

## **INTERNET BANKING SERVICES - A BUSINESS NECESSITY IN THE THIRD MILLENNIUM**

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**ABSTRACT:** *In this paper, we have presented several theoretical aspects of internet banking, based on the place of this type of services in the range of electronic services within the banking system and further on we have revealed the obvious benefits that these services have for individuals and legal entities, as well as their security features. The second part of the paper highlights some statistical aspects of online banking penetration in EU countries and in Romania by comparison. Based on the statistical data presented by Romanian banking institutions, we have made a comparison of the number of individuals and legal entities who access internet banking services.*

**KEY WORDS:** *Internet banking, banking institutions, banking system, electronic services*

**JELL CLASIFICATION:** *G21, G24.*

### **1. INTERNET - MEANS FOR DEVELOPING ONLINE BANKING**

The rapid development of information and communication technology has a significant impact on the society and the world economy through fundamental changes of the models of production and distribution, of the nature of work and on the place of the individual within the society, as well as on legal, cultural, political and administrative issues.

Thus, at the beginning of the millennium, the world economy is undergoing a complex process of transition from a predominantly industrial society towards a society of information and knowledge the premises of which are dictated by the dynamics of digital technologies that allow accessing, processing, storing and sharing information more quickly and at low cost.

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Unanimously, the experts consider that the beginnings of the information society can be dated in the early 1990s due to the rapid and exponential development of communication via Internet, a social and technical phenomenon that has been much publicized at the end of the Millennium with decisive impact on the society and its future. Currently, statistics show an impressive development of the use of Internet. Thus, data from Internet World Stats proves that 39% of the world's population is able to access the Internet. Obviously, there are two extremes to this average, North America where nearly 85% of the population has Internet access and Africa where there are 240,146,482 registered users, meaning that only 21% of the population has access to the Internet.

The transition to an economy and a society based on knowledge in conditions of a strong development of information technology and communications produces major changes in the field of financial and banking services. Thus, the success of these services under the new conditions is determined by their reorganization and diversification so as to bring not only satisfaction to customers, but also excitement. In this context, electronic banking is one of the necessary and indispensable services of the financial system. It is a kind of "umbrella" covering the process by which clients can carry out financial transactions electronically, without the need to visit the bank (Roșca, et al., 2006).

In comparison with the traditional means through which banks provide services within their branches, digital banking uses information technologies to provide customers common financial service (opening of accounts, funds transfers and electronic payments). Technological innovation and competition among existing banking institutions have allowed a greater range of banking products and services to become available through electronic, interactive communication channels. In comparison with the traditional means through which banks provide services within their branches, e-banking uses a public or private network to delivery products and services directly to customers.

While different types of e-banking services are available for quite some time through ATMs and telephone transactions, modern electronic banking services, such as internet and mobile banking, have revitalized banking transactions more recently (Drigă & Isac, 2014).

## **2. BENEFITS OF INTERNET BANKING**

Internet banking (online banking, web banking or virtual banking) is a term used for conducting banking transactions via the Internet. Electronic banking services over the Internet, an outstanding opportunity for selling banking services, enables clients to conduct financial operations any time and any place in every Internet connected corner of the world (Atay & Apak, 2013). It is a flexible and convenient way of banking and has various transaction related benefits despite of certain impediments lying in inconvenience owed to security factors and considerable high costs of installing and maintenance for information and communications technology (Drigă, 2014).

Regardless of the bank that offers this service, online banking provides advantages like flexibility, availability, individually and mobility both to corporate and individual clients:

- mobility - meaning that the user can log into his or her online bank account directly from the browser of any PC, tablet or smartphone with an internet connection, without needing to install additional programs;
- availability - basically, the service is available 24 hours a day; in general, the actual transactions will take place during the working hours, nevertheless some financial institutions have begun to offer permanent transfer services;
- conducting various transactions - paying bills, transferring funds, checking account balances, paying mortgages or purchasing financial instruments and certificates of deposits;
- individually - internet banking allows customers to view recent transactions, to make payments, to establish the date of payment orders and to view transaction history.

To bankers digital banking is efficient in terms of expenses, because of reduced administrative costs, allowing banks to expand regionally without investments in physical locations and to maintain customers by eliminating the shortcomings of branch banking where customers have direct contact with bank representatives.

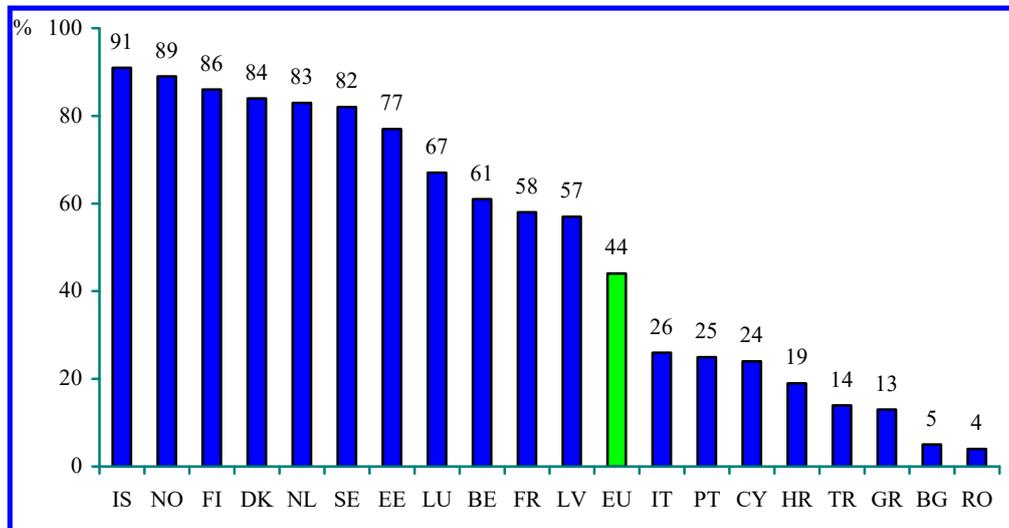
Online banking is simple, convenient to access and involves lower costs compared to traditional branch banking. In addition, it allows banks to meet the requirements of thousands of customers at the same time.

### **3. INTERNET BANKING TRENDS IN EUROPE AND ROMANIA**

Online banking, a typical product of the new economy, has become one of the most important factors in business economy today. The development of online banking in European countries reveals some common feature, but Europeans use online banking to quite different degrees.

In recent years, the dominant strategy for banking groups was to own both pure online banks and traditional banks with an internet portal allowing them to take advantages of both business models. Moreover, internet banks that initially provided only online tools have gone over to a mixed model, using other means, such as mobile banking or financial advisors (Arnaboldi & Claeys, 2008).

Statistics show that Internet banking usage by Europeans differs significantly from one state to another. Nordic countries have the highest penetration of online banking users in Europe, reaching values above 80% in 2014 (Iceland - 91%, Norway - 89%, Finland - 86%, Denmark - 84%, the Netherlands - 83%, Sweden - 82%). The average of the European Union countries is 44%, while the last places belong to Romania - 4%, Bulgaria - 5%, Macedonia - 6%, Turkey, Greece - 11% (see figure 1).



Source: based on data from the Eurostat database, <http://ec.europa.eu/eurostat>

Note: Country code: IS - Iceland, NO - Norway, FI - Finland, DK - Denmark, NL - Netherlands, SE - Sweden, EE - Estonia, LU - Luxembourg, BE - Belgium, FR - France, LV - Latvia, EU - European Union, IT - Italy, PT - Portugal, CY - Cyprus, HR - Croatia, TR - Turkey, GR - Greece, BG - Bulgaria, RO - Romania

**Figure 1. Online banking penetration in European countries in 2014**

Internet banking services allow users to manage their current accounts and deposits, to make payments, currency exchanges, etc. at any time and at a lower cost than the fees charged by the cash desks of banks. However, while the development potential of this service is huge in Romania, considering the high speed Internet in the country, in terms of online banking penetration Romania is still pretty much behind other European countries.

Statistical data (eFinance, 2013) shows that the number of customers who bank online, number of Internet banking transactions and the values of these transactions increased in Romania in 2012, but the numbers are still low for the largest country in South-eastern Europe.

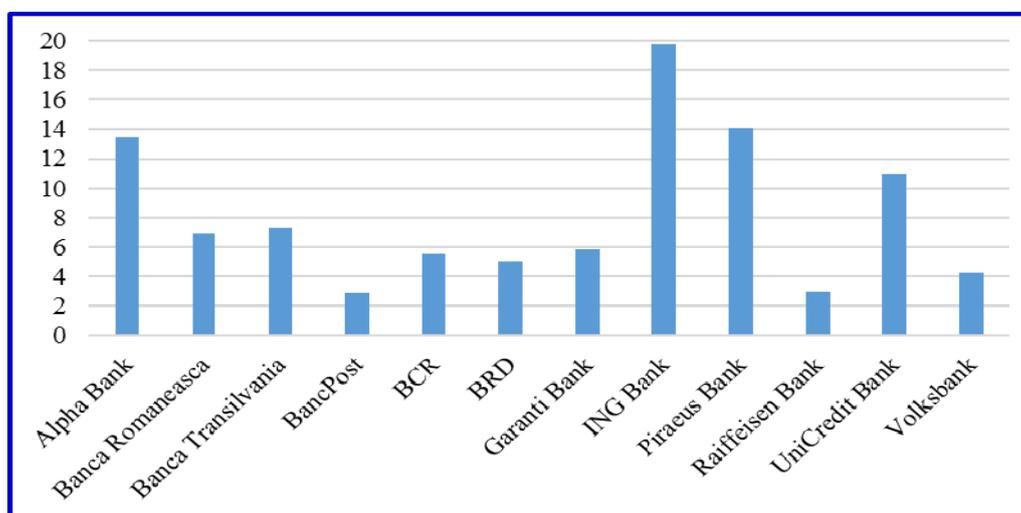
Regarding the number of individual internet banking users (see table 1, figure 2 and 3) and the number of transactions, the highest values are registered by Raiffeisen Bank, BCR, BRD, ING Bank, Banca Transilvania, while in terms of the average value of transaction per user first places belong to Alpha Bank, Piraeus Bank, UniCredit Bank, ING Bank and Garanti Bank.

However, the values of online banking transactions performed by individuals are low even for the leading players of the Romanian market (ING Bank, BCR, Banca Transilvania, Raiffeisen Bank, UniCredit Bank).

**Table 1. Internet banking usage in Romania by individuals, 2012**

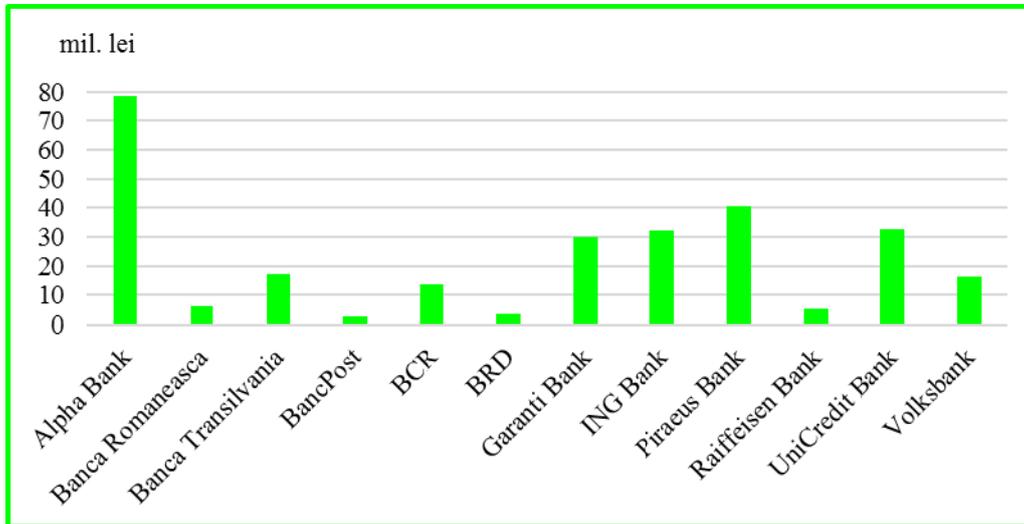
No	Bank	Number of users	Number of transactions	Value (mil. lei)	Average value of transaction per user (mil. lei)	Average number of transactions per user
1	Banca Romaneasca	17400	121019	110234	6.34	6.96
2	Banca Transilvania	236321	1725828	4117521	17.42	7.30
3	BancPost	177929	515588	496771	2.79	2.90
4	BCR	557278	3095679	7666853	13.76	5.55
5	BRD	421271	2140000	1580840	3.75	5.08
6	Garanti Bank	67000	391378	2016932	30.10	5.84
7	ING Bank	380000	7500000	12328610	32.44	19.74
8	Piraeus Bank	13000	183000	525763	40.44	14.08
9	Raiffeisen Bank	597502	1774602	3113180	5.21	2.97
10	Volksbank	37459	159076	612119	16.34	4.25
11	Alpha Bank	21800	293577	1712102	78.54	13.47
12	UniCredit Bank	88153	961658	2882129	32.69	10.91

Source: eFinance, Online banking - A deeper and more mature market in 2012, April 2013



Source: based on eFinance, Online banking - A deeper and more mature market in 2012, April 2013

**Figure 2. Average number of Internet banking transactions per user (individuals)**



Source: based on eFinance, *Online banking - A deeper and more mature market in 2012, April 2013*

**Figure 3. Average value of Internet banking transactions per user (mil. lei) (individuals)**

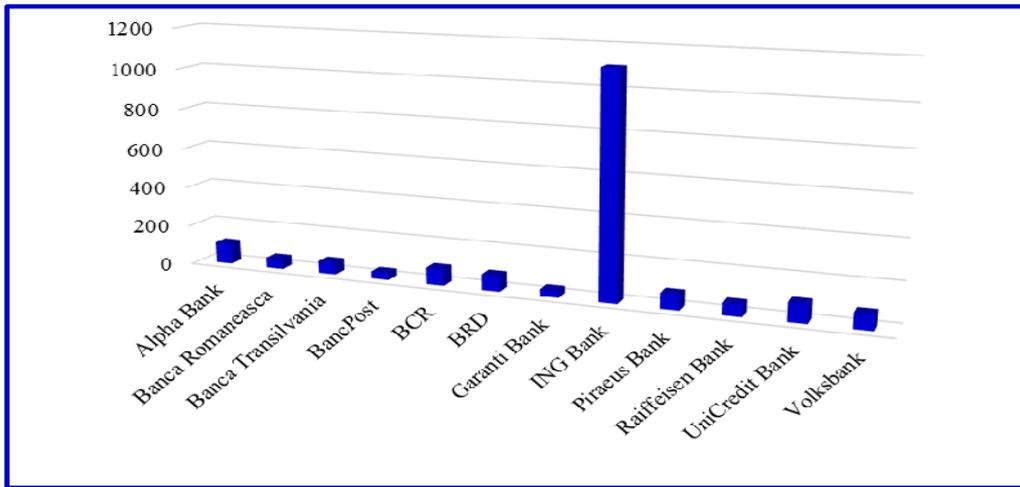
As far as legal entities are concerned (see table 2, figure 4 and 5), the highest numbers of online banking users are registered by BCR, Raiffeisen Bank, Banca Transilvania, UniCredit Bank, BRD, but if we consider the total value of transactions the most important numbers belong to BCR, ING Bank, UniCredit Bank, BRD, Raiffeisen Bank. Moreover, regarding the average number of Internet banking transactions and the average value of transactions performed by legal entities ING Bank ranks first by far, followed by Alpha Bank, UniCredit Bank, BCR and BRD.

**Table 2. Internet banking usage in Romania by legal entities, 2012**

No	Bank	Number of users	Number of transactions	Value (mil. lei)	Average value of transactions per user (mil. lei)	Average number of transactions per user
1	Banca Romaneasca	6741	346594	2900145	430.22	51.42
2	Banca Transilvania	55434	3399560	35324580	637.24	61.33
3	BancPost	26725	948637	10766584	402.87	35.50
4	BCR	94067	7910227	157461176	1673.93	84.09
5	BRD	37537	2970000	51609620	1374.90	79.12
6	Garanti Bank	13000	440837	11907029	915.93	33.91
7	ING Bank	4700	5200000	129450855	27542.74	1106.38
8	Piraeus Bank	5500	423000	3563623	647.93	76.91

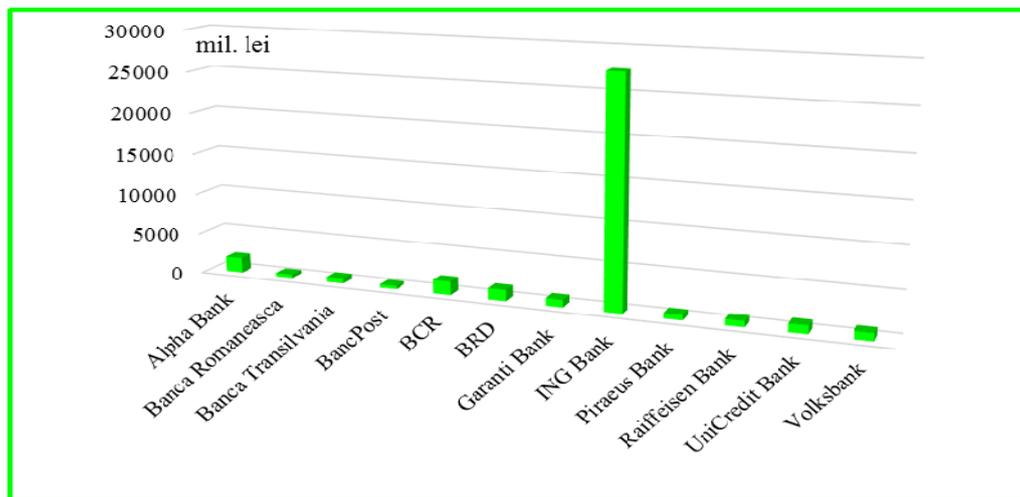
9	Raiffeisen Bank	62411	3743375	45799180	733.83	59.98
10	Volksbank	7658	588116	7231636	944.32	76.80
11	Alpha Bank	11300	1180606	21030584	1861.11	104.48
12	UniCredit Bank	55267	5234754	55809507	1009.82	94.72

Source: eFinance, Online banking - A deeper and more mature market in 2012, April 2013



Source: based on eFinance, Online banking - A deeper and more mature market in 2012, April 2013

Figure 4. Average number of Internet banking transactions per user (legal entities)

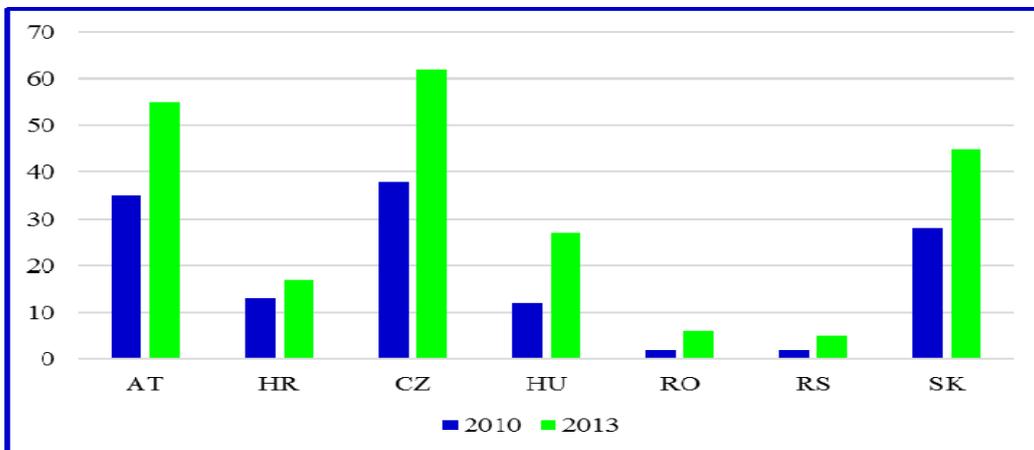


Source: based on eFinance, Online banking - A deeper and more mature market in 2012, April 2013

Figure 5. Average value of Internet banking transactions per user (mil. lei) (legal entities)

A comparative analysis of 7 European countries from Central and Eastern Europe (CEE) (Erste Bank, 2014) regarding the development of internet banking between 2010 and 2013 shows a spectacular increase of the popularity for online banking among banked population. The increase is over 20% in countries like Austria and the Czech Republic and over 15% in Slovakia and Hungary.

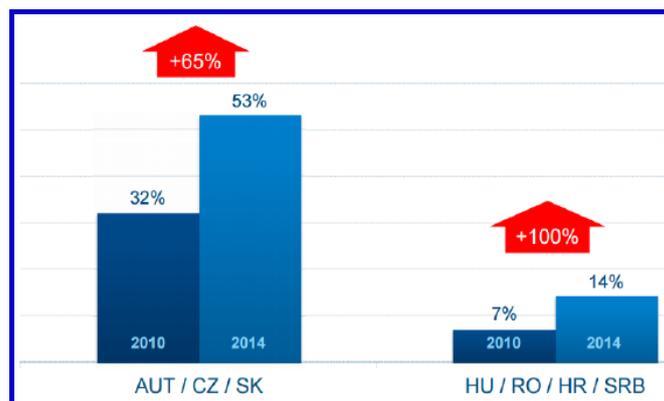
But Romania registers an increase of only 4% which is 1% above Serbia. Although Romania is the largest country in South-eastern Europe, in terms of the number of internet users (over 11 million internauts in early 2015), only 56.8% of Romanians have access to the internet, as compared to other CEE countries where the penetration rate is or 70% (Czech Republic 85.7%, Slovakia 81.7%, Austria 81.1%, Hungary 78.9%, Croatia 71.3%).



Source: based on Erste Bank (2014) Banking in the CEE Region

Note: Country code: AT - Austria, HR - Croatia, CZ - Czech Republic, HU - Hungary, RO - Romania, RS - Serbia, SK - Slovakia

Figure 6. Online banking in CEE countries, 2010 vs. 2013



Source: <http://www.bancherul.ro/>

Figure 7. Use of online banking in CEE countries, 2010 vs. 2014

Although Romanians enjoy some of the fastest internet speeds in the world (after Hong Kong, Singapore, South Korea, Japan, Israel), the number of Romanian online banking users remains low in 2014 because of poor financial education among the population, especially in rural areas, and the distrust in the banking system.

#### 4. CONCLUSIONS

Under the impact of modern technology, the banking market is growing very fast by diversifying the offer of banking services and by providing transaction security. Due to the emergence of new information technology, banking services have undergone profound changes and digital banking has taken important place in the development of financial services as banks created more sophisticated products in order to reach geographically distant and diversified markets. Although e-banking is far from completely replace branch banking, there is no doubt that in the near future digital banking will undeniably overcome traditional banking worldwide.

However, in Romania, internet banking usage is low compared to other CEE countries, mainly because of poor financial literacy among most of the country's population and because of security and privacy concerns regarding the overall online environment since trust is a critical factor in stimulating online banking operations. In fact, Romanians are very hesitant to engage in online transactions and the shares of Romanian Internet users that use online banking (7.7% in 2014) or shop online (17% in 2014) are the lowest of all EU countries.

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