

EVOLUTIONS IN THE CREDIT FIELD IN ROMANIA

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Abstract:

In my opinion, the crisis through which the Romanian economy passed between 2008 and 2012 had a turning point in lending. At the time of 2008, in Romania, most of the economic equilibria had deteriorated strongly. The bank financing, made through the credit lines that the Romanian banks received either from the parent banks outside the country or from other sources, was the engine of economic growth. That is why I believe that the evolution of domestic credit needs to be monitored permanently in order to quickly diagnose the "bubble" dynamics. From the data analyzed, it can quickly be concluded that the dynamics of domestic lending has been on the rise in recent years, but did not reach the 2006-2008 values. But it should not be forgotten that in those years the increases were related to much lower credit volumes than current values. Regarding the structure of credit, we see a change of structure noted and in the years of crisis, the credit for the population exceeded the credit given to enterprises. As a major difference to the 2008 crisis, when the credit engine was its currency component, the dynamics of domestic credit is currently traced by the RON component. This structural change is associated with lower risks. So the main question is whether the current credit values are long-term bearable, and future earnings expectations of borrowers will not be realized and they will no longer be able to honor their debt service to banks.

Keywords: crisis, credit, internal credit dynamics, credit structure, risks

JEL classification: G21

1. Introduction

In my opinion, the crisis through which the Romanian economy passed between 2008 and 2012 triggered a series of financial phenomena, such as the liquidity crisis and credit crunch.

Undoubtedly, in 2008, in Romania, most economic balances had deteriorated strongly, and the growth of some macroeconomic aggregates was so high that they could not be sustained in the long run, a strong deterioration of these dynamics being possible anytime, which happened in the 4th quarter of 2008 and, moreover, the monthly values even recorded negative dynamics. From table no. 1, we find that some indicators, while recording significant decreases, remain in the positive range:

- Dynamics of real GDP registered values of 8 and 9% in the first three quarters of 2008, well above potential GDP, as to fall to less than 3% in the fourth quarter;
- the GDP deflator registered increases between 13 and 15% in each of the quarters of 2008;
- investments have exceeded 30% in the first two quarters of 2008, as to fall to 23% in the third quarter, and ten times lower in the fourth quarter.

Other indicators decrease so much that the negative rhythms occur, especially during the fourth quarter. Here are some examples: industrial production, labor productivity, retail, services for the population.

**Table 1. Dynamics of some macroeconomic indicators
(annual growth over the same period of the previous year)**

Year	Nominal GDP (billion. lei; current prices)	Dynamics of real GDP (%)	GDP deflator (%)	Investemnts made in the national economy (%)	Industrial production (%)	Labour productivity in industry (%)	Domestic retail (%)	Market services rendered to the population (%)
2005	288,95	4,2	12,2	10,8	2,0	6,2	17,5	9,5
2006	344,65	7,9	10,6	19,7	7,2	9,9	13,5	31,4
2007	412,76	6,2	12,7	28,1	5,4	6,4	17,8	3,7
2008	503,96	7,1	14,0	17,1	2,70	-10,14	21,70	2,70
2008 T1	91,13	8,2	14,9	34,4				
2008 T2	115,07	9,3	14,3	30,2				

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Year	Nominal GDP (billion. lei; current prices)	Dynamics of real GDP (%)	GDP deflator (%)	Investemnts made in the national economy (%)	Industrial production (%)	Labour productivity in industry (%)	Domestic retail (%)	Market services rendered to the population (%)
2008 T3	138,32	9,2	13,4	23,2				
2008 T4	159,43	2,9	14,1	2,3				
jan.08					6,00	8,80	13,20	20,00
feb.08					7,60	11,00	24,40	8,30
mar.08					3,00	6,50	10,50	3,30
apr.08					13,40	17,10	22,00	17,80
may.08					2,80	6,10	8,30	12,00
june.08					4,50	7,70	19,80	10,70
july.08					5,10	8,80	22,60	2,50
aug.08					-1,70	2,3	20,0	0,7
sep.08					9,2	13,6	22,2	1,9
oct.08					1,3	5,7	15,4	-6,20
nov.08					-9,40	-4,40	7,4	-12,30
dec.08					-12,60	-6,00	-1,50	-23,20
jan.09					-16,40	-7,10	-0,60	-4,20

Source: NBR, Monthly Bulletins, periodicals section, www.bnr.ro

Deterioration of economic conditions is also noted at the level of some aggregates that assess the relations with foreigners. Thus, exports and imports declined as early as August 2008 and the current account deficit reached almost 17 billion euros, or more than half of the proceeds of export. Similarly, the number of employees has been decreasing since August 2008, and the number of registered unemployed and unemployment rate have increased from month to month. The dynamics of gross and net wage registered growth absolutely unsustainable, around 25% (calculated over the same period of the previous year), so that they would decrease from the fourth quarter of 2008 (Table 2).

Table 2. Evolution of some macroeconomic indicators

Year	Export (fob, billion. EUR)	Import (fob, billion. EUR)	Balance of trade balance (fob, billion. EUR)	Current account balance (billion. EUR)	Number of employees in the econoy (thousand pers.)	Total numer of registered unemployed (thousand pers.)	Unemployment rate (%)	Gross wage dynamics (%)	Net wage dynamics (%)
2005	22,26	30,06	-7,81	-6,89	4.559,00	523,0	5,9	17,0	24,6
2006	25,85	37,61	-11,76	-10,16	4.667,00	460,5	5,2	18,9	16,1
2007	29,55	47,37	-17,82	-16,68	4.885,00	367,8	4,0	22,6	20,3
2008	33,61	51,81	-18,20	-16,88	4.806,00	403,4	4,4	23,6	23,1
jan.08	2,50	3,60	-1,10	-1,20	4.765,20	384,0	4,3	32,9	30,7
feb.08	2,80	4,00	-1,20	-2,10	4.775,50	379,8	4,3	22,1	20,5
mar.08	2,70	4,30	-1,60	-3,40	4.803,60	374,1	4,2	19,0	17,7
apr.08	2,70	4,60	-1,90	-4,90	4.820,00	352,5	3,9	26,2	24,8
may.08	2,90	4,40	-1,50	-6,30	4.829,20	338,3	3,8	25,2	23,3
jun.08	3,00	4,70	-1,70	-7,90	4.827,40	337,1	3,8	26,2	24,4
july.08	3,20	4,70	-1,50	-9,40	4.833,20	340,5	3,8	26,2	25,8
aug.08	2,65	4,08	-1,43	-10,78	4.828,90	345,5	3,8	23,9	24,0
sep.08	2,96	4,98	-2,02	-12,97	4.834,60	352,9	3,9	24,1	24,6
oct.08	3,25	4,92	-1,67	-14,41	4.825,10	364,2	4,0	22,0	22,4
nov.08	2,55	3,93	-1,38	-15,88	4.791,20	377,0	4,1	21,2	21,4
dec.08	1,92	3,11	-1,19	-16,88	4.738,60	403,4	4,4	16,9	17,6
jan.09	1,91	2,30	-0,39	-0,53	4.736,70	444,9	4,9	15,6	12,9

Source: NBR, Monthly bulletins , periodicals section, www.bnr.ro

But the crisis started as a result of financial market events (Table 3). Thus, the leu exchange rate (against the euro), although in depreciation since 2007, showed signs of reversing the trend throughout the spring and summer of 2008, in order to deteriorate by almost 15% in the fourth quarter of 2008, being 4 lei for one euro. The reference interest rate - a kind of average of the Romanian banking market - increases from 7.5% to 10.25%, and the same increases (around 40%) can be seen also at the average interest rate on loans (which grow from 13.16% to 17.47%) or at the average deposit interest rate, which almost doubles in 2008 (the increase is from 6.96% at 13.22%). Evolution of these indicators means a credit crunch or preference for bank deposits at the expense of investment or consumption. Here, for example, the total or non-governmental domestic credit, which rises in 2008 by about 50 billion lei, but in the last months of 2008, the nominal increases are becoming smaller and smaller. Moreover, if we add that about 55% of the loan volume was granted in foreign currencies, and as they have appreciated against the leu, we can even speak of a decrease in the value of the loan. Other examples: (a) Romania's medium- and long-term external debt reaches EUR 50 billion, rising in 2008 by a quarter, (b) foreign debt service increases by 50% in 2008, from 8 to 12 billion euros. (c) the budget deficit increases three times, from 9.45 billion lei in 2007 to 27.32 billion lei in 2008). All these developments speak of a need for money from banks, businesses, the state, which, in order to get the liquidity they need, pay any costs, but even more importantly, they steal from the normal circuit, the money that had so far been made to increase the economy. So, the real economy, yielding to those who need money, is contracting, and the crisis also occurs at its level.

Table 3. Evolution of some financial indicators

Year	Exchange rate (RON/EUR) at the end of the priod	Reference interest rate (% p.y.)	Average market interest rate on loans (%)	Average market interest rate on deposits (%)	Total domestic credit (billion. lei)	Non-governmental credit (billion. lei)	External debt on TML (billion. EUR)	External debt service on TML (billion. EUR)	Balance of the consolidated general government (billion. lei)
2005	3,6771	9,68	21,04	8,34	63,10	59,81	24,64	5,31	-2,68
2006	3,3817	8,45	14,83	6,51	95,92	92,38	28,62	6,50	-5,10
2007	3,6102	7,45	13,32	6,70	157,75	148,18	38,53	8,47	-9,45
2008	3,9852	8,76	15,29	9,93	215,35	198,09	50,12	12,11	-27,32
jan.08	3,6960	7,50	13,16	6,96	163,90	154,30	38,00	0,84	0,00
feb.08	3,7269	8,00	13,49	7,31	168,60	158,30	38,90	1,20	0,91
mar.08	3,7276	9,00	13,75	7,66	174,70	164,60	39,90	1,90	0,08
apr.08	3,6759	9,03	14,36	8,33	178,80	168,70	41,80	2,20	1,10
may.08	3,6213	9,50	14,40	8,72	182,50	171,80	43,10	2,90	-2,70
june.08	3,6475	9,75	14,40	9,16	189,20	178,20	44,80	4,30	-5,20
july.08	3,5366	9,75	14,60	9,50	189,90	178,70	45,40	6,00	-3,10
aug.08	3,5330	10,00	14,90	9,92	194,99	183,63	47,46	6,91	-5,14
sep.08	3,7336	10,25	15,29	10,28	205,70	194,17	48,10	8,05	-7,17
oct.08	3,6610	10,25	16,67	11,06	205,07	193,06	49,10	9,38	-10,09
nov.08	3,7794	10,25	17,45	12,04	208,24	195,13	49,72	10,02	-17,31
dec.08	3,9852	10,25	17,47	13,22	215,35	198,09	50,12	12,11	-27,32

Source: NBR, Monthly Bulletins, periodicals section, www.bnr.ro

The liquidity crisis of 2008 shows best by analyzing developments on the Romanian interbank market (Table 4). We can observe that the stock of interbank transactions drops to about 25% compared to the values at the beginning of the year (3.94 billion lei in December 2008, compared to 14.5 billion lei in January 2008) and the average interest rate on the interbank market is almost doubled (7.96% in January 2008 to 15.14% in February 2009). The largest contraction took place (table 4) in October 2008, when the stock of interbank operations

halved, the average interest rate rose from 11.86% to 15.72%, and daily transactions fell from 2.28 billion lei to 1.23 billion lei. Let's add that the ROBOR rate for a week increases in October 2008 to 22.98%, compared to an average of 12.75% in the previous month.

Table 4. Monthly evolution of some financial indicators

Month	Daily average stock of interbank operations - (bilion. lei)	Average interest rate on interbank operations (% p.y.)	Daily average transactions on the interbank market (billion. lei)	ROBOR - 1 week. (%py)
Jan.08	14,50	7,96	3,31	8,37
Feb.08	9,49	9,35	2,51	10,10
Mar.08	10,14	9,44	2,92	9,82
Apr.08	8,81	10,34	2,31	11,21
May08	7,64	10,68	2,11	10,49
June.08	7,22	10,40	2,04	10,41
July.08	7,44	10,75	2,03	10,74
Aug.08	7,12	12,07	2,41	12,63
Sep.08	7,13	11,86	2,28	12,75
Oct.08	4,88	15,72	1,23	22,98
Nov.08	3,96	15,04	1,62	15,95
Dec.08	3,94	12,80	2,02	13,90
Jan.09	3,61	13,07	2,20	14,66
Feb.09	3,95	15,14	1,73	15,73

Source: NBR, Monthly Bulletins, periodicals section, www.bnr.ro

My conclusion is that the evolution of financial indicators, and in particular of domestic lending, must be monitored continuously in order to be able to quickly diagnose “bubble” dynamics.

2. The dynamics and structure of internal credit

After 2008, against the backdrop of the economic crisis at the beginning, and after 2012, in the wake of a timely resumption of economic growth, domestic credit dynamics remained within sustainable limits (Table 5). However, starting with the end of 2016, and in particular during 2017, domestic credit appears to register higher and higher growth. Thus, total domestic credit adds, in 2016 together with 2017, almost 20%, of which 12%, only in 2017 (by September). Higher increases are recorded in the household credit segment, which increases by 30% in the last two years and 17% in 2017 and at the level of credit to non-residents, which has increased by more than 50% in the last two years, but in size the latter is half of the credit to the population and to businesses. In respect to business credit, it declined in 2016 and grew by 9% in 2017. Activation of the lending process at the population level is also evident from the analysis of the internal credit structure. Thus, the credit for the population exceeded, as a share, the credit for businesses, the first holding 40% of the total, and the one for businesses 35%, the difference being higher than the one recorded during the crisis. Let us also note that non-residents attract 20% of total domestic credit.

Table 5. Evolution of domestic credit in Romania

Year	Total domestic credit (billion. lei)	Of which credit granted to				
		households	non-financial corporations	non-monetary financial institutions	public administration	nonresidents
Dec. 2006	133,4	40,2	48,8	3,4	2,6	38,2
Dec. 2007	175,6	71,5	73,0	3,7	3,6	23,8
Dec. 2008	224,2	99,2	94,5	4,3	6,2	19,9
Dec. 2009	271,1	100,2	96,2	3,5	11,3	59,9
Dec. 2010	271,1	102,1	104,6	2,6	11,2	50,5
Dec. 2011	265,6	104,3	115,4	3,4	10,8	31,8

Year	Total domestic credit (billion. lei)	Of which credit granted to				
		households	non-financial corporations	non-monetary financial institutions	public administration	nonresidents
Dec. 2012	284,7	104,5	118,8	2,6	9,9	49,0
Dec. 2013	277,6	103,2	112,3	2,9	9,9	49,2
Dec. 2014	259,2	102,1	105,5	3,6	9,8	38,2
Dec. 2015	262,9	108,0	104,8	4,6	10,0	35,5
Dec. 2016	286,0	113,0	101,6	5,4	10,5	55,4
Sep. 2017	301,9	120,0	106,2	6,5	10,0	59,1
index 2006 = 100 (%)						
Dec. 2006	100,0	100,0	100,0	100,0	100,0	100,0
Dec. 2007	131,7	177,9	149,5	109,3	140,1	62,3
Dec. 2008	168,1	246,8	193,7	127,1	240,4	52,2
Dec. 2009	203,2	249,3	197,1	102,2	435,0	156,7
Dec. 2010	203,2	254,0	214,4	75,8	432,5	132,2
Dec. 2011	199,1	259,3	236,4	100,2	414,7	83,1
Dec. 2012	213,4	259,9	243,4	76,1	380,4	128,3
Dec. 2013	208,1	256,8	230,2	84,6	379,9	128,9
Dec. 2014	194,3	254,0	216,1	105,3	376,5	100,1
Dec. 2015	197,1	268,5	214,8	135,7	383,5	93,0
Dec. 2016	214,4	281,2	208,3	159,5	403,3	145,1
Sep. 2017	226,3	298,5	217,6	191,9	385,1	154,8
total domestic credit rate (%)						
Dec. 2006	100	30	37	3	2	29
Dec. 2007	100	41	41	2	2	14
Dec. 2008	100	44	42	2	3	9
Dec. 2009	100	37	35	1	4	22
Dec. 2010	100	38	39	1	4	19
Dec. 2011	100	39	43	1	4	12
Dec. 2012	100	37	42	1	3	17
Dec. 2013	100	37	40	1	4	18
Dec. 2014	100	39	41	1	4	15
Dec. 2015	100	41	40	2	4	14
Dec. 2016	100	40	36	2	4	19
Sep. 2017	100	40	35	2	3	20

Source: NBR, calculations of the author using indicators taken from the interactive database www.bnr.ro

However, after 2008, the main change in the credit for businesses and the population is noted in the case of its structure by the granting currency (table 6). Thus, both at the level of credit for businesses and at the level of credit for the population the share of the loan in lei increased and decreased accordingly the credit granted in other currencies. Thus, the credit for the population is granted in the amount of 58% in lei and 42% in foreign currency (compared to 43%-57% at the time of the 2008 crisis), and the credit for businesses is structured 64% in lei and 36% in foreign currency (as against 41%-59% at the time of the 2008 crisis). Although foreign currency credit has declined as a share, however, about 40% of the loans are granted in foreign currency, and any depreciation of the leu increases the debt service of these borrowers and may increase the volume of loans which register delays in repayment or even credit losses.

Table 6. The evolution of the credit for businesses and the population in Romania, according to the currency of granting

Date	Loans to non-financial corporations - billion. lei			Loans to households - billion. lei		
	Total	of which		Total	of which	
		in lei	in foreign currency		in lei	in foreign currency
dec. 2006	48,8	22,7	26,1	40,2	23,7	16,5
dec. 2007	73,0	32,6	40,4	71,5	33,6	37,9
dec. 2008	94,5	40,9	53,7	99,2	40,9	58,3
dec. 2009	96,2	39,2	57,0	100,2	38,8	61,4
dec. 2010	104,6	40,0	64,6	102,1	35,9	66,2
dec. 2011	115,4	44,6	70,8	104,3	35,0	69,2
dec. 2012	118,8	48,8	70,0	104,5	34,4	70,1
dec. 2013	112,3	49,0	63,3	103,2	34,6	68,6
dec. 2014	105,5	50,1	55,4	102,1	40,2	62,0
dec. 2015	104,8	54,3	50,5	108,0	52,6	55,3
dec. 2016	101,6	56,5	45,1	113,0	66,1	47,0
sep. 2017	106,2	61,6	44,6	120,0	77,3	42,7
index 2006 = 100 (%)						
dec. 2006	100,0	100,0	100,0	100,0	100,0	100,0
dec. 2007	149,5	143,5	154,7	177,9	141,7	229,9
dec. 2008	193,7	180,0	205,6	246,8	172,7	353,1
dec. 2009	197,1	172,8	218,3	249,3	163,8	372,2
dec. 2010	214,4	176,1	247,7	254,0	151,5	401,1
dec. 2011	236,4	196,5	271,1	259,3	147,9	419,5
dec. 2012	243,4	215,1	268,1	259,9	145,1	424,7
dec. 2013	230,2	215,8	242,7	256,8	146,1	415,9
dec. 2014	216,1	220,6	212,2	254,0	169,4	375,5
dec. 2015	214,8	239,4	193,4	268,5	222,0	335,3
dec. 2016	208,3	248,9	173,0	281,2	278,8	284,6
sep. 2017	217,6	271,4	170,8	298,5	326,2	258,6
total domestic credit rates (%)						
dec. 2006	100	46	54	100	59	41
dec. 2007	100	45	55	100	47	53
dec. 2008	100	43	57	100	41	59
dec. 2009	100	41	59	100	39	61
dec. 2010	100	38	62	100	35	65
dec. 2011	100	39	61	100	34	66
dec. 2012	100	41	59	100	33	67
dec. 2013	100	44	56	100	34	66
dec. 2014	100	47	52	100	39	61
dec. 2015	100	52	48	100	49	51
dec. 2016	100	56	44	100	58	42
sep. 2017	100	58	42	100	64	36

Source: NBR, calculations of the author using indicators taken from the interactive database, www.bnr.ro

However, the previous dynamics do not tell everything about the evolution of domestic credit, because the new credits can be counterbalanced by credit reimbursements granted in the past. Therefore, a correct appreciation of the activation of the lending process can only be made taking into consideration the flow of new loans granted by banks. Thus, from table no. 7 we can conclude that the flow of new loans is continuously increasing since 2013 and annual flows are higher and higher. For example, in 2016, when credit activation was not at high rates as in 2017, new credit streams accounted for about 20% of the stock of loans, or better said 1 leu out of 5 lei in credits came from loans granted in 2016. Also, in 2016, the new bank loans accounted for about 60% of the maximum credit flow granted in the crisis year. Has the maximum flow of new loans in the crisis year been exceeded in 2017?

Table. 7. Evolution of the new credit granted by banks - billion lei

Period	New credit - lei	New credit – foreign currency	Total new credit	Stock of loans to the population
2007	8,68	22,15	30,83	71,51
2008	10,80	25,09	35,89	99,20
2009	5,11	6,49	11,60	100,22
2010	6,33	8,88	15,21	102,10
2011	9,18	9,44	18,62	104,26
2012	6,16	6,27	12,43	104,46
2013	8,12	5,05	13,17	103,24
2014	14,64	0,77	15,42	102,12
2015	17,59	0,33	17,92	107,95
2016	21,30	0,20	21,50	113,04

Source: BNR, Financial Stability Report, December 2016, www.bnr.ro

3. Conclusions

In my opinion, the crisis which the Romanian economy went through between 2008 and 2012 triggered a series of financial phenomena, such as the liquidity crisis and credit crunch. Undoubtedly, in 2008, most economic balances in Romania had deteriorated strongly, and the growth of some macroeconomic aggregates was so high that they could not be sustained in the long run, a strong deterioration of these dynamics being possible, which it happened anyway in the 4th quarter of 2008 and, moreover, the monthly values even recorded negative dynamics.

But the crisis started as a result of financial market events. Thus, the leu exchange rate (against the euro) depreciated strongly in the 4th quarter of 2008, approaching 4 lei per leuro, and the benchmark interest rate increased by about 50% and the average interest rate on credits and the average interest on deposits almost doubled in 2008. Evolutions of these indicators signify a credit crunch or preference for bank deposits to the detriment of investment or consumption.

All of these developments speak of a need for money from banks, businesses, the state, which, in order to get the liquidity they need, pay any costs, but even more importantly, steal from the normal circuit, the money that had until then made the economy grow. So, the real economy, yielding to those who need money, is contracting, and the crisis also occurs at its level.

After 2008, against the backdrop of the economic crisis at the beginning, and after 2012, with a shy resumption of economic growth, the dynamics of domestic credit remained within sustainable limits. However, starting in the end of 2016, and in particular during 2017, domestic credit appears to be rising higher and higher. Higher increases are recorded in the household credit segment and the credit extended to non-residents. As far as the business credit is concerned, it declined in 2016 and grew in 2017. However, after 2008, the main change in credit for businesses and households is noted in the case of its structure by the granting currency.

However, as the new loans can be counterbalanced by credit reimbursements granted in the past, a fair appreciation of the activation process of the lending process can be made taking into account only the flow of new loans from banks. Thus, the flow of new credits is continuously increasing since 2013 and the annual flows are increasingly higher, with new credit streams reaching 20% of the total stock of loans in 2016.

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