

## REBOUND OF THE ROMANIAN CARD MARKET AFTER THE CRISIS AND ITS IMPACT ON THE BANKING PROFITABILITY

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**Abstract:** *The Romanian cards market relaunched after the crisis period, because the credit diminished or even stopped during 2008-2013, so the banks had to rely on the fees granted by issued cards or by banking payments operations. So, the total issued banking cards increased a lot during the last years and the electronic banking services developed.*

**Keywords:** Banking cards, Banking profitability, Banking fees, Electronic banking services.

**JEL Classification Codes:** E42, E44, G21.

### 1. INTRODUCTION

The impact of the modern technology has led to the development of the banking service, favouring the emergence of electronic distribution systems for the banking services. Among these we enumerate: debit and credit cards, computerized instruments (ATMs, POS), internet banking, mobile banking, home banking, the latter representing the virtual electronic banking system based on the use of cards.

The payment machines or ATMs have undergone a significant development, allowing deposits, cash withdrawals or balance enquiries. Telephone banking or mobile banking requires the use of a password by the customers resorting to this service by which they can have access to the bank's computerized system and perform balance checks, payment orders, etc. The bank at home service or home banking for customers who have large funds in their accounts, offers a system that connects to the personal computer, thus being able to carry out transactions similar to those performed via the telephone. The difference lies in the fact that, by using the home banking service, customers have the possibility to print the results.

The advantages of using the electronic systems are: reducing the time to perform the transaction; low costs; engaging staff in other activities; convenience; lack of commissions. The three remote services - internet banking, home banking and mobile banking - are in fact different ways to achieve the objective of performing banking operations in real time.

It is obvious that the number of customers using e-banking is rising, the customers giving up banks that do not offer these services at a high level in terms of quality. The innovation of banking services refers to the replacement of previous parameters of the services. In most cases, innovation goes in the same direction as the banking or tax regulations.



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## 2. DEVELOPMENTS OF THE BANKING CARDS IN ROMANIA AFTER THE CRISIS

By analysing the table presenting many important banks in Romania, one can notice that the most widespread e-banking systems are the Internet banking systems (20 banks), followed by the home banking systems (10 banks) and mobile banking systems (6 banks) (Table 1). Even if the banks have adopted a reserved attitude towards the e-Banking market, claiming that it is still going through a formation period, according to the data provided by the MCIT, in 2016, the transactions performed via electronic payment instruments exceeded 35 billion euros.

**Table 1. E-banking Systems in the Romanian banking market**

No.	Bank	Internet Banking	Home Banking	MobileBanking
1.	Alpha Bank România	Alpha Web Banking	AlphaLine	
2.	BCR	BCR 24 Internet Banking	Home Banking Service	BCR 24 Mobile Banking
3.	Veneto Bank	Bank@You-Internet Banking		
4.	BancPost	Internet eBank	Internet eBank	
5.	B R D	BRD-NET	SOGECASH, MultiX	Mobilis
6.	Libra Bank	LIBRA WEB BANKING		
7.	Credit Agricole Bank Romania	UBISQL Internet Banking		
8.	Marfin Bank		MultiCash	
9.	Leumi Ban Romania	Leumi Online		
10.	EXIMBANK	Internet eBank	Internet eBank	
11.	Unicredit Tiriac Bank	UniCredit Internet banking	Multicash	
12.	ING Bank N.V.	ING Online	Multicash	
13.	Raiffeisen Bank	Raiffeisen Online	MultiCash	Raiffeisen Smart Mobile
14.	Intesa SANPAOLO BANK ROMANIA	SANPAOLO B@NK		
15.	PORSCHE BANK	Bank @ You		
16.	Transilvania Bank	BT24	BT-Ultra	
17.	FINANSBANK(Romania)	FINANSnet		
18.	Piraeus Bank Romania	Internet Banking		Mobile Banking
19.	CEC Bank	Internet banking CECOnline		CEC Bank Mobile Banking
20.	Garanti Bank	Garanti Online Internet Banking		Garanti Mobile ME

Source: banking websites, accessed at 26th July 2017

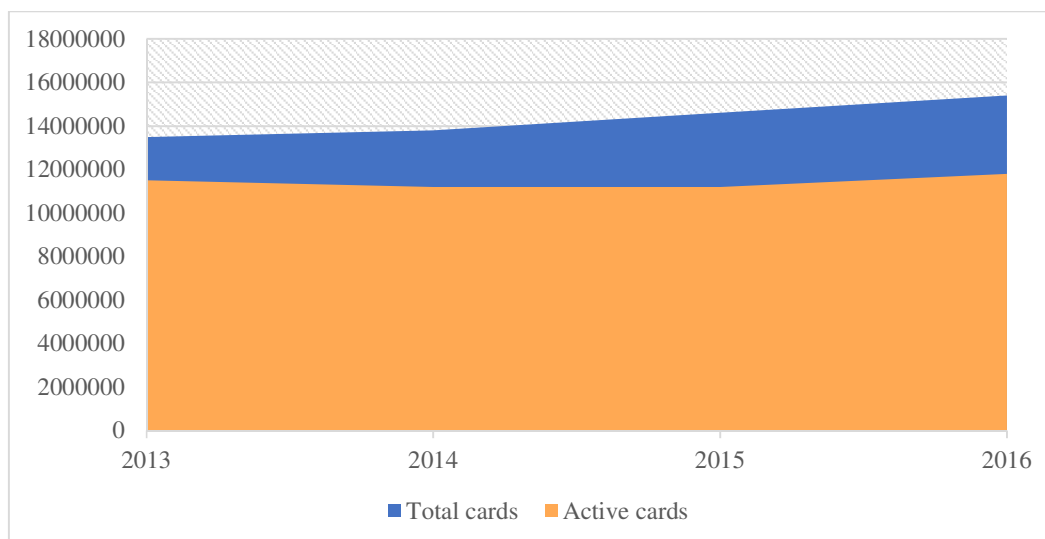
The period 2015-2016 represents the interval with the best evolution of the card market after 2009, the year when the crisis burst in Romania as well. The results are closely related to the macroeconomic evolution, Romania recording a sustained economic growth. Even if the expectations for 2017 refer to economic contraction (the annual GDP growth is forecasted to drop to 3.8%), Romania will maintain its first position in the European ranking in terms of economic growth.

The measures concerning the wage increases, both of the minimum gross wage as well as the average net wage across various sectors of activity, adopted by the government very much contributed to the formation and growth of the GDP, whereas the reduction of taxes contributed to the increase in consumption. From December 2014 to 2016, many jobs were created. At the same time, year 2015 brought the first negative annual rate of inflation in the history, which combined with the wage increases meant a real increase in the population's purchasing power. Consequently, consumption became the main driver of the GDP growth, outrunning the industry.

These macroeconomic evolutions were noticed both in the growth of the card portfolio as well as in the degree of utilization. Between 2015 and 2016, the balance of valid cards in circulation increased from 14.6 million to 15.4 million. It is worth noticing that a third of this increase is represented by the credit cards, whose portfolio increased from 2.3 million to 2.6 million in the same period – a sign of the population's increased confidence in the evolution of the economy and their own finances.

If at the end of 2002, on the market there were approximately 3.4 million active cards and 3.24 million card accounts (Radulescu and Popescu, 2012), the number of active cards on the Romanian market at the end of 2016 was of 11.8 million. Unfortunately, during the period under analysis, the gap between the number of valid cards in circulation and the cards actually used became wider. According to the data provided by the NBR, at present this difference represents 4 million cards (11 mil. active cards against 15 mil. valid cards on the market) (Figure 1).

This difference can only be explained by the fact that we still have card extensions without the client being asked whether or not he/ she wants the respective product and issues of cards (unwanted cards) which come with the package of other products (wanted).

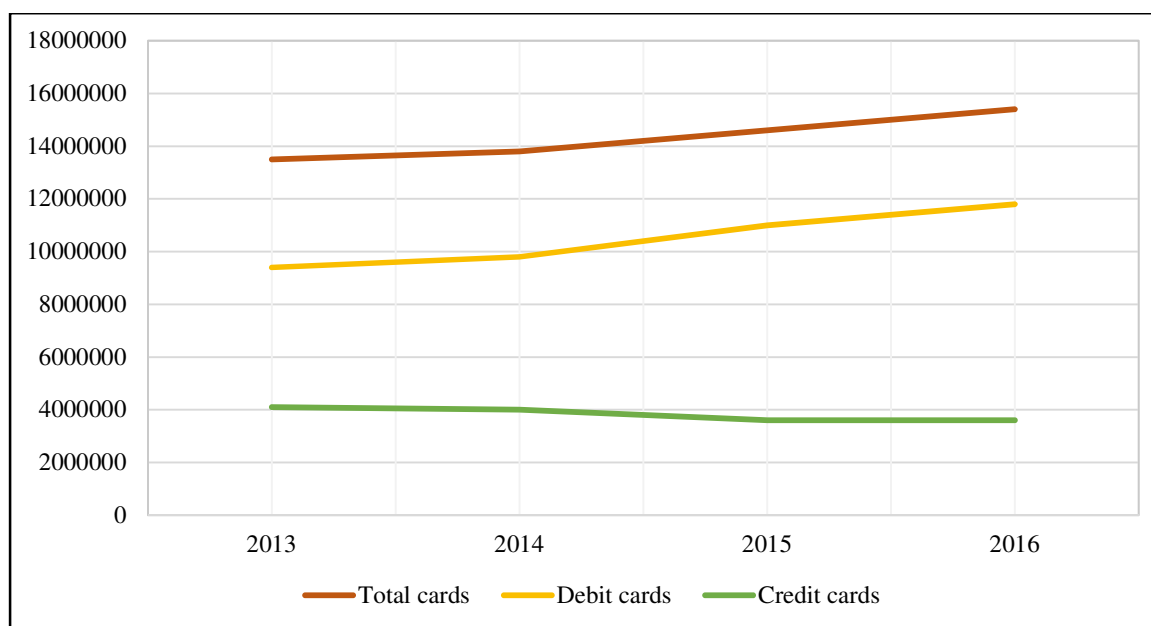


**Figure 1. Active and total banking cards number (2013-2016)**

Source: <http://www.bnro.ro/Raport-statistic-606.aspx>, accessed at 26th July 2017

A spectacular evolution is observed within the payment area. Over the last two years, while the number of transactions has capped at around 60 million per quarter, the payment transactions number increased from 55% in 2014 up to 85% in 2016, while the cash withdraw transactions number fluctuated in a very narrow band of 55-63%. For the value of transactions, in the payment area we could also see an increase from 8675 mil. euro at the beginning of 2015 up to 10952 mil. euro in 2016 (Radulescu, 2017).

By far, the most explosive growths were observed on contactless cards, whose portfolio is in the range of 3.5 million units. Only in the case of five card banking issuers, the number of transactions increased more than 13 times, and the volume of the amounts traded increased more than 18 times, reaching approximately 13.5 million transactions, respectively 123 million euros (during 2014-2015). The constant growth rhythm maintained in the first half of 2016, an obvious sign that the population takes advantage of the opportunity, its utility and the advantages of the new technology and payment method. Just by analysing the case of ING Bank, which is the market leader, there were carried out over 10.6 million transactions amounting to 600 million lei, thus exceeding the transaction volumes traded across the market throughout 2015.



**Figure 2. Distribution of the total cards by type (2013-2016)**

Source: <http://www.bnro.ro/Raport-statistic-606.aspx>, accessed at 20th July 2017

At the end of 2016 there were 15.4 million valid cards in circulation, out of which 11.8 million (77%) were active. If we analyze the evolution of cards for the period after the crisis (2013-2016) we can draw the following conclusions:

- The total number of valid cards increased by approximately 2 millions (Figure 2);
- The increase was represented by the increase in the number of debit cards (25% compared with 2013); the number of credit cards dropped by approximately 13% compared with 2013 (Figure 2);
- From the total number of cards, it can be seen that the number of active cards decreased. If in 2013 the active cards had 85% weight of the total number of cards, at the end of 2016 they recorded a 77% weight of total cards, recording a decrease of about 10% (Figure 1);

- The ATM number, POS number and EFTPOS number steadily increased with more than 40%-50% after the crisis, the highest increase being observed for POS and EFTPOS number. This means that the population increased the card payments (Table 2).

**Table 2. Number of ATM, POS, EFTPOS (units)**

Date	ATM Number	POS Number	EFTPOS Number
Dec. 2016	11,006	124,920	118,551
Sep. 2016	10,866	123,056	117,633
Jun. 2016	10,756	120,480	115,019
Mar. 2016	10,440	115,652	110,128
Dec. 2015	10,102	107,052	99,812
Sep. 2015	10,053	103,937	96,969
Jun. 2015	9,954	101,902	94,802
Mar. 2015	9,824	99,065	92,213
Dec. 2014	9,702	98,522	92,104
Sep. 2014	9,685	96,434	89,994
Jun. 2014	9,553	98,879	92,252
Mar. 2014	9,356	94,862	88,505
Dec. 2013	9,246	90,498	83,977
Sep. 2013	8,780	84,248	77,825
Jun. 2013	8,307	80,160	72,784
Mar. 2013	7,936	80,068	72,808

Source: <http://www.bnro.ro/Raport-statistic-606.aspx>, accessed at 19th July 2017

The banks owning the highest number of cards in their portfolio are Banca Transilvania, BCR, Raiffeisen Bank and UniCredit Tiriatic Bank. In 2015 Raiffeisen Bank recorded the highest increase in the card portfolio (+160,000), Unicredit was the bank with the highest development of its retailer acceptance card network (over 3,400 POS terminals and almost 4,000 new contracts signed with retailers, including online retailers), however BCR won the title Bank of the Year on the card market, being the leader in three out of the six main assessment indicators. BRD is the leader of the debit card market, but it doesn't rank very well in the top of the credit card market. BCR, Raifeissen Bank and Transilvania Bank rank high both in the debit card top issuers and the credit card top issuers (Tables 3 and 4).

In order to streamline costs and also due to the effects of certain laws such as the Government Emergency Order 174/2013 and Government Emergency Order 50/2015 – which no longer allow the issue of reapproved cards to the consumers, banks turned the portfolio cleaning process, by closing the inactive cards, into a phenomenon which manifested throughout the entire market level, which was a dramatic process for some bank card issuers. Thus, over the period 2013-2015, the portfolio of Bancpost diminished by more than a third, and BCR reduced the number of valid cards in circulation by 20% during 2015.

Even if the strong banks significantly reduced their portfolios over the period 2013-2015, their weight remained quite high, at more than 70%. ING entered this category of large issuers with portfolios of more than one million cards, outrunning Bancpost.

**Table 3. Top ten debit banking cards issuers (2016)**

No.	Bank	units
1	BRD	2,175,000
2	BCR	1,800,000
3	Transilvania Bank	1,700,000
4	Raiffeisen Bank	1,350,000
5	ING Bank	950,000
6	CEC Bank	850,000
7	Bancpost	660,000
8	UniCredit Tiriatic Bank	345,000
9	Alpha Bank	200,000
10	OTP Bank	170,000

Source: <http://www.bnro.ro/Raport-statistic-606.aspx>, accessed at 18th July 2017

By analyzing the portfolios of the banks in 2016, we notice that 10 banks hold more than 92% of the debit card market. The main reason is that these banks have the largest bank attracted deposits (especially from the population) and lately, almost any demand deposit has at least one debit card attached (Table 3).

A spectacular evolution can be observed in the case of Banca Transilvania, the largest bank owning majority Romanian capital, whose development is due to the offensive marketing strategies within the last period. Over the last two years (2014 - 2016) Banca Transilvania managed to climb 5 positions within the top of banks in terms of assets level. If at the end of 2014, it was on the 8th position within the top of banks in terms of assets; at the end of 2016 the bank was ranked the third. The evolution recorded at this level shows an increase of almost 25% of the market share in terms of assets, from 5.9% in 2014 to 7.27% in 2016.

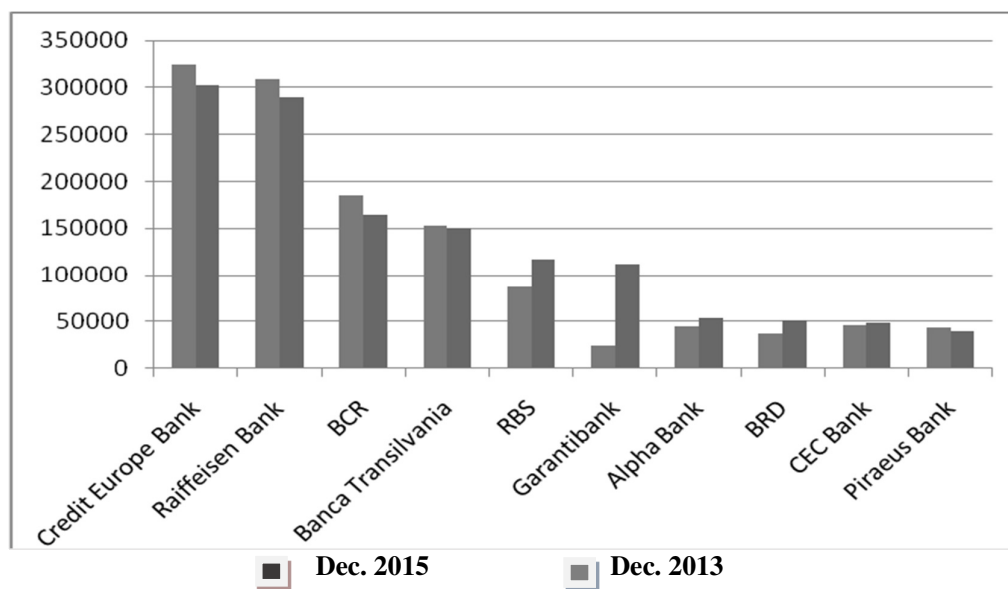
With regard to credit cards, Credit Europe Bank consolidated its leader position, mainly due to its well-known credit card called “Card-advantage”, which allows interest-free instalment purchasing. Although within the period under analysis the total number of credit cards declined, the Credit Europe Bank strengthened their leadership position in terms of credit cards (Table 4).

**Table 4. Developments of the portfolios of the first 10 credit banking cards issuers**

Issuer	Dec. 2013	June 2014	Dec. 2014	Dec. 2015
<i>Credit Europe Bank</i>	324.725	329.577	322.584	302.826
<i>Raiffeisen Bank</i>	309.264	326.158	332.627	289.949
<i>BCR</i>	184.600	179.228	179.744	164.254
<i>Banca Transilvania</i>	153.517	152.899	154.646	150.583
<i>RBS</i>	87.243	n.a.	164.239	116.494
<i>Garantibank</i>	23.996	54.672	78.614	111.438
<i>Alpha Bank</i>	45.154	48.176	49.079	54.176
<i>BRD</i>	37.037	43.015	52.049	51.081
<i>CEC Bank</i>	46.527	37.147	49.378	48.758
<i>Piraeus Bank</i>	42.894	42.000	41.978	40.000
<b>Total</b>	<b>1.193.924</b>	<b>&lt; 1.300.000</b>	<b>1.424.938</b>	<b>1.329.559</b>

Source: banks websites, accessed at 18th July 2017

The following banks within the ranking also recorded a decrease in the number of cards issued (Raiffeisen Bank recorded a decrease by 6.2 % and BCR by 11%). A significant increase can be observed in the case of Garantibank, increase which is mainly due to the credit card called Bonus Card issued by this bank resembling the one issued by Credit Europe (installment interest-free credit card) and also to other types of cards (Baneasa Bonus Card, WWF Bonus Card, AVON Card, Bonus Card with mirror, etc.) which had a great impact on the population (Table 4 and Figure 3).



**Figure 3. Developments of the credit cards by issuers (2013-2015)**

Source: <http://www.bnro.ro/Raport-statistic-606.aspx>, accessed at 18th July 2017

In the table 5 we can observe the concentration of the number of cards. Even if the number of small issuers increased, they still own only 4.6% of the market. The main reason is due to the concentration of bank deposits within these banks (the top 5 card issuing banks also own about 70% of the depositors market).

**Table 5. Cards market concentration**

Issuer Type	Dec. 2013	Dec. 2014	Dec. 2015
<b>Banks with large portfolios (over 1 mil. cards)</b>	9.207.123 – 74,7% (5 issuers)	8.003.220 – 64,7% (4 issuers)	8.632.495 – 71,3% (5 issuers)
<b>Banks with medium portfolios (100.000 – 1.000.000 cards)</b>	2.837.217 (9 issuers)	4.023.108 (11 issuers)	2.919.470 (8 issuers)
<b>Banks with small portfolios (below 100.000 cards)</b>	286.899 – 2,3% (15 issuers)	331.938 – 2,7% (16 issuers)	558.028 – 4,6% (18 issuers)
<b>Total</b>	<b>12.331.239</b>	<b>12.358.266</b>	<b>12.109.993</b>

Source: <http://www.bnro.ro/Raport-statistic-606.aspx>, accessed at 15th July 2017

Almost a quarter (24.87%) of the active payment cards are issued in Bucharest, according to the report of the Central Bank on the financial behaviour of the population and of the economic agents and only 2.23% of these cards are issued in foreign currency.

The average ratio between the number of banking cards and the population in Romania was more than 60%, but it varies from a county to another. Thus, in Bucharest and Ilfov there are 2.13 million cards issued, for a population of approximately 2.2 million inhabitants according to the National Statistics Institute. The counties in which were issued most of the cards compared to the number of citizens are Cluj (65.1%), Sibiu (51%), Brasov (50.7%) and Timis (50.3 %). The counties with the lowest rate of card penetration are Giurgiu (15%) and Calarasi (17%), according to the data provided by the National Bank of Romania (NBR).

2014 was the first year throughout the history of the card market in Romania in which the number of valid cards in circulation was lower than the number recorded in the previous year. However, in only 10 years, the number of cards in circulation increased more than 10 times, performance which had not been achieved by any other European state in the same period.

With regard to the Eurozone, after the crisis, a number of other 13 European countries recorded decreases in the card portfolios. According to the contraction recorded after the crisis (2013-2015), Romania ranks among the group of Bulgaria, France, Slovenia, Lithuania or Czech Republic that displayed contractions of their issued card portfolios (ECB database).

If we compare the portfolio of valid cards in circulation with the active population aged between 15 and 59, we find out that Romania concluded year 2016 with a statistical average value of 0.75 cards per inhabitant (Romania ranks after Bulgaria, but the value is increasing). But the value is very encouraging for the future of the electronic payments given the fact that our country holds the first position within the EU in terms of the share of rural population - over 45% and given the Romanians' traditional behaviour in favour of using cash for payments.

However, the degree of penetration is significantly different in the urban area compared to the rural one. The most recent statistics show that more than half (54%) of the urban population aged above 15 owns a card, while for the whole country the percentage drops to 41 % (Master Card Index). The percentage of people using the banking card rises up to 85% for the Romanians living in cities with more than 50,000 inhabitants (APERIO Index). The percentages also vary a lot according to the education level, from 20% for people with primary education studies to 86% in the case of people with higher education studies.

### **3. IMPACT OF CARDS ON BANK'S PERFORMANCE**

The Romanian card market is going through an interesting period. Despite the crisis, in 2015 the banks brought important events, innovations, product and service launches in this segment

From the beginning of 2014, the Romanian card market entered a period of portfolio refining. The banks' attention shifted from the quantitative expansion within the card area to the stimulation to use these products and to the qualitative portfolio development. This aspect was noticed through the decrease in the number of valid cards on the market to 12.8 million at the end of 2014, from 13.5 million in 2013. The first half of 2015 maintained the number of cards in circulation at a close level even though approximately 1.25 million cards were issued during this period. The increase in the portfolio of valid cards in the first semester was marginal, of 0.6% from 12.8 million to 12.9 million cards.

There is a segmentation of the domestic card market, between the large issuers, with portfolios of more than one million cards - BCR, BRD, Raiffeisen Bank, Banca Transilvania - and the banks within the second echelon of this sector, with a lower portfolio. The first semester of the year points out a difference in evolution between the two segments. Therefore, at the level of three banks within the first echelon, the card portfolio diminished or remained almost unchanged in



terms of volume. This situation characterizing BCR, BRD and Raiffeisen is due to the stringency of the debit card portfolio. An exception is Banca Transilvania which increased its number of cards by almost 40,000 units (almost all being debit cards), a 2.85% marginal increase compared to the bank's portfolio.

The banks in the second echelon recorded faster dynamics during the first semester, whether we are referring to emerging players, starting from a lower card portfolio or mature players, such as ING. Thus, OTP Bank, Alpha Bank, CEC, UniCredit Ţiriac and ING Bank recorded a solid increase in the card portfolio during the first semester, with dynamics of more than 4 per cent - even double-digit increases - versus the end of 2014. However, the fastest growth rates were recorded by Garanti Bank, given that it starts from a lower base. Moreover, in nominal terms, the evolution of the card portfolio within Garanti was the most consistent in the first half of the year. At the end of 2013 the bank initiated an offensive approach within the retail banking area, with the credit card Bonus Card as its spearhead, and this year they also focused on debit cards. The number of cards increased by 33%, Garanti adding over 42,000 new cards to its portfolio. The segment of debit cards moved forward by almost 42%, while the number of Garanti credit cards increased by 27%.

Taking into account that each banking operation is charged with a commission, whether it is a simple interbank transfer, a cash withdrawal from the ATM or an analysis of a credit file, it is worth considering the profit gained by banks when it comes to cards. Also, this category comprises current account administration commissions. A recent feature within the banking practice, in many cases opening a deposit involves opening a current account at the same bank, the current account being administered therefore with a commission attached. Although in absolute value, the commissions are not significant, the operations volume leads to a significant contribution to a bank's profitability.

In accordance with the legal provisions in force, banks publish the balance sheet and profit and loss account, but they do not make available detailed facts on their distribution, for better information.

In order to analyze the financial impact of cards we used articles from the media, opinions and journals

The "cheapest debit cards" pull out of their holders' pockets an average amount of 32 lei per year in the case of Gold cards; however, the average cost may even reach 300 lei per year. If we take into consideration the cash withdrawal commissions (with the issuing bank or other banks), payments to retailers within the country and abroad and card issue commissions, the annual administration commissions and the costs incurred by the holder to check the balance 12 times a year at the ATMs of the bank issuing the card or the minimum balances that have to be maintained in the account and which were imposed by some banks, we can notice that the accumulated amount is not at all insignificant.

Over the period 2012-2014 many credit cards were closed by means of a consumer credit, however, given the fact that the new NBR regulations concerning the loans to the consumers considerably limit the access to this type of loan, banks have restarted to intensely promote credit cards

If in the case of debit cards, the financial impact on the performance of the bank was at an average level, the situation completely changes in the case of credit cards. Generally, a credit card has a grace period for the purchases made at retailers. Many customers purchasing goods using the credit card do not manage to fully pay the amounts used during the grace period, therefore risking paying 25-30% interest per year. The interest rate in the case of a credit card is considerably higher than for a standard loan, through capitalization it can even reach 40%. Banks do not provide detailed information about their income on this segment, but taking into account the interest rates

charged, the number of active credit cards and particularly the commissions charged, we can conclude that a large part of their income is formed from this segment.

Credit cards can represent an option not only for individuals, but also for legal entities. The credit cards for SMEs are very similar to a credit line; the differences between these two products are very few. Just like for loans, the first thing that needs to be noted is the interest rate.

Within the business card segment the interest rate varies from 0% for the full payment of the amount until the 25th of the following month and it can reach up to 22-23%, which is quite a high interest rate taking into account the fact that this card can be considered a loan, and if the due date is exceeded, the interest rate is even higher.

The spread of bank cards has increased a lot over the last years in Romania, and along with it the bank card associated frauds. Banking cards (debit or credit cards) may be used in various ways.

As a consequence of the interdependence both at the level of the financial market infrastructure as well as at the level of the participating institutions, cyber-attacks may have a systemic impact on the financial sector and they can affect the real economy. The fundamental standards to assess and reduce these risks concerning the financial market infrastructures are constituted by the “Principles for Financial Market Infrastructure”, elaborated by the Bank of International Settlements (BIS) in 2012, in particular their requirements concern the operational and governance risks. These standards stipulate the provision of settlement finality and restoration of critical activities within a maximum of two hours as objectives of the security policy. In 2014, the Bank of International Settlements (BIS) also developed a study on cyber-related risks, which served as guidance for the monitoring authorities and the administrators of the market infrastructure until the completion of a new set of international standards which will address these risks in a detailed manner.

The National Bank of Romania, in co-operation with the European Central Bank and the other EU monitoring authorities, assesses the systemic risks associated to potential cyber-attacks and gets involved in the testing process and improvement of the cybernetic resilience of the financial market infrastructures and of their participants. This activity falls within the general responsibilities of the central bank, to permanently monitor, through the perspective of the relevant international standards, the good functioning of the national payment and settlement systems, aiming to identify and minimize risks which might endanger the financial system and the economy on the whole.

#### **4. CONCLUSIONS**

In Romania, year 1992 can be considered the debut year for the banking card programmes; however, the settlement acceptance of cards issued by the International Banking System had been possible since 1972 through the National Organization for Tourism but only for non-resident individuals.

From 1992 and until the beginning of 2016, on the Romanian market emerged 16 card issuers which issued 57 types of different active cards, out of which 29 issued under the license from VISA, 22 under license from EUROCARD/ MASTERCARD and 6 under the license from AMERICAN EXPRESS.

Therefore, experiencing excellent dynamics, the domestic card industry diminished the circulation of cash in economy with more than 50,000 billion lei, the equivalent to 4.5% of GDP. At the end of December 2016, only VISA cards taken alone exceeded 5 million units. However, we have to note that the number and volume of transactions, in particular payment transactions, are relatively low compared to the one of the neighbouring countries or EU area, a high weight in the total transactions being represented by transactions performed by individuals withdrawing their

wage incomes from card accounts. Therefore, this aspect requires the widening of the card utilization base by increasing their degree of acceptance at retailers, given the great potential of the market.

At the end of this study on the banking card market in Romania, we can state that the Romanian banks are beginning to focus not only on the increase in the number of cards, but also on a wider acceptance, a more frequent utilization and more efficient card issuing strategies, on a development in which the intensive dimension begins to diminish the gap compared with the extensive one, all of which indicating the maturity of the card market in Romania. The great improvement of the Romanian card market supported the banking system during the last crisis and the gap between the valid cards and active cards started to diminish after 2014 which means that the banks are targeting a better acceptance of their issued cards at the merchants and are developing their electronic payment systems.

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