approximately one year, until June 2004 (Reisman, 2007).

The latest events seem to prove, one again, that the history really does repeat itself and that the consequences are increasingly wider, pressing heavily on the shoulders of the economy.

4. Conclusions

Admitting that it is hard to distinguish booms from sustainable growth, our research tried to provide a helping hand under the form of a better understanding of the separation between these two phases of economy; we pointed towards the evolution of two of the most powerful crises that economy had to face: the Great Depression and the Great Recession.

Expansion and excessive **interventionism**; these are the two words that can synthesize and characterize, in light of the Austrian point of view, the triggering of the 1929-1933 plus the 2007-present crises. Presented in a simplistic yet comprehensive manner, these are the Austrian hints that could have helped prevent or, at least, diminish the harmful and destructive effects of what we consider to be two of the most violent crisis of the XX, respectively the XXI century. These are the indicators that have raised numerous question marks, firstly, among both Mises and Hayek and secondly among contemporary Austrian economists, determined them to launch signals about the hazardous state in which the economy was heading towards.

When economy meets a powerful impetus people embark on an optimistic ship, without even considering seeking its true nature or the triggering causes of the boom that is forming under their eyes. During these precise moments Austrian economists are the only pessimist ones. When crises occur roles are reversed as people become worried while the Austrians become optimistic. At a first glance, this seems like a completely absurd approach. However, Austrian economists rush to give this statement a sense as their explanations sustain the fact that the crisis represents a natural way of correcting the errors that economy encountered up until then, a path that leads towards recovery and the healing of an economic system which has been suffering from a grinding disease. The recession is, therefore, the needed treatment; and sometimes medicine tastes bad but one still has to swallow it in order to get better.

Although more than 80 years have passed since the triggering of the Great Depression, the events that shook the pillions of the economic structure are still raising various problems and generating controversy. The last crisis that the economic apparatus had to endure since 2007 was, in many ways, similar to the one in 1929, therefore this can only mean the refusal to learn the obvious lessons that history could have tough during the years. The Austrian School, through their Business Cycle Theory, embrace the hypothesis that the more intervention economy has to face the worst the scenario of the recession will be and truly consider that a **free-banking system**, without the bailing central bank and with the commercial banks working based on the **100% reserve system** might actually do the trick[1]. Less debt and more savings were crucial back in 1930s as they are nowadays. Although accused by most economists who pull up the sleeves and think they are giving a helping hand to cure the disease, Austrian economists, guided by the leading views of Mises and Hayek, prefer not to react to the ongoing of a depression as they truly believe in self-regulated markets. The free markets, and only them, are able to coordinate the connection between time and interest, such an important aspect for further economic development. By choosing to get involved, the majority ceases to see their actual leading towards creating the problems and not solving them. Hence, the healing mechanism suggested by its representative figures, especially the one proposed in a very detailed manner by Jesus Huerta de Soto in his treatise *Money, Credit and Business Cycle* must not be neglected: *"The solution lies in the following: the privatization of money and the introduction of a rigid monetary system such as the pure gold standard; the establishment of a 100% reserve requirement on demand deposits, as with any other deposit of a fungible good, such as wheat or oil; and the elimination of central banks, which in modern market economies are the only socialist planning agencies in the monetary sphere that remain operative."* (Huerta de Soto, 2010, p. 782)

Austrian economists strongly believe in their reform[2] and are completely aware of the tragedy that lies underneath the line of events that are affecting the economy. Among the already mentioned series of causes that bear the guilt of economic imbalances, they are convinced that a very important yet tragic part is actually the lack of veracious information. Understanding the true causes that are leading to the triggering of crises might represent a real solution.

[1] See Huerta de Soto (2010).

[2] Austrians believe in their approach and propose a fundamental reform of economic environment. The Misesian perspective convokes the return to the 100% gold standard as well as the renunciation of fractional-reserve commercial banking and the abolition of the central bank, while Hayekians advocate a system where consumers reign as they are able to choose the currency, from a variety of alternatives that fits them best.

The complete comprehensibility of the Austrian theory transposes the multitude of errors from theoretical towards the factual realm, one who became as real as possible. Therefore, things can be seen either in black or white. White is represented by the Austrian libertarians, while the mainstream interventionists occupy the black segment. A middle solution does not exist as gray is nowhere to be found in the color palette that describes the economic sphere. This could be explained by the fact that the necessary change must be a radical one, capable to reform the foundations of the dominant economic system from 1920 up until today.

Being such a vast and alive subject, our further challenge consists of the attempt to model some of the indicators that act as a warning signal for Austrian economists, namely interest rate, inflation etc.

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6. References

Boettke, Peter J. (2001). *Calculation and Coordination: Essays on Socialism and the Transitional Political Economy*. London: Routledge.

Cochran, J. (2010). Capital in Disequilibrium: Understanding the Great Recession and the Potential for Recovery. *Quarterly Journal of Austrian Economics*, Vol. 13, No. 3, pp.42-63.

Dadkhah, K. (2009). The Reagan-Thatcher Revolution: The Age of Hayek and Schumpeter. *The Evolution of Macroeconomic Theory and Policy*, Vol. 10, pp. 213-230.

Hayek, F.A. (1933). *Monetary Theory and the Trade Cycle*, in *Mises Daily*, Ludwig von Mises Institute, http://mises.org/daily/3121.

Hayek, F.A. (1932). *Prices and Production*. Ludwig von Mises Institute, http://mises.org/books/pricesproduction.pdf.

Huerta de Soto, J. (2009). The essence of Austrian School. *Economic Affairs*, Vol. 29, Issue 2, pp. 42-45.

Huerta de Soto, J. (2010). *Monedă, Credit şi Ciclu Economic/Currency, Credit and Economic Cycle*. Ludwig von Mises România, http://mises.ro/608/.

Hülsmann, Guido Jörg (2008). Deflation and Liberty. *Mises Daily, Ludwig von Mises Institute*, http://mises.org/daily/3231.

Keynes, J. M. (2009). *Teoria Generală a Ocupării Forţei de Muncă, a Dobânzii şi a Banilor/ General Theory of Employment, Interest and Money.* Bucharest: Publica.

Mayer, C. (2003). The Housing Bubble. *The Free Market*. Ludwig von Mises Institute, http://mises.org/freemarket_detail.aspx?control=450.

Mises, L. (1943). Elastic Expectations and the Austrian Theory of the Trade Cycle. *Economica*, Vol. 10, pp. 251-252.

Mises, L. (1953). *The Theory of Money and Credit*. Ludwig von Mises Institute, http://mises.org/books/tmc.pdf./

Mises, L. (2006). *The Causes of the Economic Crisis (And Other Essays Before and After the Great Depression)*, originally published as 'On the Manipulation of Money and Credit' in 1978, Ludwig von Mises Institute, http://mises.org/resources/3361.

Reisman, G. (2007). The Housing Bubble and the Credit Crash. *Mises Economics Blog*. Ludwig von Mises Institute, http://archive.mises.org/006967/.

Robbins, L. (1934). *The Great Depression*. Freeport: New York.

Rothbard, M. (1959). *Did Capitalism Caused the Great Depression*. Ludwig von Mises Institute, http://mises.org/daily/2845.

Rothbard, M. (1972). *America's Great Depression*. Ludwig von Mises Institute, http://mises.org/rothbard/agd.pdf.

Shostak, F. (2003). Housing Bubble: Myth or Reality? *Mises Daily*. Ludwig von Mises Institute, http://mises.org/daily/1177.

Shostak, F. (2006). The Prophet of the Great Depression. *Mises Daily*. Ludwig von Mises Institute, http://mises.org/daily/2344.

Smiley, G. (2008). The U.S. Economy in the 1920s. *Library of Economics and Liberty*, http://www.econlib.org/library/Enc/GreatDepression.html.

Spitznagel, M. (2009). *The Man Who Predicted the Depression, in The Wall Street Journal*, http://online.wsj.com/article/SB10001424052748704471504574443600711779692.html.

Steele, G. R. (2005). Hayek's Theory of Money and Cycles: Retrospective and Reappraisal. *Mises Daily, Ludwig von Mises Institute*, http://mises.org/journals/qjae/pdf/qjae8_1_1.pdf.

Thornton, M. (2008). Mises vs. Fisher on Money, Method, and Prediction: The Case of the Great Depression. *Ludwig von Mises Institute*, http://mises.org/journals/scholar/Thornton16.pdf.

Taylor, J. B. (2007). Housing and Monetary policy. *Housing, Housing Finance, and Monetary Policy*, Kansas City: Federal reserve Bank of Kansas City, pp. 463–76.

Vieru, E. B. (2011). How can we anticipate crises? *The Annals of the "Ştefan cel Mare" University of Suceava. Fascicle of the Faculty of Economics and Public Administration*, Vol. 11, No. 2(14), pp. 128-134.

White, L. (2010). The Roaring Twenties and the Austrian Business Cycle Theory. *The clash of economic ideas*. Cambridge University Press: Cambridge.

White, W. (2006). Is Price Stability Enough? *BIS Working Papers No. 205*, Basel: Bank for International Settlements.