

COMPARISON OF THE STATES OF CREDIT CARD BUSINESS BETWEEN SERBIA AND BOSNIA AND HERZEGOVINA

Nikola DAVIDOVIĆ, Aleksandar SIMOVIĆ

Faculty of Electrical Engineering, University of East Sarajevo, Bosnia and Herzegovina,
e-mail: nikola.davidovic@etf.unssa.rs.ba, aleksandar.simovic@etf.unssa.rs.ba

Abstract—Of all known electronic payment systems in both Bosnia and Herzegovina and in Serbia the use of payment cards is widely spread. In addition to world-famous brands in Bosnia Herzegovina and in Serbia as well, there is one domestic card in each of these countries, and these cards are BamCard in Bosnia and Herzegovina and DinaCard in Serbia. This paper describes the current state of card business in both Bosnia and Herzegovina and in Serbia, as well as the comparison between these states during the period of time from 2008 to 2010.

Keywords—credit card business, ATM, POS, electronic payment system.

I. INTRODUCTION

ONE way of a non-cash payment is a card payment. The development of this system of payment was initiated early in the fifties of the twentieth century. The world wide known brands of the cards are: VISA, MasterCard, Eurocard, American Express and Diners Club. When it comes to their use, besides all these best known cards, there is also a large number of other different cards. Each of these countries, Serbia and Bosnia and Herzegovina have one domestic payment card in use. In Serbia there is DinaCard, while in Bosnia and Herzegovina there is BamCard.

Using the card while paying for goods has many advantages over a cash payment. One of the most important advantages is an access to all available money resources, 24 hours a day. A payment card user can use all available money (including overdrafts and / or credit limit) on his bank account. In other words, a card user is not limited just to the cash which he is carrying with him. In addition, it is much safer for a card user to use a card payment instead of a cash payment. In case of a loss of a card it would be enough just to report it to the bank in order for the money on a certain bank account to be saved and not stolen by another person.

One of the biggest advantage of the cards is the fact that customers can use their cards to pay for goods all around the world due to the international card schemes in which the cards have been issued and they can be sure

that their cards will be accepted regardless of the bank or the country they have been issued in.

As far as the moment of payment for goods is concerned, there are different sorts of the cards: debit cards (an immediate payment), credit cards (a later payment) and pre-paid cards (a payment in advance). In Serbia, as well as in Bosnia and Herzegovina, there are all types of the cards depending on the moment of payment.

In general, as far as a card organization is concerned, there are two types of the card networks. The first type is "four parties", the so called open model. This model is used by the world-wide brands such as VISA and MasterCard, as well as it is used by the domestic cards such as DinaCard in Serbia and BamCard in Bosnia and Herzegovina. According to this model it can be distinguished:

- A card issuer – the bank that issues a card to a customer;
- A card user – a person who uses a card in order to pay for goods and / or certain services;
- A trader – a person who charges for goods and / or services;
- A card acceptor – the bank which provides a payment guarantee and enables a card acceptance at a trader's.

According to this open model, while paying with cards, a trader gets on his account the funds which are reduced by the costs of a payment transaction of the trader's bank, as well as by the costs of the bank that issues a card and by the costs of a card network which makes a transaction.

The second type of a card organization is known as "three parties", the so-called closed model. This model is used by world-wide brands such as American Express and Diners Club. According to this model there is no inter-bank fees since both a card issuer and a card acceptor represent the same organization.

II. CREDIT CARDS IN SERBIA AND IN BOSNIA AND HERZEGOVINA

The first electronic system for Visa cards was placed at ATM terminals in Serbia in 1997. Around the same time, the using of ATM terminals in Bosnia and

Herzegovina also started. Speaking in terms of cards, in Serbia and Bosnia and Herzegovina ATM equipment accepted the name "bankomat" instead of ATM, which is the name of a manufacturer of ATM devices.

In late 2008, as well as in 2009, there were about 30 commercial banks in Bosnia nad Herzegovina, while in 2010 that number was 29. Of all these banks, 25 of them provided their clients with payment card services, using the cards of the world-wide brands: MasterCard, Visa, American Express and Diners. BamCard, as the only domestic card for card payment in Bosnia and Herzegovina was issued by the eight banks in 2008 and in 2009, while in 2010, that number was reduced to five. In late 2008, as well as in 2009, there were about 34 commercial banks in Serbia, while in 2010 that number was 32. Of all these banks, even 27 of them, besides providing their clients with the cards or other card services, issued a domestic card in Serbia, called DinaCard. Other banks accept DinaCard on all their ATMs.

It is interesting to notice that many banks in Serbia issue DinaCard, as the only card for card payment than

it is case in Bosnia and Herzegovina, when it comes to their domestic card called BamCard. In 2010, even 84,38% of all the banks in Serbia was issuing DinaCard. On the other hand, in Bosnia and Herzegovina the situation was completely different. In 2010, only 17,24% of all the banks in Bosnia and Herzegovina was issuing BamCard.

It is evident that, although a use of BamCard, as a payment card, started earlier than a use of DinaCard (BamCard was established in 1999, while DinaCard was established in 2003), DinaCard as part of a project has been more successful and also has been issued in a larger number than it is case with BamCard.

The total number of issued payment cards in Bosnia and Herzegovina to the end of 2008 was 1,612,219 while in 2009 it was 1,773,758 and in 2010 it was 1,693,466. The total number of payment cards issued in Serbia at the end of 2008. was 5,728,789 while in 2009 it was 6,014,390 and in 2010 it was 6,147,937 (shown in Figure 1).

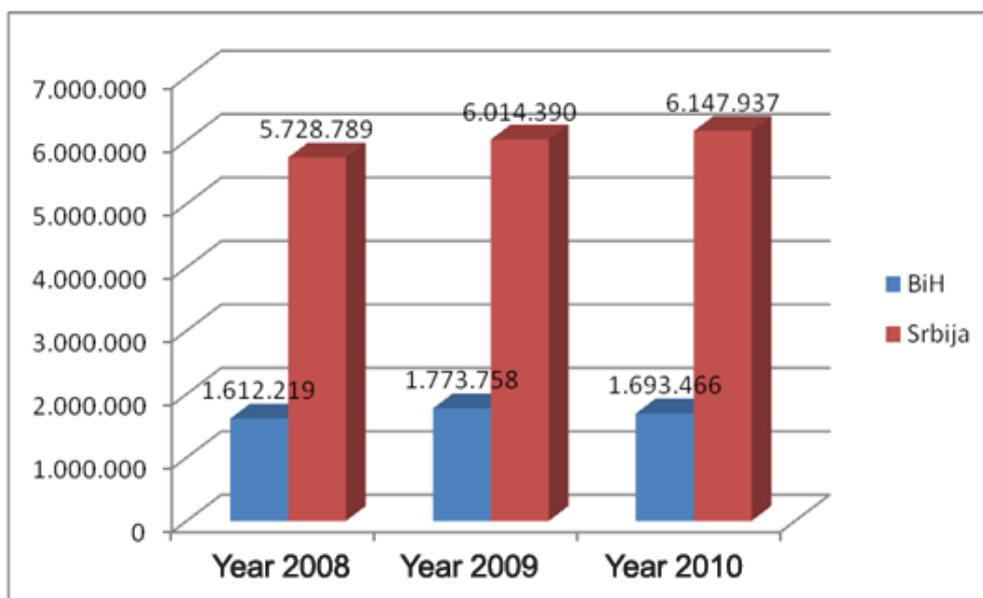


Figure 1. The total number of issued cards in Bosnia and Herzegovina as well as in Serbia

In Republic of Serbia there are approximately 7,276,000 people living there, while in Bosnia and Herzegovina there are around 4,622,000 people living there, which means that there are more people in Serbia, and that number is bigger for 53%.

If we compare the number of cards issued in Serbia to that number of cards issued in Bosnia and Herzegovina, based on population, it seems that the number of cards issued in Serbia is 3.5 times greater than in Bosnia nad Herzegovina. In addition, it is evident that the average number of cards is 0.84 per capita in Serbia, while in Bosnia and Herzegovina that number is far less - a 0.37 cards per capita. Although a certain number of the card users have more than just one card in both Serbia and in

Bosnia and Herzegovina, there is a huge difference when it comes to the average number of the cards per capita. Besides, when it comes to a number of active cards, the cards that are in actual use, it can be considered that the ratio between issued cards and active cards is smaller, approximately 1.7 times larger in Serbia than in Bosnia nad Herzegovina.

It can be noticed that the trend of using cards is in an increase in Serbia, while in Bosnia nad Herzegovina, there is a slight decrease in using credit cards.

The most common cards in Serbia, as well as in Bosnia and Herzegovina, based on the moment of payment, are debit cards, which are given by the banks to their clients when they choose to open an account. In

late 2010, the number of debit cards in Bosnia and Herzegovina was 1,404,491 or about 82,9% of the total number of issued cards in the same country. On the other hand, in late 2010, the number of debit cards in Serbia was 5,270,241 or 82,9% of the total number of issued cards in that country. Thus, the percentage of the issued cards depending on the moment of payment is identical, if the percentage share of such ratio can be reduced with accuracy to one decimal place.

Moreover, when it comes to the representation of the card brands in both countries, the number of such ratio between Serbia and Bosnia and Herzegovina is almost identical. In the market of both countries the most common card for card payment is Visa card. There is a different situation when it comes to the use of domestic cards. In Republic of Serbia DinaCard, as a domestic card is used more than it is case with BamCard in Bosnia and Herzegovina.

In recent years there has been an increase of transactions, both in Serbia and in Bosnia and Herzegovina. Figure 2 shows the realized transactions in euros in 2008, 2009 and in 2010 as well. The conversion into euros is done according to the current exchange

rates at the end of the year in question, as well as according to the current exchange rates of the Central Bank of Bosnia and Herzegovina and the National Bank of Serbia. It should be noted that in Serbia in 2008, as well as in 2009 and in 2010 the rate varied at the end of the year which was not the situation at the beginning of the year. The average of the varied rate was approximately 8.5%.

Figure 2 shows that in Bosnia and Herzegovina there was a greater increase in value of transactions than in Serbia. When the year 2010 is compared to the year 2008, it seems that there was an increase of about 31%, while in Serbia, this increase amounted to only about 10%. In addition, it seems that the value of the ratio of the transactions between Bosnia and Herzegovina and Serbia is in a decrease. At the end of 2008 in Serbia the amount of the transaction value was higher than in Bosnia for about 49%, while by the end of 2010 that value was for about 32% higher. If this is compared with the population, we conclude that during a year a turnover per card is higher in Bosnia and Herzegovina than in Serbia.

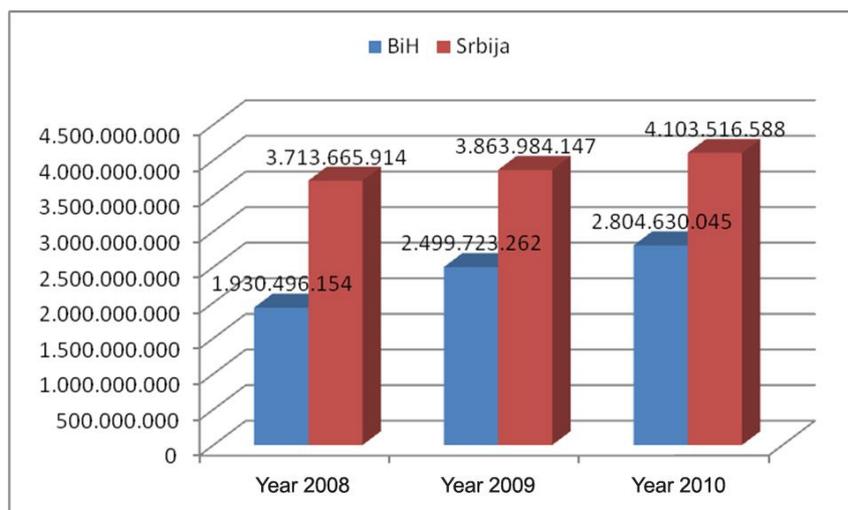


Figure 2: The amount of the transactions shown in euros in both Bosnia nad Herzegovina and in Serbia

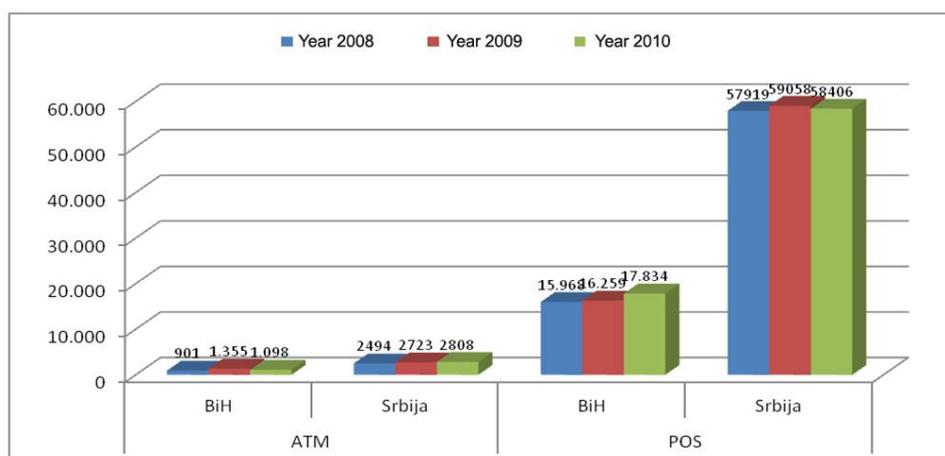


Figure 3: The number of ATM and POS terminals in Bosnia and Herzegovina as well as in Serbia

In order to use the card and all of its possible benefits, it is necessary to be there an adequate infrastructure network, ie. sufficient number of POS and ATM terminals. Many banks, both in Bosnia and Herzegovina and in Serbia, have worked extensively on a construction as well as on a restoration of their infrastructure network in order to provide their clients with the services of a card payment. Figure 3 shows the comparative ratio of ATM and POS terminals between Bosnia and Herzegovina and Serbia. Figure 3 shows that the number of ATM terminals is higher in Serbia than in Bosnia and Herzegovina for about 100%, while a number of POS terminals is higher in Serbia than in Bosnia and Herzegovina for about 240%. Besides it is possible to notice that there is an increase in the number of POS terminals in Bosnia and Herzegovina, while in Serbia

there is a slight decrease in the number of the same terminals. On the other hand, regarding ATM terminals, it can be said that the situation is reversed from the previous one.

When it comes to a consumption structure, or in other words, to the consumption ratio between ATM and POS terminals in Bosnia and Herzegovina, it can be noticed that the value of such ratio is approximately the same, regarding their percentage. In 2008 a difference in the percentage ratio between ATM and POS devices is the smallest one, while in 2009 such difference is the greatest one. Figure 4 shows the structure of transactions, according to the way of using funds (via the ATM or POS devices). A similar situation can also be found in Republic of Serbia.

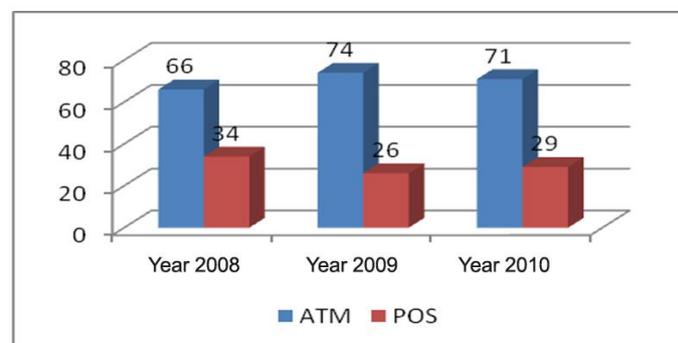


Figure 4: The structure of transactions, according to the way of using funds in Bosnia and Herzegovina

In addition, the structure of resources that are used via POS devices consists of a large percentage of cash funds. POS devices are used to get cash. Thus, although in theory held that the use of cards will significantly reduce participation in cash, in Serbia and in Bosnia and Herzegovina, the use of cards has not significantly affected the reduction of cash. Debit cards, which make up the largest percentage of the cards used in these two countries are mostly used for cash withdrawals at ATMs and POS terminals. It is possible to conclude that in these countries, debit cards are used in practice, as a means through which the user has a constant access to cash.

It can be noticed that user of the cards, that have been issued outside of the boundaries of Bosnia nad Herzegovina, when paying for goods and services, use cash, rather than credit cards. Regarding this issue, the same situation can be found in Republic of Serbia.

The credit card users from Bosnia and Herzegovina, as well as from Serbia, use credit cards rather than cash when they pay for goods and services and when they are abroad. In Bosnia nad Herzegovina, that percentage has increased from 55% to 59% and it tends to increase even more in future. In Serbia, such percentage is insignificantly higher.

Although there is a large number of POS terminals in Bosnia and Herzegovina, as well as in Serbia, the

percentage of using credit cards for paying goods and services is still small. The reason why the situation is like this is because it is not possible to get a discount on certain goods when paying with credit cards. To get a discount on certain goods is possible only by paying with cash.

Finally, it is possible to talk customers into using credit cards when paying for goods and services as well, only if:

- A credit card user is allowed to get a discount on desirable goods;
- An interest rate is reduced;
- A kind of lottery is organized.

III. CONCLUSION

This paper shows the current state of the cards use in Bosnia and Herzegovina, as well as in Serbia. According to the total number of the cards in Serbia, it can be stated that it reached its maximum, or in other words, it means that almost every person in Serbia has at least one kind of a payment card in possession. Although it is possible for every person to have any kind of card (debit or credit), issued by different banks, this number will not significantly affect the number of active cards (the cards in use) in Republic of Serbia. The number of payment

cards in Bosnia and Herzegovina is in an increase, and it tends to increase even more in future.

In Republic of Serbia, the domestic card is better accepted than it is the situation with the domestic card in Bosnia and Herzegovina. Besides, a lot of work has been done on DinaCard project in a sense of its promotion in Serbia, while it is not the same situation with BamCard project in Bosnia and Herzegovina.

The problem with using the card in these two countries is that the cards are mainly used for cash withdrawals. The use of cards for paying goods and services is in a small increase as far as a number of transactins is concerned. However, as far as the total amount is concerned, this number stays the same. When it comes to the average amount of transactions in both Bosnia nad Herzegovina and in Serbia, it can be seen that this amount is in a slight decline. Therefore, it can be concluded that payment cards have been recently used for paying out "small" accounts.

In addition, it can be noticed that card users from abroad use cash as a way of paying more often in Bosnia and Herzegovina and in Serbia as well, while the same users, when they are in their home country, use payment cards as a menas of paying! "The problem" can be seen in the fact that it is possible to get a discount on some goods when paying with cash, while it is not the same situation when paying with a card. Moreover, it is even questionable how many POS terminals is actualiy active or if sellers are true professionals trained for using such terminals.

Finally, in order for this current state of payment cards to be changed in both countries, it is necessary for the banks to find a way of persuading more sellers to sell their goods by using payment cards instead of cash, by which both the sellers and the customers would have a certain interest.

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