The 2008 Financial Crisis and Its Impact on: Consumers, Banking and Real Estate Sector

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Content

1. Introduction

The 2007-2008 financial market turbulences have determined the most severe financial crisis since the 1929's Great Depression, its consequences being felt in all the segments of real economy. Instability soared across national borders, from developed to emerging economies, from one sector to another, from housing into banking and the related financial markets, hitting private firms' balance sheets, imposing new demands on the public sector's financing needs.

Various countries have responded differently to the crisis depending on their development stage, accordingly implementing monetary and fiscal policies.

In this paper, will be analyzed using empirical evidence the crisis impact on three fundamental inter-correlated areas of the economy: consumption, banking, real estate. There were made comparisons and interpretations upon indicators considered to be representatives for the above mentioned areas: unemployment rate, salaries, purchasing power, crediting level, interest rates, construction work rates, etc.

1.1 Literature review

The financial crisis has been a much discussed subject since its effects determined deep changes in the real economy and in the mass and individuals' psychology.

Minzen (2008) made a deep analysis of the financial crisis that started in the US as the "subprime crisis". He argued that there were a number of factors providing conditions for a crisis to manifest: period of exceptional stability, financial innovations, and the rise in the house prices. With banks failing due to liquidity crisis, Minzen is emphasizing the role of central banks and authorities in providing liquidity and in supporting the economies. He concludes with the importance of creating regulation and supervision frame in order to face the rapid financial innovation.

In addition, Lin (2008) investigated the impact of the financial crisis on the developing countries, warning about the emerging markets' danger of passing crisis of their own with a supplementary pressure upon other segments of economy (banking). He emphasized the importance of the government adopting the right fiscal and monetary policy according to the economy's macroeconomic indicators, with international organizations supporting the emerging markets. He concludes, in the same manner as above, with the need for controlling the asset price inflation and for financial supervision.

Brunnermeier (2008) characterizes the current crisis as being one surprisingly close to a "classical banking" one but with an intensive securitization that led to the creation of exponential risk caused by "opaque web of interconnected obligations". Like in the previous papers, Brunnermeier ends by discussing about the direction of the future financial regulations that should be related to the complexity of financial instruments.

Rose and Spiegel (2009) try to create a model of the financial crisis together with its manifestation. The model combines changes in economic indicators (GDP, stock prices, country rating, exchange rates) with categories like: financial system policies, asset price appreciation in the real estate and equity markets, international imbalances, foreign reserve levels, institutional and geographic features). The conclusion was that the causes of the crisis were idiosyncratic, with opaque linkages that cannot be easily quantified.

Schwartz (2008) examined three factors with significant influence on the emergence of the global crisis: expansive monetary policy, imperfect financial innovations and collapse of trading. While agreeing with the idea that insolvent firms must not be recapitalized, she concluded that a procedure should be implemented in order to examine portfolios of bank and financial institutions to identify the problematic ones.

Donath and Cismas (2009) examined in their paper the important role Central Bank is playing in Romania in supporting the exchange rate and inflationary pressure through the implemented monetary policy. They are arguing about the necessity of the government implementing a policy that assumes investments in productive segments of economy. They conclude by emphasizing the importance of credibility, consumption, of implementing a smooth restoration of macroeconomic balance and efficient public deficit's management.

Zaman (2009) examined the pre-electoral optimism regarding the crisis manifestation and the post-electoral reality. He concluded that effective measures cannot be taken unless there is a support coming from the international institutions (International Monetary Fund and World Bank).

1.2 Origins of the financial market crisis

1.1.1 The environment before the crisis

The financial crisis started to manifest in an environment characterized by factors like: expansive monetary and fiscal policy, flawed financial innovations and, consequently, the transformation of traditional banking model into "originate and distribute" model.

The US expansive monetary environment was explained through the following:

* large capital inflows from abroad, Asian countries (China, Japan)buying US securities to stabilize the exchange rate in order to increase incomes from exports and to hedge against a depreciation of

their currencies against dollar[1]. Developing countries shifted toward accumulating large volumes of US assets, funding the growing deficits in US (generally, in industrialized countries) and creating imbalances among countries with large current account surpluses and deficits;

*the Federal Reserve feared a deflationary period after bursting of the US tech-stock bubble in 2000, easing in this way the monetary policy by lowering the discount rate 27 times between January 2001-June 2003. This situation stimulated a boom in the housing market, with increasing housing prices that fueled the consumption boom, respectively the credit expansion. The above mentioned period has been described as the Great Moderation in the US and the Great Stability in UK (Minzen, 2008), being characterized by low inflation, low nominal short-term interest rate and steady growth.

Another factor influencing the emergence of the credit crunch was the adoption of innovations (Lian, 2008) in financial instruments (securitization, derivatives, auction-rate securities) driven by the search of higher yields in a low-interest-rate environment. In this case, the problem arose from the difficulty of determining the instruments' prices and from the lack of regulations regarding the respective instruments and the issuing companies. As a consequence, the risk was spread in such a complex manner that neither the designer, nor the buyer of these instruments understood the risk they imposed. The mortgage loan securitization encountered diverse loan categories, from the mortgage industry to commercial paper issuance, student loans, and credit card receivables. The pool of mortgages standing behind the mortgage-backed securities was difficult to price, the specialized agencies assigning ratings to complex securities in a similar manner as for ordinary corporate bonds.

Related to the creation of the innovative financial instruments, the banking system underwent a fundamental transformation from the traditional banking model, in which the loans were held until they were repaid, to the "originate and distribute" model, in which loans were pooled, divided into tranches and passed to other financial investors, in this way off-loading risk.

1.1.2 The Subprime Mortgage Market and the Securitization

With low interest rate policies, laws allowing mortgage lending at high interest rates, fees, tax advantages[2] and premises of continuous increase in house prices, there were created favorable conditions for both borrowers and lenders. As borrowers continued to seek funds in order to gain from the differences in the real estate values, lenders increased lending, extending the scope of lending to include lower quality mortgages (subprime mortgages)[3]. According to Minzen (2008),

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[1] Consequence of the Southeast Asian crisis of late 1990s;

[2] The Tax Reform Act (1982) ended tax deduction for interest on forms of borrowings other than mortgages;

[3] There were noticed 2 periods of growth in subprime mortgages – one during late 1990s and the other one from 2002 to 2006 (Jaffee, 2008);

Subprime mortgages can be defined through 2 approaches, one related to the originators of the mortgages (the proportion to which loans are refinanced), the other referring to the previous recording of the borrower (regarding delinquency, foreclosure or bankruptcy). The subprime mortgage is characterized by higher up-front fees, higher insurance costs, fines for late payment or delinquency and higher interest rates (to cover the higher default risk), with a higher probability of termination through prepayment or default. There were loans with options to defer payments that converted from fixed to variable interest rates, low-documented in order to access market segments represented by buyers with poor credit/income histories or with variable income.

The banks' movement toward "originate and distribute" model and the financing of their asset holdings with shorter maturity instruments (Brunnermeier, 2009), determined the creation of structured products referred to as collateralized debt obligations (CDOs – asset backed securities), including residential mortgage backed securities (composed of different types of mortgages) and based upon this, other instruments such as credit default swaps (CDS)[4], trade indices consisting of portfolio credit default swaps. The process was constituted from several steps in which the underlying credit risk was first unbundled, tiered, securitized and distributed to end investors like primary lenders, mortgage brokers, bond insurers, credit rating agencies, structured investment vehicles. It has been shown that many of the purchasers were off-balance sheet institutions created and/or owed by banks that had originally sold the securitized instrument, in order to avoid the capital control requirements applied to banks according to Basel I regulations.

The complexity of the products developed by the private sector stood in the fact that they implied a more variable cash flow, a greater default risk as low quality mortgages were included in pools, and high level of heterogeneity in the tranches.

With statistical models of many professional investors and credit rating agencies providing positive information on structured finance products, being rated more favorable than corporate bonds, with fund managers in searches for high expected returns with small probability of extreme loss there were created the premises of increased popularity regarding the securitized products.

1.3 The credit crunch

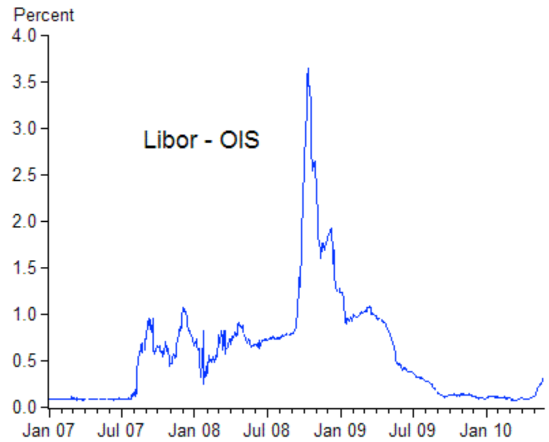
The popularity of the respective products backed by good ratings and the idea that house prices could only rise led to a decline in the credit quality, mortgage brokers offering low teaser rates, no-documentation mortgages, piggyback mortgages, "No Income, No Job or Asset" loans.

As the subprime mortgages default rate mounted in 2006, it was revealed that the risk was not diminished using product pools, the defaults being positively correlated (Minzen, 2008). This

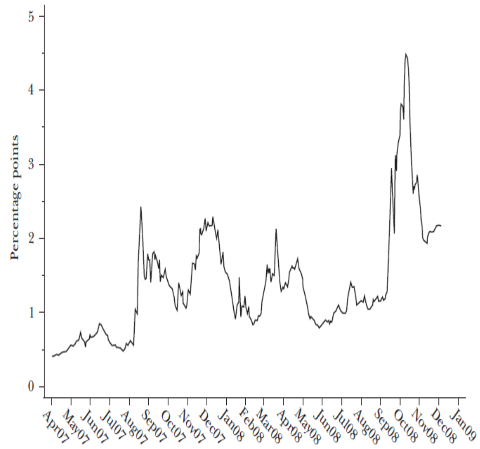
[4] According to Brunnermeier (2009) the gross notional amount of outstanding credit default swaps in 2007 ranged from 45 trillion USD to 62 trillion USD;

situation was doubled by the subprime mortgage investors that leveraged their positions with borrowed funds represented by short-term loans.

The trigger for the liquidity crisis was caused by an increase in the subprime mortgage defaults (see graphic with residential mortgage delinquency rates) with rating agencies introducing tranches from subprime deals in “downgrade review”, indicating in this way the high likelihood to be downgraded. The uncertainty created, sustained by the difficulty of assessing the exposure level of the structured products to subprime loans had a negative impact on the interbank market, banks becoming reluctant to lend to each other. The situation influenced the spreads between interest rates like: LIBOR-OIS spread that increased by 100bp and TED spread (Treasury-Eurodollar) that became even wider (Brunnermeier, 2009).



The TED Spread



Source: Bloomberg.

The resulting freeze in the capital and money markets affected certain financial institutions depending on the markets to find liquidity, like commercial banks relying on short-term commercial papers could not obtain funds and investment banks that had bought asset-backed securities through short-term papers, not being able to pay the due-amounts. The liquidity panic in the markets determined the bailouts of institutions like Lehman Brothers, Merrill Lynch, AIG and the run of the Northern Rock Bank.

In order for the situation to be kept under control distressing institutions and market liquidity, the central banks provided funding liquidity:

- ECB organized forward auctions for liquidity;
- ECB offered lending at longer maturities (there was a shortage of funds at 1-, 3-, 6-month maturities) against a wide range of collaterals;
- Federal Reserve announced a term auction facility for a predetermined one-month money direct from Fed;

- Federal Reserve established two further facilities: a primary dealer credit facility and a weekly term securities lending facility to offer Treasury securities on a one month loan to investment banks against eligible collateral as MBSs;
- The Bank of England injected marketable assets into banking system, providing long term asset swaps to any bank eligible to borrow from the National Bank.

1.4 The Credit Crunch and the Developing Countries

The growth encountered by the developed countries before the crisis hit influenced also the developing countries through increased export revenues (determined by higher export demand from developed countries), higher commodity prices, rise in foreign direct investments, increased remittances from abroad. With the developing markets opening their economies during the last decade, exports as share of GDP increased in the interval 2000-2007 from 29% to 39% (Global Development Finance, 2008). As seen from the data provided by World Bank (Table 1. Net Capital Flows table-Appendix) , the level of FDI to developing countries increased during 2002 to 2007 from 160.7 billion USD to 470.8 billion USD, this being explained by the investors searching for higher returns being given the low yields in the mature economies. With increasing sources of financing (bank lending, bond flows, FDIs, remittances from abroad rising to 240 billion USD in 2007), the developing world achieved high growth rates, translated into a GDP increasing of more than 5% per year from 2003 to 2007(Graph 1. GDP growth-Appendix).

After the credit crunch boom in the developed economies, the crisis wave affected the developing countries being registered substantial reduction in their exports (declines in terms of trade, global slowdown reduces the demand for commodities and manufactured goods), negative shock to investments (portfolio investment will fall, as greater risk aversion keeps the capital away), reduction in remittances. In figures, according to World Bank data, the reduction in exports registered at the beginning of 2009 a value of -35%. In 2008, the net international flows of private capital to developing world fell to 707 billion USD (4.4% of developing county GDP) from the record-high level of 1.2 trillion USD (8.6% of GDP in 2007). Regarding the GDP evolution, the prospects for developing countries were referring to a 4.7% deceleration.

Regarding the emerging markets, it has been proved the existence of a distinct danger related to the possibility of the developing economies to go through crises of their own (domestic asset-market bubbles) with impact on all sectors of real domestic economy.

2. The case of Romania

In the years before crisis, Romania was characterized by an increase in relevant financial indicators like final consumption, gross capital formation, GDP. The growth Romania has experienced is demonstrated by an average increase of GDP of around 6% per year, in the period 2005-2008 (from a 4.1% increase in 2005 to a 7.3% increase in 2008). Investments continued to be supported to a large extent by Foreign Direct Investments (FDI), in this sense being seen an increase from 6.5 USD billion in 2005 to more than double in 2008. Investment rate registered a continuous increase as Romanian economy is trying to catch up with technological competition in areas like industry, construction and agriculture. As a consequence, in the structure of investments could have been seen an orientation toward constructions sector, reporting a yoy increase in first six months of 2007 of 31.4%.

During the period taken into analysis, it was registered an upward trend in gross fixed capital formation, which picked up from 8.6% yoy in 2003 to 16.1 in 2006.

The widening of trade deficit, particularly between 2007 and 2008, reflected a lower level of competitiveness and imposed the necessity of further investments inflows. This aspect was sustained by the fact that in 2007 Romania became EU member and started to face true competition. The Romanian current account deficit was strongly influenced by the trade balance that registered a deficit that almost doubled from 2006 to 2008. In this sense, exports remained much slower than imports, with a positive aspect regarding the exports structure that improved in favor of high complexity goods. In evolution, exports increased from 27.7 USD bn in 2005 to 49.8 USD bn in 2008, while imports followed a higher increase from 37.3 USD bn to 77.9 USD bn in the same period.

Indicator	Measure	2005	2006	2007	2008	2009	2010e	2011f
Nominal GDP	USD bn	99.2	122.7	170.6	204.3	161.1	158	168.4
GDP growth (real)	% yoy	4.1	7.9	6.3	7.3	-7.1	-2	1.7
Industry	% GDP	35.2	35.9	36.7	36.7	36.7	38	38.8
Unemployment rate	%	5.9	5.2	4	4.4	7.8	7.4	8
CPI	% yoy	9	6.6	4.8	7.8	5.6	6.2	5.5
Exports	USD bn	27.7	32.3	40.6	49.8	40.7	44.8	49.3
Exports	% yoy	18.1	16.6	25.4	22.7	-18.2	10	10
Imports	USD bn	37.3	47.2	65.1	77.9	50.2	55.7	62.4
Imports	% yoy	23.9	26.3	38.1	19.7	-35.6	11	12
Trade balance	USD bn	-9.6	-14.8	-24.6	-28.2	-9.5	-10.9	-13.1
Current account	USD bn	-8.6	-12.8	-23.1	-23.7	-7.3	-9.2	-12.1
Current account	% GDP	-8.7	-10.4	-13.5	-11.6	-4.5	-5.8	-7.2
FDI (net)	USD bn	6.5	11.8	10.2	14.2	6.5	6.6	7.9
External debt	USD bn	36.5	54.3	86.1	101.3	113.3	113.8	128
External debt	% GDP	36.8	44.2	50.4	49.6	70.3	72	76
Fiscal balance	% GDP	-1.2	-2.2	-2.6	-5.7	-8.6	-7.6	-6
Total public debt	% GDP	15.8	12.4	12.6	13.4	23.9	31.4	35.8

Source: www.dbresearch.com

Total external debt grew by more than 45% in 2006 as against 2005 and this being entirely due to the private sector.

The transition years of high inflation ended in 2004, being sustained by a prudent fiscal policy and currency appreciation. In 2006, the inflation dropped significantly as a result of tighter monetary and fiscal policy. This aspect was demonstrated by the evolution of Consumer Price Index (CPI) that decreased from 9% yoy in 2005 to 6.6% in 2006.

Being given the sustained growth in the Romanian economical environment and the argument that developing and emerging economies are not financially integrated with the world system, consequently these economies not being contaminated, the signals received from the international markets were not taken seriously. This situation was doubled by the Romanian authorities' optimism (Zaman, 2009) with respect to the possible impact of the global economy on country's financial system and real economy due to the parliamentary elections that took place at the end of 2008.

The showed optimism was obviously unjustified as Romanian economy is part of the global flows and was bound to be affected to a certain extent by the turmoil on the external markets. The manifestation of the crisis in Romania can be characterized through two perspectives (Donath, Cismas, 2009): from a financial one and from the real economy's outputs perspective. From the financial point of view, Romanian markets don't have strong connections with the US and UK markets that were most affected by the crisis. Also, it can be said that the Romanian market doesn't have the capacity, nor the structure to deal with complex financial instruments, in this way not being extensively exposed to the respective toxic assets that stood at the origin of crisis. The narrow financial market represented a factor against the contagiousness of the crisis as there were few companies listed at the Bucharest Stock Exchange and the volume of transactions was very low. Furthermore, the banking system stands at the core of funding process of the firms and individuals, being closely supervised by the National Bank of Romania (NBR). In this sense, in order to prevent any negative outcome resulting from the dispersion of systemic risk, NBR implemented a tight monetary policy, implying high reserve requirements that acted as protection for bank encountering temporary liquidity gaps. The prudential measures proved their efficiency in keeping under control the money supply, and consequently the inflation rate, preventing the banking system to encounter major problems.

From the other perspective, the negative effects of the crisis occurring in the real economy. The effects of the financial markets' lack of credibility were seen in the increased costs implied by loans, as most of the loans were denominated in foreign currencies. More expensive funding determined a decreasing trend in the housing market and in the inflow of FDI, putting in danger the funding of the already high current deficit. Being a part of the global economy, the country's exports value were affected, with consequences on the level of production, unemployment rate and exchange rate.

In figures, from 2009, the contraction of Romania's economy started and deepened, GDP decreasing by 7.1% yoy in 2009 and, respectively, by 2% yoy in 2010. On the demand side, final consumption and gross fixed capital formation were registered decreasing values. The final consumption was 1.4% lower in 2010 compared to 2009, while gross fixed capital formation dropped by 13.7% yoy.

After a 18.2% yoy decrease in 2009 caused by the turbulences in all segments of international economies, exports remained he main factor driving the Romanian economy, registering an increase of 10% yoy in 2010, in this way helping to keep the overall economy not to collapse.

As seen from the above figures, in 2009-2010 the fiscal balance registered increasing deficits of 8.6% yoy, respectively 7.6%. The figures are explained through the management of public money characterized by the absence of sustainable fiscal position and waste of money. Government failed in finance productive investments (infrastructure, social protection and human development) and in meeting its own debts toward private firms, channeling funds toward loss making areas.

The gross public debt registered increasing values from 23.9% of GDP in 2009 to 31.4% of GDP in 2010, caused by higher borrowings of the government.

In order to understand the crisis effects on real economy, a closer analysis is going to be done on three fundamental segments: consumption, banking and real estate sectors.

3. Empirical evidence

In order to understand in depth the effects of the financial crisis, the following chapters will describe the changes registered in three fundamental correlated aspects: the consumer behavior, the lending activity and the real estate market in Romania.

The personal interpretations were made upon processed data and tables, with the basic information coming from National Bank of Romania (NBR), National Institute of Statistics (NIS) and various country and market reports.

In the next section were made the following calculations:

- The annual values for private consumption were determined as an average of monthly values from 2000 to 2009 coming from the reports supplied by NIS;
- The calculation regarding the changes made upon the GDP components, respectively in the private consumption and the financing sources were done yoy, using the formula $(P_{M/2009}-P_{M/2008})/P_{M/2008}$ upon basic data supplied by NBR;
- The annual values of the PCI, investment and saving rates were obtained from the average of monthly values between 2007 and 2009; the inflation rate was determined using the formula: Inflation rate=PCI-100;
- In order to have a better view of the evolution of certain indicators (unemployment rate, dynamics of interest rates for consumption loans in EUR and RON) were used charts drawn upon tables attached as appendixes;

In banking part all the calculations were made upon a data base regarding all categories of loans in EUR and RON, respectively on deposits, both attached as appendixes to this paper. In general, the calculations consisted of sums (as total loans in EUR/RON), proportions and percentage increases/decreases. As it will be seen, charts were drawn upon tables for a better representation of changes and influences in the chosen indicators.

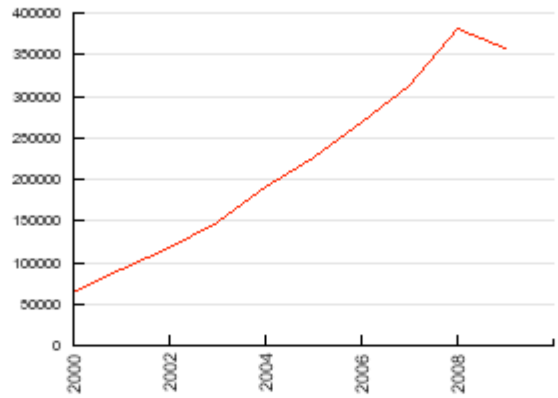
Regarding the Real Estate market evolution the figures, charts and tables were obtained using the data provided by various real estate reports. Furthermore there was constituted a data base with the value of construction work rates and issued building permits between 2008 and 2009 upon which various charts were drawn as it will be seen later on.

4. The crisis impact on private consumption

At a first view and taking into consideration the data provided by the Romania National Institute of Statistics, it can be observed a continuous increase in the value of private consumption from 62,402 million RON in 2000 to 313,223 million RON in 2007, reaching a pick of 381,063 million RON in 2008 and starting to decline in 2009 to a value of 357,069 million RON.

Year	Million RON
2000	62,402
2001	92,177
2002	116,896
2003	149,396
2004	191,499
2005	226,929
2006	268,441
2007	313,223
2008	381,063
2009	357,069

Source: www.insse.ro



In his behavior, the consumer is confronted with certain restrictions while making his choices. Among these restrictions, two are considered by economists as being the most important ones and refer to the disposable income and the level of prices (Dobrota, 1997). Both of these indicators are influenced in their evolution by other factors characterizing the economical activity like: level o retail loans, saving rate, inflation, level of unemployment, level of remittances from abroad, level of FDI, etc.

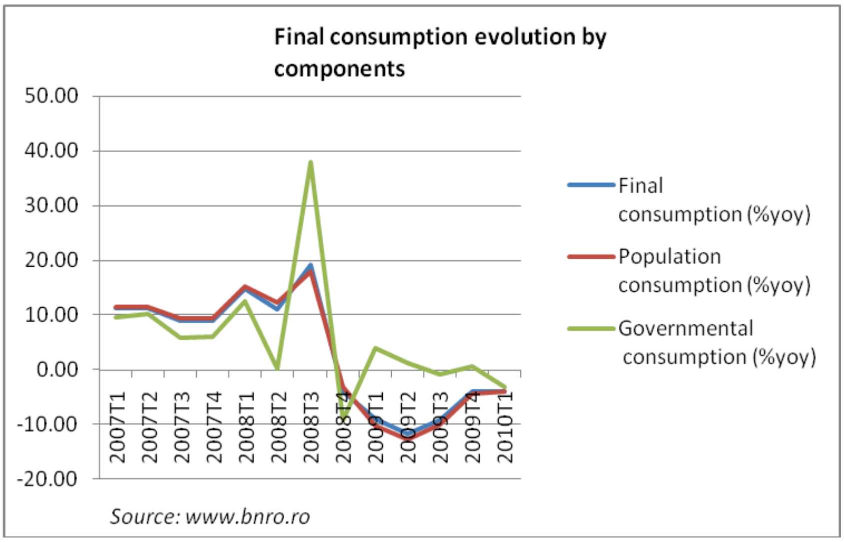
As crisis is manifesting, the losses registered in all segments of real economy have significant negative effects on consumption. In a rough environment where the conditions of crediting become tougher, many households are constrained by no longer being able to borrow against their home equity. As a natural consequence, this leads to a fall in consumption and an increase in savings as households adjust to their new circumstances. The changes in consumption depend also on non-economic aspects like the consumers' perceptions on the crisis and consumers' psychology.

GDP components

Year	Final consumption (%yoy)	Gross capital formation (%)	Net exports (%)	GDP (%yoy)
2007T1	10.47	5.50	-9.87	6.10
2007T2	9.83	5.57	-9.69	5.71
2007T3	7.29	7.11	-8.72	5.69
2007T4	7.63	6.48	-7.53	6.58
2008T1	14.2	1.2	-6.8	8.5
2008T2	9.5	3.0	-2.9	9.6
2008T3	13.8	-3.3	-1.1	9.4
2008T4	-3.2	1.6	4.7	3.1
2009T1	-8.5	-7.0	9.3	-6.2
2009T2	-9.8	-8.2	9.2	-8.7
2009T3	-6.8	-7.6	7.3	-7.1
2009T4	-3.1	-7.8	4.4	-6.5

Source: www.bnro.ro

During the period 2002-2007, the economic growth was driven by the domestic demand, stimulated on one hand by the rise in the household consumption. As seen from the statistics presented above, the increase in the consumption prior the crisis registered the highest values in comparison to the dynamics of other GDP components, this being explained by the increase in the net disposable income and by the developments made by the retail and service sectors. Thereby the final consumption aroused to pick values in 2007 (first quarter) and 2008 (first and third quarter), respectively 10,74%yoy increase, 14.2%yoy and 13.8%yoy increase. Following the crisis, the final consumption decreased consistently, reaching a -9.8%yoy decrease in the second trimester of 2009.



On components, the dynamics of the private consumption is influenced in higher proportion by the population consumption, than by the governmental one, the first registering increased values, picking 17.9%yoy in the third trimester of 2008 and negative evolution from the last part of 2008, with the highest value of -12.8%yoy in the middle of 2009. The negative evolution of private consumption is given by the influence of certain factors like: the decrease in the dynamics of disposable incomes, the uncertainty regarding the income (it was observed an increased uncertainty regarding the working place), and from here the tendency of increasing savings.

The transmission of the crisis wave was strongly done through the finance channel with impact on the non-governmental credit dynamics as the mother-banks reduced the external private credit-lines toward the Romanian subsidiaries. This situation determined a 7.9% yoy decrease from the third semester of 2008 in the new granted consumption loans , reaching the highest decrease of -77.2% in the first trimester of 2009. Consequently, there was docuented a continuously decrease in the expenses with goods and services, with a pick of -18.4% yoy in the middle of 2009.

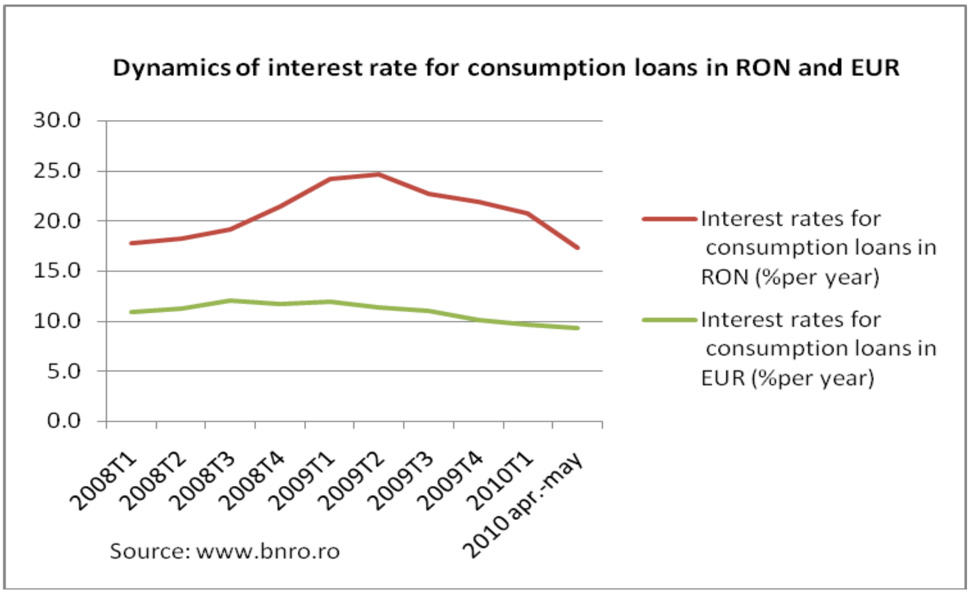
Private consumption and financing sources

Data	Expenses with goods and services (%yoy)	Disposable income (%yoy)	New granted consumption loans (%yoy)
2008T1	15.1	13.3	26.8
2008T2	17.2	20.2	4.2
2008T3	16.4	19.0	-7.9
2008T4	-2.8	15.3	-51.7
2009T1	-13.4	8.7	-77.2
2009T2	-18.4	-5.6	-75.7
2009T3	-18.2	-1.4	-73.3
2009T4	-12.2	-14.0	-53.6
2010T1	-6.5	-5.8	12.8
2010 apr.-may	-4.2	-5.2	35.4

Source: www.bnro.ro

As seen from the figures above, before the crisis the consumption loans increased their profiles, becoming from 2003 to 2005 the growth driver for lending activity being given the fact that households enjoyed substantial purchasing power gains.

The effects of the liquidity crisis on the financial market and on the consumption are also seen through the evolution of interest rates regarding the retail consumption loans, increasing to a maximum level of 24.7% for RON in the middle of 2009, respectively 12% for EUR at the beginning of



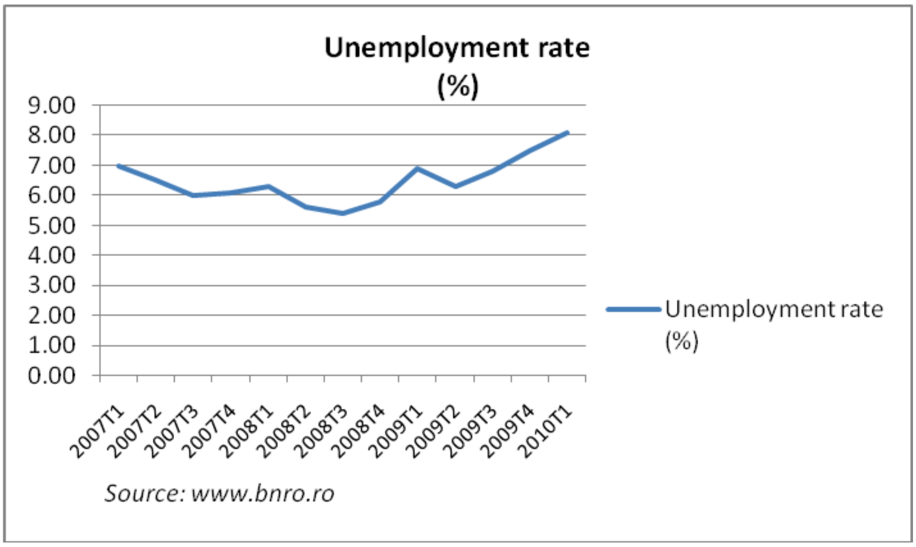
2009.

Despite the sever contraction of the economy, the consumer's price index (an indicator of the purchase power of the consumer) hadn't decreased drastically, compared to other European countries, this being explained by the external conditions like: the increase of excise duties, the depreciation of the national currency, the insufficient adjustment of public expenses and the inflexibility characterizing the labor and product markets.

Year	PCI	Inflation
2005	**109,0**	**9,0**
2006	106,56	6,56
2007	**104,84**	**4,84**
2008	107,85	7,85
2009	**105,59**	**5,59**

Source: www.insse.ro

Another factor influencing in an indirect manner the consumption is represented by inflexibility of the labor market that reacted to the crisis manifestation through an increase in the unemployment rate from an average of 4.4% in 2008, to 7.8% in 2009 and through a slowing in the salaries increase level, from a level of more than 20% in 2008 to 1.9% in 2009.



While in the private sector there were massive reductions of personnel, in the public sector the decrease in the employees' number was a marginal one, the measures of limiting the public expenditures being related to the bonuses removals and imposed days off (Erste Report, 2007). In 2009, the labor productivity on overall economy decreased with 5.9%, following an annual average increase of 7.1% between 2003 and 2008, constructions field being the most affected in this sense. Another influence in the decrease of labor productivity was attributed to the lack of measures regarding the personnel reduction in the public domain. Being given these, the negative gap registered previous years between the labor productivity dynamics and the annual increase in the salaries was maintained at a considerable level: -14.3% compared with an average of -16.2% between 2007 and 2008.

The turbulences in the labor market are influenced by the decreasing dynamics of the FDIs, explained by the increased aversion of foreign investors regarding the emerging markets, with effects on investments. In 2009, it was registered a decrease in the foreign corporate' exposure toward the domestic banking system (aprox. 5%), in favor of external financing (aprox. 20%).

Being given the above analyzed turbulences and the uncertainty in all areas of Romanian economy, the population had a tendency in increasing their savings, the saving rate registering average values from 14.04% in 2007 to 18.4% in 2009.

Data	Investment rate (%)	Saving rate (%)
2007	28.71	14.04
2008	30.33	16.9
2009	24.48	18.4

Source: www.bnro.ro

According to a survey led by the research company GfK, in 2010 Romanian household consumption fell by 5.0% in the first nine months of the year as people adapted their buying habits to the economical environment. The basic food segment was the least affected by the expenditure decrease, dropping by 3.0% in January-September. Home-made products, which cover 22% of essential food value, being seen as a good alternative to cope with the crisis and sustain the consumption. Non-food non-essential products registered the highest decrease in value terms of more than 9.0%, the main reason being the smaller purchasing frequency.

As seen from the above analysis, consumption represents a complex and fundamental notion upon which the economy' s revival depends. The consumption can be seen as a function of several interconnected variables strongly affected by crisis: the level of diposable income, unemplyment rate, inflation level, crediting level.

5. Crisis effects on banking/loans

In the early 2000, following a period of deep restructuring, as experienced by all other countries in the region, the banking sector started to stabilize and grow on the background of the economic recovery. Growth in foreign capital inflows (privatization and green fields) and consolidation of the supervisory role of NBR were the main stability drivers with effects on regaining customers' confidence. Talking about a growing economy, the inflow coming from FDIs supported healthy developments in terms of infrastructure, products and risk management, with a more active central bank succeeding to improve regulations and market discipline

Correlated with a robust economic growth, in the recent years Romania posted one of the highest speed rates of lending development in the region (UniCredit Group, 2009).

In 2003 it was created the regulatory environment for the mortgage lending, retail loans registering a considerable jump, growing by 3 times against previous year. The specific movement of this year was the result of long-time postponed consumption that pushed up households' demand for loans.

Between 2005 and 2008, households enjoyed significant purchasing power gains due to factors like: wages increase, labor market development, income tax reduction. In this way, higher competition combined with a disinflation process led to interest rates decrease, easing customers' access to banking loans.

Regarding the corporate loans it had been registered a more stable development with real annual growth rates of about 21% until 2006 (National Bank of Romania, 2008, 2009). 2007 represented the year of Romania's EU integration, this being translated into an increase in companies' demand for loans in order to support certain investments.

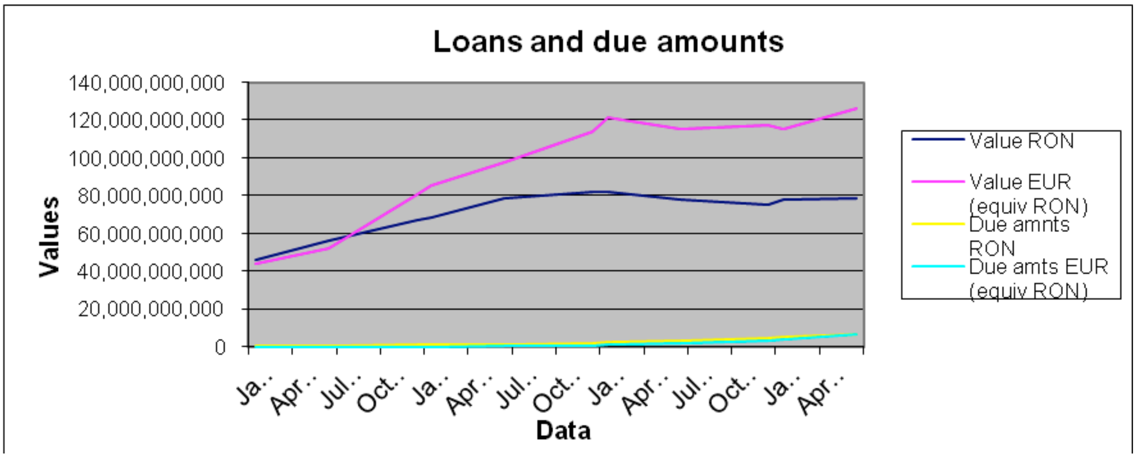
From 2007, the international economy passed a period marked by increased tensions determined by the slowing of the economy growth and by the assets price correction, generating a feeling of distrust from investors and significantly increased risk aversion. The 2007 financial instabilities transformed in 2008 into crisis, becoming severe into 2009 and affecting the world economic growth.

In Romania the main issues arousing from the crisis dispersion refer to the increased risk aversion, international markets contractions, more difficult external financing and the replacement of the global liquidity risk with the solvability one.

The risk aversion manifested in the developed countries, expanded rapidly toward the emergent markets determining general economic decrease, a slowdown of FDI, an increase in the unemployment rate, adjustments in the current account and fiscal deficits.

In 2008 in Romania, the access to liquidity became more difficult and more expensive due to the reluctance of the international creditors in providing financial funds, the government competing with the private sector for resources and the rating agencies downgrading the country under "investment grade".[5]

Given the above described environment, 2009 was characterized by the credit supply and demand contraction, determining a disruption in the credit activity's upward trend. Thereby, according to the NBR figures, in 2009 there was documented a modest increasing evolution of the non-governmental credit (0.9% in nominal terms, -3.6% real terms) compared with a 2008 dynamics of +33.7% nominal terms, respectively +25.8% real. The unstable economy and the depreciating national currency, determined a change in the non-governmental credit structure, the loans granted in foreign currency increasing from 57.8% in 2008 to 60.1% in 2009.



An important characteristic of 2008 was that a large proportion of the new loans were granted with promotional interests, postponing for future years an increased service debt.

In this sense, a deterioration of the credit portfolio quality was observed, with the exposure of credit and interests with over 90 days delay (and/or for which judicial procedures started) increasing from 2.8%in overall portfolio in 2008 to 7.9% in December 2009. This unfavorable situation led banks into making on one hand a massive provision increase for covering the non-performing loans and, on the other hand, to adopt a more prudential position in approving new loans. This is being translated into higher collateral/guarantees requests, the crediting costs (other

[5] S&P and Fitch rating agencies attributed to Romania BB+ with negative perspective, while Moody's considered a Baa3 rating, with stable perspectives;

than the interest rates) increased in a higher level, higher prime for more riskier credits, decreased limit for credit limits, more restrictive contractual clauses, decreased credit period.

Another indicator that shows the influence of the crisis on banking, generally, and on crediting, particularly, is represented by the liquidity indicator[6] that diminished from 2.47 in 2008 to 1.38 in 2009. This was explained by the change in the banks' strategy that concentrated in 2009 on attracting deposits, while decreasing lending. Following this strategy, the ratio credits granted to clients/attracted deposits decreased from 122% at the end of 2008 to 112.8% in 2009.

Indicators	Dec-07	Jun-08	Dec-08	Jun-09	Dec-09	Jun-10
Liquity ratio	38.70	N/A	34.43	N/A	35.28	N/A
Due loans/Total portfolio value	0.22	0.3	0.32	1.03	1.45	2.17
Loans to deposits	108.72	119.64	122.03	119.23	112.8	117.46
Total value of doubtul and loss loans and interests/ Total portfolio value of loans and interests	4	4.71	6.52	11.76	15.29	17.81
Loans and interests considered losses/ total portfolio value of loans and interests	N/A	N/A	2.8	N/A	7.89	10.2

The annual dynamics of the individual loans extended its descendent trajectory started in February 2008, entering in the last part of 2009 on a negative pattern, registering values of -3% in December 2009 in comparison to end of 2008. The decrease in this segment surpassed the decrease registered in corporate lending (1.96% in December 2009 toward the end of 2008).

The increase in the lending level before the crisis manifestation was a cause of an increased competition among banks on the basis of individuals' increased incomes.

The figures expressed above were significantly affected by determinants constituting the credit demand and supply. In this sense, the credit demand was influenced by factors as following: the population's uncertainty regarding the working place, respectively their incomes, too high indebtedness rate for population, banks maintaining at high levels the interest rates for new/already existing loans. Regarding the credit supply, the main drivers of its descending evolution were: banks adopting a prudent policy due to bad expectations regarding the financial markets, increasing risk of adverse selection, the client's risk profile reevaluation, more difficult access to external financing for financial institutions, consolidation of the liquidity's net position in the banking system, the reorientation of the respective financial institutions toward investments with higher liquidity grade.

[6] The liquidity indicator is calculated as a ratio between the effective liquidity and the necessary liquidity;

Under the impact of the above factors, all credit categories registered decreasing patterns, the most affected ones being the consumption loans with -1.15% yoy in December 2009, compared to +33.74% yoy in 2008. The mortgage loans reduced their dynamics by 31.4 percentage points but remained in a positive area, increasing with 15.9% yoy in December 2009 (the yoy increase in December 2008 was 47.37%), this being mainly explained by the start of the governmental program "The first house"[7] .

Data	Consumption loans EUR&RON	%yoy increase	Mortgage loans EUR&RON	%yoy increase
Jun-07	38,968,473,788		9,116,016,527	
Dec-07	55,239,015,971		14,246,602,990	
Jun-08	65,669,206,349		17,394,285,075	
Dec-08	73,875,131,680	33.74%	20,990,704,564	47.34%
Jun-09	74,111,646,382		22,379,003,143	
Dec-09	73,024,768,067	-1.15%	24,328,031,086	15.90%
Jun-10	67,948,700,000		27,932,900,000	

Regarding the currency in which the loans were granted, the year 2009 marked divergent evolutions it was encountered a 5% yoy increase in EUR loans in December 2009 compared to a 41.51% yoy increase in 2008, and a -4.73% yoy decrease in 2009, against 23.38% yoy increase in 2008. The explanation stands in the stability of Euro currency, compared to the national one, translated into lower costs.

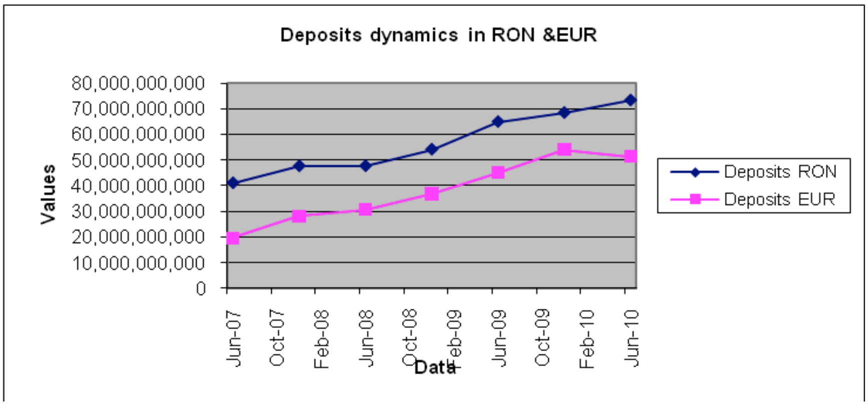
[7] Public program that permits to people without houses to buy at low prices, with loans at low interest rate, guaranteed by the state;

Data	Total loans EUR (equiv RON)	EUR loans yoy dynamics	Total loans RON	RON loans yoy dynamics
Jun-07	52,187,865,308		56,962,583,317	
Dec-07	81,264,016,613		67,300,794,157	
Jun-08	98,500,292,109		79,474,806,592	
Dec-08	114,995,838,975	41.51%	83,036,000,994	23.38%
Jun-09	117,618,569,492		80,375,589,076	
Dec-09	121,005,098,674	5.23%	79,107,469,619	-4.73%
Jun-10	133,103,500,000		71,712,250,000	

As consequence, if in previous years the EUR loan had a tendency of equalizing the RON loan as percentage in total non-governmental loans, in 2009 the lag between those two became lager. Thus, at the end of December 2009, the EUR loans value represented 60.1% in the total amount of credits, and the RON loans registered a 39.53%, while at the end of 2008 the difference between the two indicators was 16.14 percentage points (59.41% toward 40.59%).

Data	Total EUR loans (equiv RON)	%total EUR loans/ total loans	Total RON loans	%total RON loans/ total loans
Jun-07	52,187,865,308	47.81%	56,962,583,317	52.19%
Dec-07	81,264,016,613	54.70%	67,300,794,157	45.30%
Jun-08	98,500,292,109	55.34%	79,474,806,592	44.66%
Dec-08	114,995,838,975	58.07%	83,036,000,994	41.93%
Jun-09	117,618,569,492	59.41%	80,375,589,076	40.59%
Dec-09	121,005,098,674	60.47%	79,107,469,619	39.53%
Jun-10	133,103,500,000	64.99%	71,712,250,000	35.01%

In 2009, the population's money demand for prudential purposes (saving) increased dramatically on a pessimistic background determined by the present and expected financial situation deterioration. The deposits under 2 years registered increasing trends in yoy comparison – in June 2009 toward June 2008, the EUR deposits increased by 47%, while the RON ones by 37%, reaching pick level in the crisis period.



In figures, the above table is translated as follows:

Data	RON Deposit dynamic %yoy	EUR Deposit dynamic %yoy
Jun-08	16.27%	56.50%
Dec-08	13.68%	31.09%
Jun-09	36.46%	46.85%
Dec-09	26.63%	46.47%
Jun-10	12.94%	14.05%

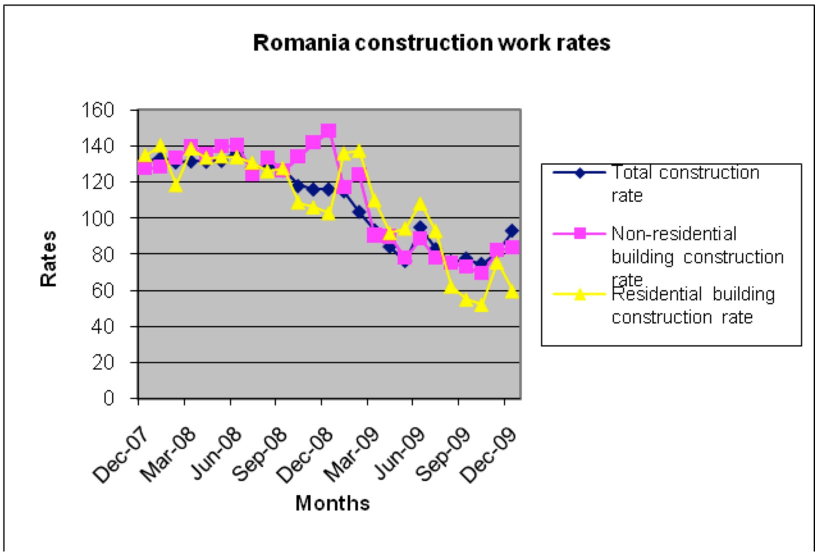
According to the NBR reports, the indebtedness rate recorded worrying level and the loan portfolio of the banks deteriorated, the non-performing loans increasing from 2.4% in December 2008 to 6.1% in 2009. The net wealth of the population decreased in 2009 with 10% caused by the price effect of the non-financial assets (real estate). Also, this was affected by the faster depreciation of the purchased assets' sales value compared with the credit amortization (contracted in order to buy the respective assets), this being translated into a potential danger – the debtors not being preoccupied to repay the loans.

The year 2009 marked also negative evolutions in the real estate sector, respectively in the real estate assets. The credit portfolio quality coming from the mortgage crediting has been deteriorating from 1% non-performing loans in 2008 to 4.75% in 2009, due to a high decrease in the properties' prices that were mortgaged.

6. The crisis effects on real estate segment

One of the most crisis-affected areas of real economy, with deep implications on the existing companies, households' net wealth and crediting is the real estate market.

Starting from 2002, with the advantage of high margins provided by the real estate markets, local and international companies started constructing office buildings and other facilities in order to support the business sector growth. Thus, as seen in the figure below, the market started increasing its pace of growth in 2002, with picks in 2007-2008, from 2009 going through a high decreasing period caused by the crisis manifestation.



The investors' confidence in the Romanian market increased once with the completion in 2003 of the first two institutional investments that accounted for transaction values of 60 million EUR.

In figures, the office market in Bucharest[8] was characterized as follows. At the beginning of 2008, the total stock of office premises delivered on the Bucharest market was reaching 950,000 sq m, whilst by the end of the year, this real estate segment reported important new deliveries of 240,000 sq m bringing the total stock at around 1,190,000 sq m (Q4, 2008).

From 2009, on the background of the financial turmoil, the demand for new office spaces decreased significantly, registering a historical value of 130,000 sq m (net take-up) in 2009, below the highest value recorded in 2008 of 270,000 sq m. Simultaneously, the level of new supply reached the highest value within the last 5 years of around 330,000 sq m. By the end of 2009, due to the

[8] Due to its size, infrastructure and resources Bucharest represents the first step of foreign companies in Romania

economic instability, contracting the companies' activity, the vacancy rate reached 16.6%, further to an 8 times increase when compared to year 2007 value.

As a consequence of difficult access to funding and increased availability, for the future the real estate companies (CRBE-Eurisko, 2009) activating in the market forecast a significantly lower annual new office supply, estimated to reach only 96,800 sq m, further to a fall of 64% year-on-year.

The level of demand and supply in the real estate office market can be measured through the level of prime rents. In this sense, the rents for the office market registered their highest value in 2008, when spaces within prime properties reached the level of €25-26 per sq m per month (More Real Estate, 2010).

From 2009 to 2010, the prime headline rents were situated between €18-20 per sq m per month for the central area, €14-17 per sq m per month for semi central locations whilst rents for decentralized business districts were in range of €9-13 per sq m per month.

Another component of real estate market that was heavily influenced by the crisis spread consists from the residential market. In 2007 the residential market in Romania was marked by extraordinary rises. After reaching a peak in Q4 2007, the debut of 2008 registered stagnation of the volumes transacted, and at the end of the first semester of this year a sensible regress of the market was felt on certain segments.

The explanation of this dynamics of the residential market is very much connected with the behavior of the big investors in the market, and less with that of the end users.

The diminution of the investors' activity in 2008 made place to classical transactions, giving to a certain extent the measure of the natural rhythm of the market. Those who made acquisitions in 2008 were in fact the end users of the residential projects.

There are several factors, both internal and external, that led to the above described behavior of the real estate market in Romania. Retrospectively, before the market deterioration, in Bucharest, certain real estate segments registered annual increases of up to 20 – 25 percent, the demand was high, and those that invested in these products collected considerable returns. Those that acquired large packages of real estate products in view of re-selling them afterwards, or those that begun residential developments on basis of a business plan that had as reference point the market situation in 2006-2007 have found out that the acquisition possibilities of the staple end user have diminished. It is not the demand that has diminished, but the possibility of the Romanians to afford the new conditions of financing an acquisition. The developers, as well as those that had in mind to acquire large portfolios, faced more restrictive standards for credits (banks asking for larger collaterals supporting the exposures and applying higher interest rates). The banking system has made almost every month changes in the interest rates and of the conditions of granting loans, resulting in the stagnation of the market. Since September 2008, together with the financial situation on the international market, the access to credits has become increasingly difficult, both for the public at large and for the developers.

The turmoil within international financial markets has started to show repercussions on the Romanian real estate market with severe effects for the residential segment. This has caused a marked reduction in the volume of transactions with activity below the level of recent years and downturn adjustment of the prices to a peak of 45%. Moreover, at the end of 2008 due to an unstable environment, the development portfolio suffered reconfigurations with development projects being dissolved and construction process being suspended. In this sense, developers were willing to finalize only the most advanced construction works, whilst the planned developments were suspended.

In the last quarter of 2008 the government implemented measures (JL LaSalle, 2010) aiming to stimulate the demand for purchasing new dwellings as follows: *5%cut in the VAT level, *the start of the governmental program "First House".

Indicator	Mar-08	Jan-10
3 room apartment price (eur)	120,000	70,000
Down payment (eur)	12-18,000	13,000
Interest (%)	7	4.7
Monthly installment**	597	350

** First House program, Bank: BRD-GSC

In 2006–2008, the prices were not reflecting the purchasing power of the Bucharest population, surpassing the average income of an inhabitant by 30 to 40%. The demand was estimated to reach hundreds of thousands of units and this is only in the case of Bucharest City. The reality was that only few people were qualified for purchasing a newly developed flat. This discrepancy led to an investors market or to one led by private individuals having the possibility of such an investment or saving and not to an end-user market. If at the beginning of 2008, the demand for new residential units in Bucharest was coming mainly from private investors, with the market contracting the power has shifted towards the end-user.

In terms of volume of sales, the residential segment has registered significant decreases starting with Q2 2008 in this context the first discounts appeared (when it comes to parking/kitchen furniture included in the price of the apartment, discount of 24% representing the VAT). The asking prices for the newly developed units have registered significant decreases starting from 5 to 10% in the first phase and currently reaching a maximum of 35 – 40% (for the central areas) and up to 50 – 55% (in the case of the peripheral areas as the northern ones) (King Sturge, 2008).

Regarding the future evolution of residential prices it is assumed that the general level of prices have already reached a resistance threshold, of approximately 40-45%, lower than the maximum values reached in the first half of 2008 (DTZ-Echinox, 2011). This resistance threshold has been generated by the overall LTV ratio of 68% on the Romanian market. A pessimist scenario implies the surpassing of this threshold and the reach of 50% level of decrease while an optimist scenario assumes the maintaining of the current level of prices along the remainder of 2010, followed by a slight decrease for 2011.

7. Measures taken in order to diminish the crisis impact

According to Minzen (2008) and Lin (2008) in their research papers, the current crisis differs from the previous ones through the contagion speed and the inter-linkages among the world's financial firms and sectors. In this sense, it is important for the developing countries (Romania case) to take quick, decisive and systematic measures (Lin, 2008) and to implement coordinated policies in order to minimize the effects of the crisis manifestation.

Opposite to the emerging markets' situation, the wealthy countries need to take advantage of their more stable economical position and more developed institutional structures in order to find an agreement on how to move forward[9].

Generally, developing countries governments have two main macroeconomic tools for responding to the implied negative consequences: monetary policy and fiscal policy (Vacarel, 2004). On the fiscal-policy side, among the tools that might be used, can be mentioned the following: implementing fiscal tools to generate the already affected domestic demand, stimulating public investments (Zaman, 2009) like: building infrastructure (the case when the private-sector growth surpassed the ability of the public sector to support the growth), developments in social protection and human development (in order for the temporary shock not to become a permanent decline in the wealth of poorer households).

The respective policies are chosen taking into consideration certain economic characteristics of the developed countries as the reserve levels, current account surplus/deficit, debt levels, inflation level, the ability to respond to the crisis depending on the room the markets have to increase domestic demand without cutting excessively in other parts of economy.

Besides the countries themselves, the international financial institutions (International Monetary Funds, World Bank, IFC) provided assistance in the form of loans, grants with the goal of supporting structural, social, financial areas with influences on the economies' equilibrium.

In the Romania case, the governmental measures taken in order to combat the crisis effects were related to:

- The institutional aspect - in this sense the National Committee of Financial Stability (NCFS)was created with the specific target of proposing solutions for diminishing the crisis effects, and ministerial working groups in charge of implementing anti-crisis measures adopted by the government;

[9] According Minzen (2008), since the full-blown crisis from September, the EU and US governments have moved further and faster than would have predicted to adopt dramatically expanded government roles in the financial sector;

- The strategic part – it was adopted an anti-crisis program consisting of 23 policy measures divided in three main categories: economic (goal: to stimulate the economic recovery and growth), financial (goal: to increase liquidity in the system), social measures (goal: to support the social categories with lower income more affected by crisis).

Despite the above adopted measures, not all proved to be appropriate to offset the crisis, especially the ones in the social area. A big issue in the Romanian economy is determined by the public money mismanagement backed by a lack of sustainable fiscal position, these having dramatically effects in establishing a macroeconomic balance. This is translated through a public policy that is choosing the financed activities on performance and efficiency criteria.

Up to this moment, the government failed to finance productive investments (infrastructure) channeling funds toward loss making areas, contributing to the deepening of the crisis instead of using its tools to boost the economic activity.

According to NBR in the 2009 Annual Report, Romania is still an attractive country for foreign investors but investments in the infrastructure expansion become mandatory.

In an environment characterized by inflationary pressures, risk of high exchange rate volatility and non-sustaining macroeconomic indicators (high deficits), the Central Bank implemented certain measures in order to ease the monetary policy as follows:

- Reducing the interest rate policy from a maximum of 10.25% in September 2008 to 8% at the end of 2009, ending to a 6.25% at the middle of 2010; while maintaining the current levels of minimum reserve ratio to 15% for RON and 25% for foreign currency;
- Stronger liquidity and solvency management through (National Bank of Romania, 2008): better inter-banking monitoring, financial instruments in order to cover liquidity disequilibrium in the banking system (Lombard facility, foreign currency swap), standardized reports regarding the banks' granted loans and deposits, banks' management meetings for the analysis of the identified risks, strategies, plans, capital requirements.

In order to increase the stability of the financial system, NBR proceeded with changes in provisioning system in the sense of a better coverage of the exposure and with increasing the limit for granting the deposits from 20,000 EUR to 50,000 EUR.

In March 2009, NBR underlined the need for external financing in order to support the country's economic development. Following this decision, two credit facilities were granted: a 20 billion EUR loan granted by IMF and a 1 billion EUR loan granted by World Bank. The IMF loan was granted with the specific targets of offsetting the crisis effects of the worrying drop in private capital inflows, strengthening the financial sector, addressing external and fiscal imbalances. The World Bank financial support focused on three fundamental areas (Zaman, 2009) with determinant influence on long-term stabilization and economic restructuring: *public sector reforms to improve public financial management through better transparency, predictability, increased quality in public services (health, education); *strengthening social protection (social assistance and pensions) to absorb the crisis impact on the more vulnerable social segments; *financial sector reforms – The World Bank focusing on medium-term reforms that support the IMF program.

Being given the above measures, the positive effects are expected to appear from 2011, being expected, accordingly to IMF predictions, an economic increase of 1.5%. As seen up to the present time, the main problem standing in the implementation of these reforms stands in the public money mismanagement, characterized by lack of transparency, predictability and still high levels.

8. Conclusion

The present crisis spread by contagion to the whole world is the result of a risky and irrational behavior assessed by the participants in the economic flow: population, companies, financial institutions, public entities, with consequences on the global economy.

Being given the crisis echo it is important to outline the lessons coming from the world's economies vulnerabilities in order to create a more developed and stable global economic structure: revision of the motto "some financial institutions are too big to fail", prudential supervision of financial markets in accordance with present conditions, the asset price inflation' control under certain governmental and monetary authorities, the set-up of regulatory environment for financial innovations, rational, systematic and coordinated measures.

In the specific case of Romania, the lessons refer to the collaboration between the Central Bank and Government in order to establish macroeconomic stability through channeling funds toward the productive segments (small, medium firms, corporate), improving infrastructure (decreasing unemployment, increasing income and consumption) and lowering non-productive expenses.

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- Appendixes

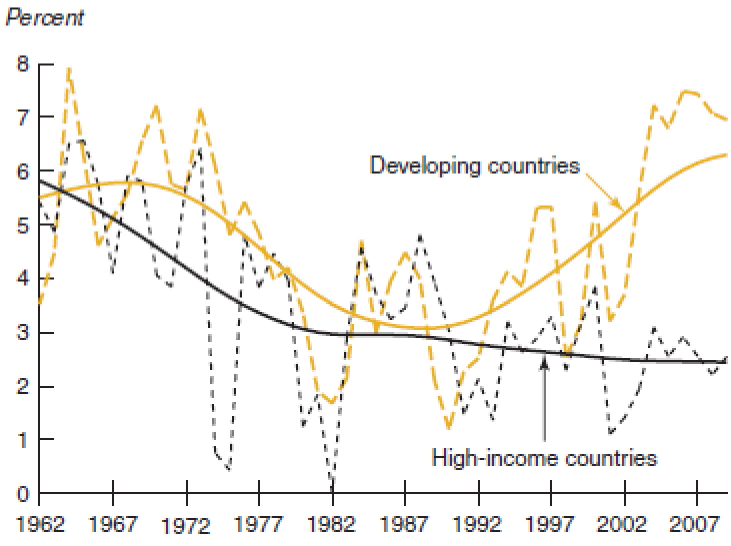
Table 1. Net Capital Flows to Developing Economies

$ billions

Category	1999	2000	2001	2002	2003	2004	2005	2006	2007e
Current account balance	−17.7	36.3	12.8	62.0	116.9	164.3	309.5	431.0	425.9
as % of GDP	−0.3	0.7	0.2	1.0	1.7	2.0	3.2	3.8	3.1
Financial flows									
Net private and official flows	209.7	181.2	191.3	174.0	262.4	386.4	479.7	689.8	1025.0
Net private flows (debt + equity)	195.7	187.0	164.5	169.1	274.1	412.5	551.4	760.3	1028.9
Net equity flows	188.4	179.0	178.6	166.2	186.0	265.9	357.4	472.3	615.9
Net FDI inflows	177.0	165.5	173.0	160.7	161.9	225.5	288.5	367.5	470.8
Net portfolio equity inflows	11.4	13.5	5.6	5.5	24.1	40.4	68.9	104.8	145.1
Net debt flows	15.1	−0.4	4.5	8.9	72.8	128.8	152.4	217.5	409.1
Official creditors	14.0	−5.8	26.8	4.9	−11.7	−26.1	−71.7	−70.5	−3.9
World Bank	8.8	7.9	7.6	−0.4	−0.8	1.4	2.5	−0.7	3.0
International Monetary Fund	−2.2	−10.6	19.5	14.0	2.4	−14.7	−40.2	−27.1	−4.7
Others official	7.4	−3.1	−0.3	−8.7	−13.3	−12.8	−34.0	−42.7	−2.2
Private creditors	1.5	5.8	−23.0	3.8	84.4	155.2	222.7	288.0	413.0
Net medium- and long-term debt flows	18.9	12.2	1.9	0.7	30.9	87.7	133.1	193.8	283.3
Bonds	25.7	19.5	10.2	8.8	19.6	41.1	52.6	25.3	79.3
Banks	−5.5	−3.9	−2.0	−1.7	15.2	50.4	85.3	172.4	214.7
Others	−1.3	−3.4	−6.3	−6.4	−3.9	−3.8	−4.8	−3.9	−10.7
Net short-term debt flows	−17.4	−6.4	−24.9	3.1	53.5	67.5	89.6	94.2	129.7
Balancing item[a]	−153.1	−172.3	−115.5	−70.6	−83.2	−156.6	−417.5	−481.9	−391.0
Change in reserves (− = increase)	−32.8	−42.6	−80.4	−166.5	−292.4	−402.4	−390.8	−634.2	−1090.7
Memorandum item									
Workers' remittances	77.5	84.5	95.5	115.8	143.4	160.7	191.0	221.0	240.0

Sources: World Bank Debtor Reporting System and staff estimates.
Note: e = estimate; FDI = foreign direct investment.
a. Combination of errors and omissions and transfers to and capital outflows from developing countries.

Graph 1. Comparison of GDP growth



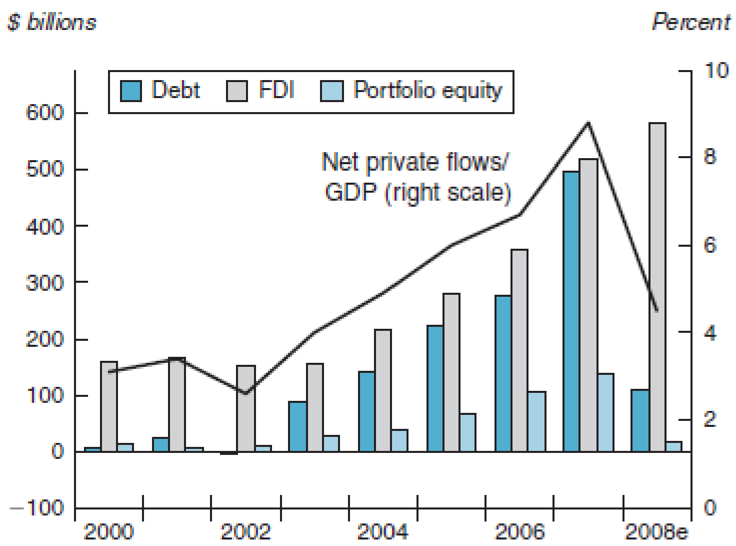
Source: World Bank.

Table 2. Export Volume and Production Decreasing in 2009

	Export volume growth (percent)		Industrial production growth (percent)	
	2008 (Whole year)	2009 (Y/y latest)	2008 (Whole year)	2009 (Y/y latest)
World	**4.5**	**−24.1**	**0.5**	**−12.8**
High-income	**1.7**	**−24.3**	**−1.9**	**−17.6**
United States	6.0	−16.2	−2.2	−12.5
Japan	−1.6	−36.0	−3.2	−34.0
Germany	1.1	−22.6	0.0	−21.7
All developing	**5.0**	**−22.5**	**6.2**	**−2.5**
East Asia and Pacific	**4.8**	**−25.0**	**11.2**	**4.6**
China	14.6	−22.7	13.0	7.4
Europe and Central Asia	**1.7**	**−32.0**	**0.7**	**−14.0**
Russian Federation	0.0	−38.0	2.3	−16.8
Latin America and the Caribbean	**−7.0**	**−11.0**	**1.0**	**−10.2**
Brazil	−2.1	−29.0	2.9	−13.3
Middle East and North Africa	**6.5**	**−3.5**	**3.6**	**−0.5**
South Asia	**10.4**	**−23.7**	**4.1**	**−4.4**
Sub-Saharan Africa	**7.1**	**−5.0**	**1.0**	**−4.5**

Source: World Bank.

Graph 2. Net Capital Inflows Decrease in 2008



Sources: World Bank Debtor Reporting System; staff estimates.
Note: 2008 figures are estimated.

Table 3. Remittances flow to developing countries

		Base case		Low case	
	2008e	2009f	2010f	2009f	2010f
All developing countries	305	290	299	280	280
By region:					
East Asia and Pacific	70	67	68	64	64
Europe and Central Asia	53	48	50	46	47
Latin America and the Caribbean	63	60	62	58	58
Middle East and North Africa	34	33	34	32	32
South Asia	66	63	65	61	62
Sub-Saharan Africa	20	19	20	18	18

Graph 3: Construction licenses issued for buildings

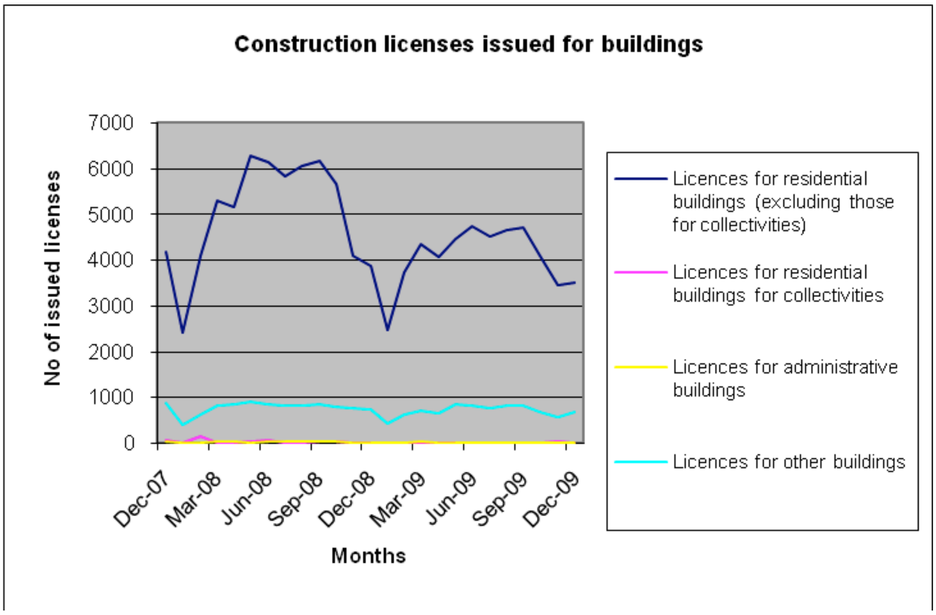


Table 4: Comparison between the average income and the price of a 2 rooms apartment in a medium area

Crt no	Indicator	2002	2003	2004	2005	2006	2007	2008
1	Monthly net salary (eur)	188	195	229	273	324	430	460
2	Apartment price (EUR)	12,500	20,000	35,000	48,000	60,000	85,000	90,000
3	2/1	66	103	153	176	185	198	196