Theoretical and Applied Economics
Volume XXIII (2016), No. 1(606), Spring, pp. 171-182

Macroeconomic strategies for the prevention of economic and financial crisis

Cătălin-Emilian HUIDUMAC-PETRESCU
Bucharest Academy of Economic Studies, Romania
catalinhuidumac@yahoo.com
Alexandru Cătălin POPA
Bucharest Academy of Economic Studies, Romania
alexandrup86@gmail.com

Abstract. *The role of any macroeconomic policy, regardless of the economic school of thought which they are based, is to create a stable economic environment and to ensure sustainable growth in the long term. This involves the prevention of economic and financial crisis, which actually means to correct any major imbalances before they produce their destructive effects in the economy. This article is intended to be a critical analysis of fiscal and monetary policies, based on the main schools of thought, in terms of their effectiveness in preventing crises.*

Keywords: macroeconomic theories; economic model; economic crisis; anti-crisis strategies.

JEL Classification: E44, Q54, E43.

1. Introduction

The recent economic and financial crisis that humanity has crossed questioned many of the conclusions produced by theories of economics which until recently were considered by many analysts absolute truths. Controversies are related to supporter's ideological options, but generally falls within the ideological conflict between state interventionism in economies and free market. Monetary and fiscal policy errors often caused artificial growth. Balloons, no matter in which form, always burst sooner or later, and their effects reach other segments of the economy. Most often, their forming coincides with misallocation of resources in economy, later requiring measures to support the recovery which also means discretionary consumption, perpetuating inequity.

The effects of the recent crisis were among the toughest and were seen around the world in increasing unemployment following the closure of businesses, in increasing interest rates and default rates paid to banks (which sometimes even led to foreclosures) and in a general reduction of purchasing power and consumption.

Economic and financial crisis is the result of the conjugate failure of main economic actors, coming mainly from the financial environment, in building long term business models, of the authorities – regulators, legislators, central banks – in preventing the crisis through macroeconomic adequate policies and regulations and of the economic science in creating theoretically support of reliable long-term business models. For some time, economic practice has maintained an almost blind trust in the efficiency of free markets and economic theories of this type dominated other theoretical options. But every science must be able to challenge its fundamental assumptions, at least when reality no longer fully confirms them. Economics plays a crucial role in ensuring the wellbeing of individuals as it creates the framework where ideas are generated and promoted, which are then accepted by decision makers and implemented by the competent authorities.

This paper is divided into five parts. After introduction, there is a part dedicated to the overall evolution of the economic crisis both in the developed and in the developing economies around the world. The economic crisis started in 2007, first as a crisis of the US financial system has spread rapidly to all levels of the economy and in most countries. The fast extension on other continents took place on a background of old issues of world economies related to the heterogeneity in countries development or to some major worldwide trade imbalances, problems that, up until the crisis were not felt so easy. Beyond this, many investors were attracted primarily by the prospect of investing in US financial markets, but also in countries of origin. The third part of this article discusses the fiscal policies adopted by policymakers in most EU Member States before the crisis and how they have contributed to the widening of financial crisis. The fourth chapter is about the monetary policies adopted by central banks around the world before the financial crisis which were especially influenced by Milton Friedman's monetarist political vision promoted in the 1970s. The last chapter is dedicated to conclusions.

2. The economic crisis evolution

The origins of the current crisis lie in the US financial system errors before 2007 that fueled years of growth models based almost solely on consumption. The fast increase in housing prices was due mainly to credit becoming easier and based exclusively on guarantees provided by borrowers in the form of mortgages on real estate purchases (the so-called subprime loans). Creating complex derivatives allowed American credit institutions to transform these risky assets into cash, thereby avoiding the few existing prudential regulations and feeding the whole process. These assets tied to mortgages on homes and assessed by renowned rating agencies as safe, were mostly sold by various financial intermediaries with an activity different from that of credit institutions such as investment funds/banks or insurance companies, which allowed the latter to assume higher risks. As long as banks could find increasingly more customers willing to borrow, the housing price were increases, and borrowers who had difficulties to repay rates could refinance the loans by contracting other new and higher loans (the mortgages value was increasing).

This system was obviously unsustainable, worked for years under the eyes of authorities that had the task of ensuring the stability of financial systems. The effects were mainly seen in the construction sector where developers were trying to keep up with demand growth of new housing, but also in the rest of the real economy, the loans fueling, even if less, private final consumption of any kind.[(1)] This way there have been created major imbalances between real household purchasing power and consumption, the effects being not immediate nor any readily observable.

The main factor that fueled the scheme has been creating and developing financial derivatives markets. The maturation of this instrument market has stagnated or began to decline slightly. At this stage appeared the first default situations which have increased gradually. Practically the entire circuit was reversed; banks began to execute real estate collateral, demand has increased considerably and prices have dropped further. Under market forces, macroeconomic equilibrium started to recover, but with negative effects not only on individuals. This moment was the beginning of the crisis. The negative effects in the financial system were so strong that endangered its main function in economy, which is intermediation of financial resources. Bankruptcies of major players in the financial sector, of which the most spectacular remains that of Lehman Brothers bank in 2008, generated large liquidity problems throughout the US economy, including the real sector and a general state of panic for investors. The construction market collapsed and consumption decreased considerably being fueled no longer by subprime loans.

In Europe the crisis manifested itself in a relatively similar way although the housing market has not had a similar pattern, European banks couldn’t grant loans as easily as those on the American continent. However, European banks in developed countries have been attracted by the high yields offered by financial derivatives and did not hesitate to

buy them. Also, over issues brought by the holding US toxic assets overlapped some old issues that were related to the European economic model characterized by a monetary union, a totally different state to state fiscal policy and a general heterogeneity in the degree of economic development.

Basically European countries can be divided into two categories: the developed ones that founded the European Union, with financial systems large and very large relative as reported to GDP level, able to invest significant resources externally, and developing countries which, at least before the crisis, were dependent on external resources, such as European funds and external loans.

US financial crisis has spread primarily in European countries in the first category because of significant exposures that they had against American financial institutions. In crisis situations, the first reaction of any investor is to withdraw from the market, to invest in the most liquid and safe possible assets, even if they produce lower yields. The general feeling of distrust led to the limiting of foreign financing that less developed states depended. These states underwent major adjustments of current account deficits, consumption proportionally decreasing.[(2)] Adjustments have assumed lower revenues to the state budget which in turn have resulted in major cuts in public spending, including pensions and wages in some countries and calling for immediate financial assistance from international institutions. However, a beneficial effect of the crisis was that of reducing the dependence of developing states for external financing, redirecting it to EU funds and increased exports. At least from this perspective, one can say that the European economic model is more sustainable post-crisis than before the crisis.

In the Asian countries the model based mainly on surplus production, fueled by excessive lending in the Western countries, also suffered major adjustments, decline in consumption in Western countries materialized in reducing exports to them. However, an economic model where someone just produce and someone else consume on credit cannot be sustainable in the long term.

The crisis is nothing but a restoration of the natural balance of economies in a relatively short period and with some negative effects on short and medium term. In the long run an economic crisis can be seen as an opportunity to streamline existing business models or even create new ones by the emergence and promotion of innovative ideas in economic science, which otherwise would have been accepted with great difficulty.

3. Fiscal policies before the crisis

Fiscal policy refers to how financial resources are drawn and used in the public interest by the authorities who represent the executive power. They cover the taxes and income collected, including the way they are collected (taxation thresholds, flat tax rate, etc.) and the use of such resources so called the state budget structure. Budget deficits are recorded

when collection is below the level of spending, and governments are forced to borrow to cover the gap, thus increasing public debt.

In the Keynesian view, governments should intervene in economy in a cyclical manner; in times of strong economic growth, the accumulation of budget deficits and public debt is not at all recommended. Under conditions of prolonged expansion governments should adopt a countercyclical behavior that would not further encourage consumption and should possibly accumulate resources for using when recessions appear.

In the classical vision, noninterventionist, governments should be restricted only to give citizens those services they need and that the private sector cannot provide, namely defense, public order, infrastructure, etc.; in terms of market intervention it is a neutral policy. Governments should not try to avoid crises, as often under these reasons, government intervention will impair proper functioning of markets, creating macroeconomic imbalances. In other words, crisis prevention is done by the authorities by non-involvement in economic activity, the solution often promoted by famous slogan enunciated since the eighteenth century by Vincent de Gournay *"Laissez faire, laissez passer, le monde va de lui même!"*

Unfortunately, reality shows that fiscal policies adopted by most governments before the crisis have not followed any of the above recommendations, operating pro-cyclical and exacerbating the negative effects of the crisis.

Cyclical fiscal policies can be easily seen in the development of budget deficits before the crisis. The table below presents the evolution of this indicator during 2005-2009, years in which the EU ought to apply fiscal policy limits laid down in the Maastricht Treaty to ensure financial sustainability (deficit up to 3% of GDP and a public debt level of under 60% of GDP). Almost all European governments have broken to a lesser or greater extent these limits, all except Denmark, Estonia, Luxembourg and Sweden. Perhaps even more serious is that these limits considered reasonable in 1993, when ratificating the Maastricht Treaty, were violated by European states even in years of economic growth (figures in Table 1 marked with *) when, at least theoretical, encouraging consumption by public authorities was not justified. The United States registered deficits also comparable with the European Union countries in the years before the crisis.

Table 1. *The budget balance in the European Union and United States (% GDP)*

	2005	2006	2007	2008	2009
United States	-2,43	-1,79	-1,11	-3,12	-4,05
European Union (EU28)	-2,6	-1,6	-0,9	-2,5	-6,7
Eurozone (E19)	-2,6	-1,5	-0,6	-2,2	-6,3
Belgium	-2,6	0,3	0,1	-1,1	-5,4
Bulgaria	1,0	1,8	1,1	1,6	-4,1
Czech Republic	-3,1*	-2,3	-0,7	-2,1	-5,5
Denmark	5,0	5,0	5,0	3,2	-2,8
Germany	-3,4*	-1,7	0,2	-0,2	-3,2
Estonia	1,1	2,9	2,7	-2,7	-2,2

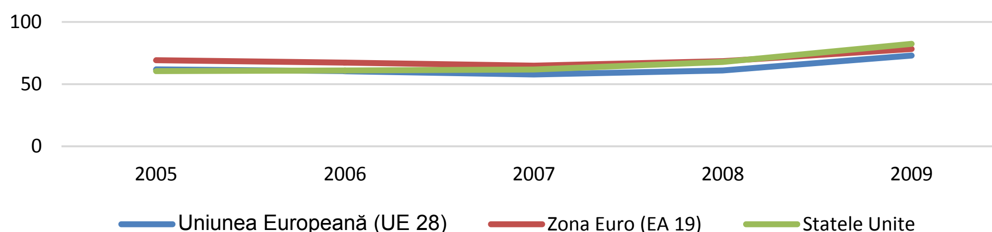
	2005	2006	2007	2008	2009
Ireland	1,3	2,8	0,3	-7,0	-13,8
Greece	-6,2*	-5,9*	-6,7*	-10,2	-15,2
Spain	1,2	2,2	2,0	-4,4*	-11,0
France	-3,2*	-2,3	-2,5	-3,2*	-7,2
Croatia	-3,7*	-3,2*	-2,4	-2,7	-5,8
Italy	-4,2*	-3,6*	-1,5	-2,7	-5,3
Cyprus	-2,2	-1,0	3,2	0,9	-5,5
Latvia	-0,4	-0,6	-0,7	-4,1	-9,1
Lithuania	-0,3	-0,3	-0,8	-3,1*	-9,1
Luxembourg	0,2	1,4	4,2	3,3	-0,5
Hungary	-7,8*	-9,3*	-5,1*	-3,6*	-4,6
Malta	-2,7	-2,6	-2,3	-4,2*	-3,3
Netherlands	-0,3	0,2	0,2	0,2	-5,4
Austria	-2,5	-2,5	-1,3	-1,4	-5,3
Poland	-4,0*	-3,6*	-1,9	-3,6*	-7,3*
Portugal	-6,2*	-4,3*	-3,0	-3,8*	-9,8
Romania	-1,2	-2,2	-2,9	-5,6*	-9,1
Slovenia	-1,3	-1,2	-0,1	-1,4	-5,9
Slovakia	-2,9	-3,6*	-1,9	-2,3	-7,9
Finland	2,6	3,9	5,1	4,2	-2,5
Sweden	1,8	2,2	3,3	2,0	-0,7
UK	-3,5*	-2,9	-3,0	-5,1	-10,8

Source: Eurostat, US Office of Management and Budget (OMB).

The natural result was that at the outbreak of crisis governments couldn't do much to limit the financial crisis effects, many entering themselves into a sovereign debt crisis amid uncertainty created by the financial markets. The best example of this is Greece, a member of the European Union and the euro area who at the onset of the US financial crisis in 2007 already had an unsustainable debt level of 103% GDP. The crisis has exacerbated the problems of tax administration in this country, the only way to avoid a complete failure of the Greek Government (the first in Eurozone) being a substantial financial aid and harsh fiscal adjustment measures. Despite all the efforts, including a major restructuring of public debt in 2012, Greece will remain in history as the first country in the Western world who failed to reimburse a loan from the International Monetary Fund in 2015. Later there were found some temporary solutions to redress the situation, an extension being considered very dangerous both for Greece and for all EU states. At the end of 2014, Greece's debt stands at 178% of GDP.

The graph below shows the development levels of government debt to GDP for the US, Eurozone 19 and the European Union, pointing out the high values for all of these economic zones in recent years preceding the financial crisis, levels considered until recently quite dangerous (over 60% of GDP).

Chart 1. *Government debt (% GDP) during 2005-2009*



Source: Eurostat, US Office of Management and Budget (OMB).

In conclusion, fiscal policies before the economic crisis have not been able to prevent the financial crisis, even acting in the sense amplifying its negative effects.

4. Monetary policy before the crisis

Monetarist school, with its main exponent Milton Friedman, was the most dominant economic vision since the 1970s. Although financial stability before the crisis was an atribution of central banks, their primary objective remained to ensure and maintain price stability (Stiglitz, 2010 p. 409). Monetary policy was about the action of the central banks' intervention in economy for correcting associated inefficiencies caused by variations in prices, even if they were modest. Monetary policy instruments available to central banks are multiple (interest rate monetary policy, open market operations, minimum required reserves and other administrative and regulation measures). Most frequently central banks resorted to actions on the monetary policy interest rate as it is considered the most effective tool available due to the speed that it acts with minimum negative externalities. Although central banks act on interest rates in the short term, it is an illusion to believe that this monetary policy instrument only, even if used in the most ingenious way possible, could ensure long-term stability in the financial markets. Financial markets means more than money markets and the consequences, losses and gains, of the first products exceed the losses of the last. However the increased attention of financial markets is justified even in the light of ensuring a low inflation rate. The recent financial crisis has highlighted the limits of using monetary policy rates, central banks being forced to resort to unconventional measures aimed at influencing long-term interest (quantitative easing measures).

Monetarism is based on the idea of the classical school that there is always a direct and natural link between money and inflation and suggests, at least in its primary forms, a fixed rate of increasing money supply, in correlation with the GDP expansion (Stiglitz, 2010, pp. 409-410). This should ensure price stability, sustainable economic growth, free of periods of economic and financial crisis. Monetarism supported the idea of strict control of money supply to ensure price stability.

Regarding the possibility of using monetary policy tools to prevent or limit the effects of a financial crisis, monetarism followers were somewhat skeptical. Monetary policy should be neutral and act solely on ensuring price stability.

Table 2 shows the evolution of these two indicators for the United States and the European Union, represented by Euro Zone 19 and the largest economy outside this zone, namely UK.

The data in this table confirms the existence of a direct relationship between money and inflation, but also shows a somewhat surprising thing, that this link is not strictly proportional, at least in the short term. Thus, during 2005-2014 prices in the Eurozone 19 rose by 17.9%, while broad money increased by 47%. Things are similar in other areas analyzed, i.e. broad money seems to grow faster than prices.

Table 2. *Inflation and money supply*[(3)] *between 2005-2014*

	Euro Area 19		Great Britain		United States	
	Harmonized Index of Consumer Prices (2005=100)	Index of M3 - broad money supply (2005=100)	Harmonized Index of Consumer Prices (2005=100)	Index of M3 - broad money supply (2005=100)	Harmonized Index of Consumer Prices (2005=100)	Index of M3 - broad money supply (2005=100)
2005	100	100,00	100	100,00	100	100,00
2006	102,22	108,62	102,3	112,63	103,17	105,29
2007	104,43	120,66	104,7	127,89	105,88	111,77
2008	107,92	133,24	108,5	145,96	110,51	119,44
2009	108,27	138,30	110,8	161,23	109,6	129,10
2010	110,01	136,80	114,5	175,44	112,26	132,28
2011	113,01	138,17	119,6	172,63	116,55	141,93
2012	115,83	141,86	123	169,65	119,01	154,10
2013	117,39	144,60	126,1	176,84	120,5	164,42
2014	117,9	147,06	128	175,96	122,08	174,60

Source: Eurostat, OECD, own calculations.

This phenomenon has many explanations. One explanation would be that any increase in the money supply causes an immediate increase in prices as new the new money are making their way into the financial system and remain there for a certain period without having an impact on the real economy. Accordingly we must admit that it is only a matter of time before a significant growth in money supply will make its presence felt in the general consumption, and therefore in inflation.

A second explanation could relate with the rotation speed of money, but it is still unlikely because according to the quantity theory of money, to act this way would mean that the rotation speed of money in the analyzed period to decrease in order for money growth to increase faster than prices. This is pretty hard to believe given the very rapid development of financial and payment instruments in the recent years. Monetarism was based on the assumption that the rotational speed of money is relatively constant, but in the last 30 years this indicator varied greatly, mostly increasing (Stiglitz, 2010, p. 410).

A third explanation of this same phenomenon is related to the calculation methodology of consumer price indices. It is known that they do not consider real estate prices, prices that had strong growth in these years amid the US subprime lending.

However, the table above shows that the monetary policies in most geographical areas considered cannot be characterized as being of anti-cyclical nature in the years before the financial crisis. At most we can say that monetary policies were neutral, given that they ensured a relatively steady growth in money supply, while maintaining a low inflation rate. However, many studies that support the monetary policies adopted by countries that have been pro-cyclical, according to a study published by OECD in 2013, the monetary policy interest rates have been below Taylor level.

The charts below show without too many doubts that central banks around the world have tried to prevent / limit the financial crisis and its effects primarily appealing to classical instrument, namely the monetary policy interest rates. The charts show the evolution of monetary policy rates in the major economic powers, namely the US, European Union, represented by the Eurozone 19 and the UK, and China. There is a consistent and significant growth in the years preceding the financial crisis and a sharp drop in the onset of the crisis, namely in 2007 in the United States and in 2008 in the rest of economic areas.

Chart 2. *Changes of the monetary policy rate in the Eurozone (%)*

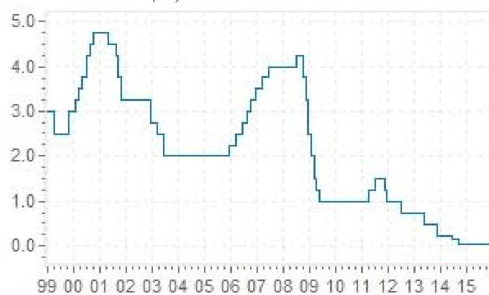


Chart 3. *Changes of the monetary policy rate in US (%)*

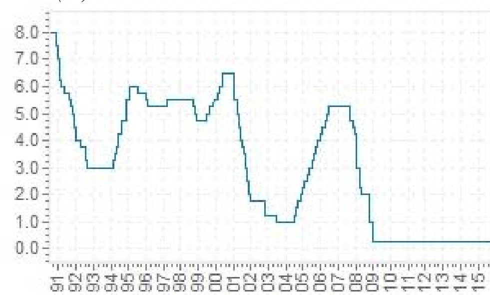


Chart 4. *Changes of the monetary policy rate in GB (%)*

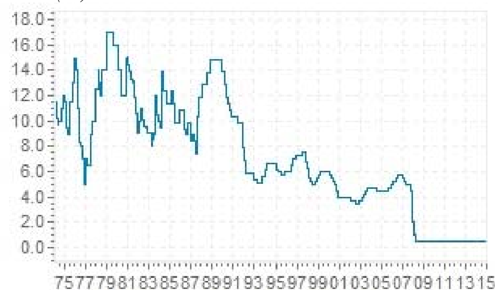


Chart 5. *Changes of the monetary policy rate in China (%)*

Source: Global-Rates.com

With the outbreak of the crisis, many countries began to use monetary policy as a tool to combat the financial crisis significantly modifying the development of monetary policy everywhere. The main tool used after exhausting the possibilities to reduce the monetary policy interest rates, quantitative easing was a contemporary solution to the liquidity trap set by J.M. Keynes in 1936.

It is obvious that the monetary policies implemented by the authorities have achieved the objective of ensuring financial stability. Interestingly, economic theories and developments in this area. If the beginning of monetarism his followers campaigned for careful control of monetary aggregates, after 1990 most central banks have adopted the strategy of inflation targeting citing a number of arguments relating both to measure precisely and in real time of monetary aggregates or the importance of achieving the ultimate objective of monetary policy, namely price stability.

Monetary policy should be limited to a single objective - that of price stability Friedman, 1982, p. 100). Faith that rooted in central bankers was that low inflation is necessary and even sufficient to ensure long-term economic growth in terms of financial stability. This proved more than once false. In addition, major central banks have contributed directly and indirectly to the subprime mortgage crisis by the failure of adopting adequate regulatory and control measures and by practicing for extended periods low rates of interest. Finally, since 2006, the US central bank has refrain from publishing data on the M3 monetary aggregate, which private analysts of informations absolutely necessary to make complete analyzes of long-term financial stability. However the OECD publishes data on M3 US using the M2 as an indicator proxy.[(4)]

5. Conclusions

One of the primary values of economics is to provide authorities with the tools needed to prevent economic and financial crises. Government actions, namely macroeconomic policies, are merely the product of economic science. The ideological fighting between interventionism and non-interventionism developed along modern history of humanity have led to current situations where crises are repeated, and authorities hesitate in answering important questions on the solutions of the crisis, but also to the question on why it was not possible to prevent it.

The state power is based on two main types of macroeconomic policies: monetary and fiscal policies. Inspired by the classical school, monetarism seems to greatly restrict the degree of state intervention by limiting monetary policies to a single objective of price stability and the recommendation to use monetary policy rate only for that purpose. The fight with inflation (actual or potential) became the number one concern for central banks around the world, financial stability or economic growth were put in the background.

Fiscal policies have remained up to politics and undoubtedly could have made a contribution to the prevention of financial crisis, but unfortunately in most states, they acted to the contrary. This time economics is not to blame, since all economic theories caution in encouraging consumption under high economic growth. It rather sounds like a simple matter of implementation, even malevolent, of economic theories.

Not incidentally, solutions to overcome the crisis consisted in giving up conventional monetary policies and adopting firm measures of quantitative easing nature, as well as a rethinking of policy and fiscal practices. But these solutions have involved significant costs for everyone and the crisis still continues to be felt.

It is clear that in the next period the economics theory of monetary policy must redefine, in extending the responsibilities of central banks and the instruments at their disposal. At the same time, we must not ignore the lessons of irresponsible fiscal policies in the region. One of the best ideas of monetarism was supporting the independence of central banks. Reality shows that politicians are prone to abuses and monetary policy mistakes can be extremely costly. On the other hand, the politics always express the will of the people, and economic and political power must be distributed only on this basis. It is in such context that the economic science has to offer viable solutions for crisis prevention and treatment, with minimal costs.

Notes

(1) Incidentally, one of the reasons this unsustainable growth was hardly seen in the official data on inflation is that the statistic pursued by central banks worldwide is free of prices of real estate assets.

(2) For example, in Romania, the current account deficit declined in 2009 to around 4% of GDP from 13% the previous year, a period that coincided with the most pronounced economic downturn.

(3) The M3 money supply in broad sense is presented as defined by OECD and includes passive of the following financial instruments: currency, overnight deposits, deposits with maturities up to 2 years or refund less than 3 months from the notification, REPO agreements, money market fund units and other similar debt securities with maturities of up to two years.

(4) http://www.federalreserve.gov/Releases/h6/discm3.htm
http://stats.oecd.org/mei/default.asp?lang=e&subject=14&country=USA

References

Băltăţescu, I. (2009). Abordarea Keynesistă a Ciclului de Afaceri şi Crizelor Economice şi Critici ale acesteia. *Revista de Economie Mondială*. 1(4).

Bouis, R. et al. (2013) The Effectiveness of Monetary Policy since the Onset of the Financial Crisis. *OECD Economics Department Working Papers.* No. 1081. OECD Publishing.

Friedman, M. (1982). Monetary Policy, Theory and Practice. *Journal of Money, Credit and Banking*. Vol. 14, No. 1, pp. 98-118.

Friedman, M. and Friedman, R. (2009). *Libertatea de a alege. O declaraţie personală.* Ed. Publica. Bucureşti.

Greenspan, A. (2008). *Era turbulenţelor*. Ed. Publica. Bucureşti.

Keynes, J.M. (2009). *Teoria generală a ocupării forţei de muncă, a dobânzii şi a banilor,* Ed. Publica, Bucureşti.

Mankiw, N.G. (2015). *Principles of economics*. Seventh Edition. Cengage Learning. Stamford USA.

Stiglitz, J.E. (2010). *În cădere liberă.* Ed. Publica. Bucureşti.

Taylor, J. (1993). Discretion versus policy rules in practice. *Carnegie Rochester Conference Series on Public Policy.* 39. pp. 195-214.

http://stats.oecd.org

http://www.bankofengland.co.uk

http://www.bnr.ro

http://www.ecb.europa.eu

http://www.federalreserve.gov

https://circabc.europa.eu

https://www.whitehouse.gov/omb

www.global-rates.com