

Comparative Study of Bank Cards in Romania, Bulgaria and Hungary

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Abstract

The digital age in which we live has brought changes to the financial and payments industry. Whereas until recently banknotes and coins were in power, in recent years electronic money has become the main player in payments. Due to political regimes up to the 1990s, Eastern European countries were late to access financial innovations.

However, in recent years, the market for bank cards has been dynamic in this part of the EU as well. This paper analyses the types of cards present on the Hungarian, Bulgarian and Romanian markets. The comparative study of the evolution of the number of cards over a period of 7 years will show us which are the common and individual characteristics. The paper is relevant for analysts and the public because it also captures the period of the Covid 19 pandemic. At the end some directions for future studies are presented.

Key words: credit card, debit card, electronic money

J.E.L. classification: E44, F10, F19, F40, G20

1. Introduction

At the level of a state or region, the *volume of payments* indicator is an important one. Over the last decade electronic payments have grown in both form and volume. Extensive digitisation in all areas has led to increased interest in online payments for all stakeholders. E-payments, which in the past were initiated only by specialised institutions, are now used by banks, companies, local and central governments and individuals.

Therefore cashless payments are on the rise. At EU level, there has been an increase of more than 8% over the last year. Half of these transactions were card transactions and the other half were credit transfers and direct debits.

This accelerated pace of digitisation was also somewhat driven by the coronavirus pandemic, which led to the rise of online payments and the use of card payments in shops, especially as it was one of the recommended measures to prevent the spread of the virus.

The number of online transactions has increased year on year. Even if this trend already existed, it can be said that the COVID-19 pandemic has accelerated the use of cards and other means of payment at the expense of cash.

Studies have shown that the pandemic has changed consumer behaviour, the way B2B trade is conducted, (Zaif, Cerchia & Micu, 2020), and implicitly of the peasants.

In this context, the analysis of payment means and the volume of electronic payments is a topical issue.

2. Theoretical background

The developments brought about by accelerated digitisation have transformed all areas of contemporary society and hence the nature of money and goods and services, resulting in a process called dematerialisation.

It should be noted that the systems used by banks have been specifically adapted to new realities and technologies. The topic of new technologies and innovations in the banking system was dealt with by Cerchia, Oachesu & Constantin (2018).

Financial and communication innovations have brought changes across the board. Thus national and international companies, but especially niche companies have adopted marketing strategies targeting online buyers (Zaif & Cerchia, 2019).

3. Research methodology

The card is the most widely used and fastest growing electronic payment instrument in Europe. Although these cards are popular everywhere, their use varies widely across European countries but it is worth noting that the percentage of cross-border card payment transactions is still relatively low in overall volumes. Thus, this points to a vast potential for growth in card use, both in individual countries and across borders.

The behaviour of consumers and e-commerce participants and beyond, the choice of financial instruments used by them, are important issues now and in the future. may be extremely important in the near future, as the battle between cash and e-currency has reached a turning point and electronic payments are slowly overtaking cash.

The study will analyse the evolution of the number of cards in three neighbouring Eastern European countries: Romania, Bulgaria and Hungary. The following types will be analysed: cash cards, debit cards and credit cards.

The empirical study will capture characteristics of the three markets as well as consumer behaviour traits.

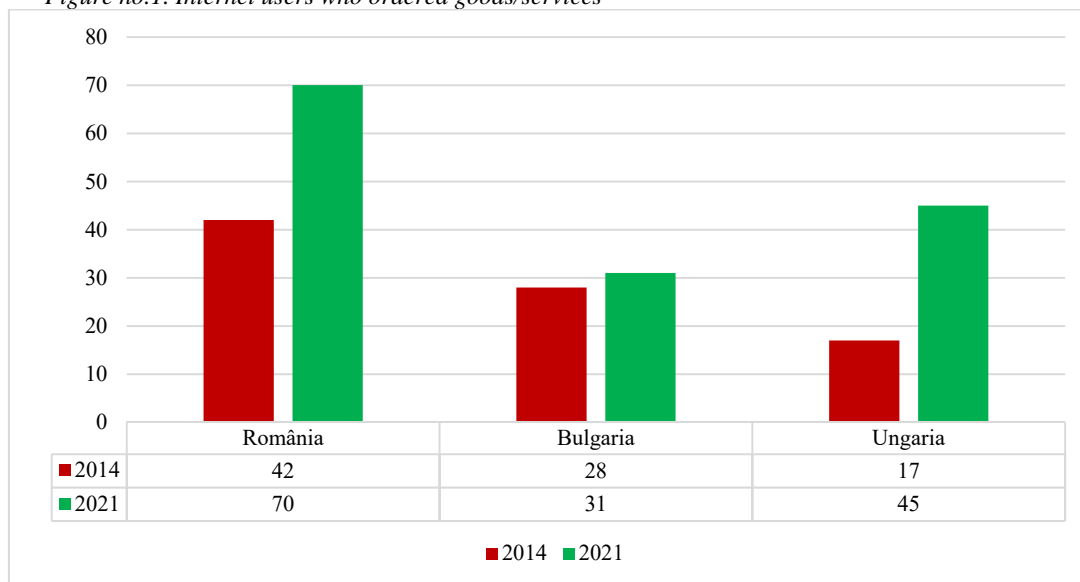
The limitations of the study are that the data available for all three countries were limited to the year 2020.

4. Findings

4.1. Use of cards in electronic commerce

In the study we analysed the percentage of internet users who ordered goods or services in Romania, Bulgaria and Hungary between 2014 and 2020 and found that the percentage of orders increased in 2021 compared to 2014.

Figure no.1. Internet users who ordered goods/services



Source: own conception - data processing

https://ec.europa.eu/eurostat/databrowser/view/ISOC_EC_IBUY_custom_557430/bookmark/table?lang=en&bookmarkId=231aabef-4dca-4294-ae0e-59a1f84e268b [Accessed sept.2022]

The biggest increase in orders for goods and/or services was recorded by Romania, with +28 pp, obviously in relation to the percentage recorded in 2014, while at the opposite pole is Bulgaria with an increase of only +3 pp compared to 2014 and Hungary recorded the same increase as Romania, i.e. +28 pp. The increase in Romania is remarkable, especially since a few years earlier e-commerce in Romania was almost zero. (Grozea (Lazăr), Spătariu, Asaloş, 2009).

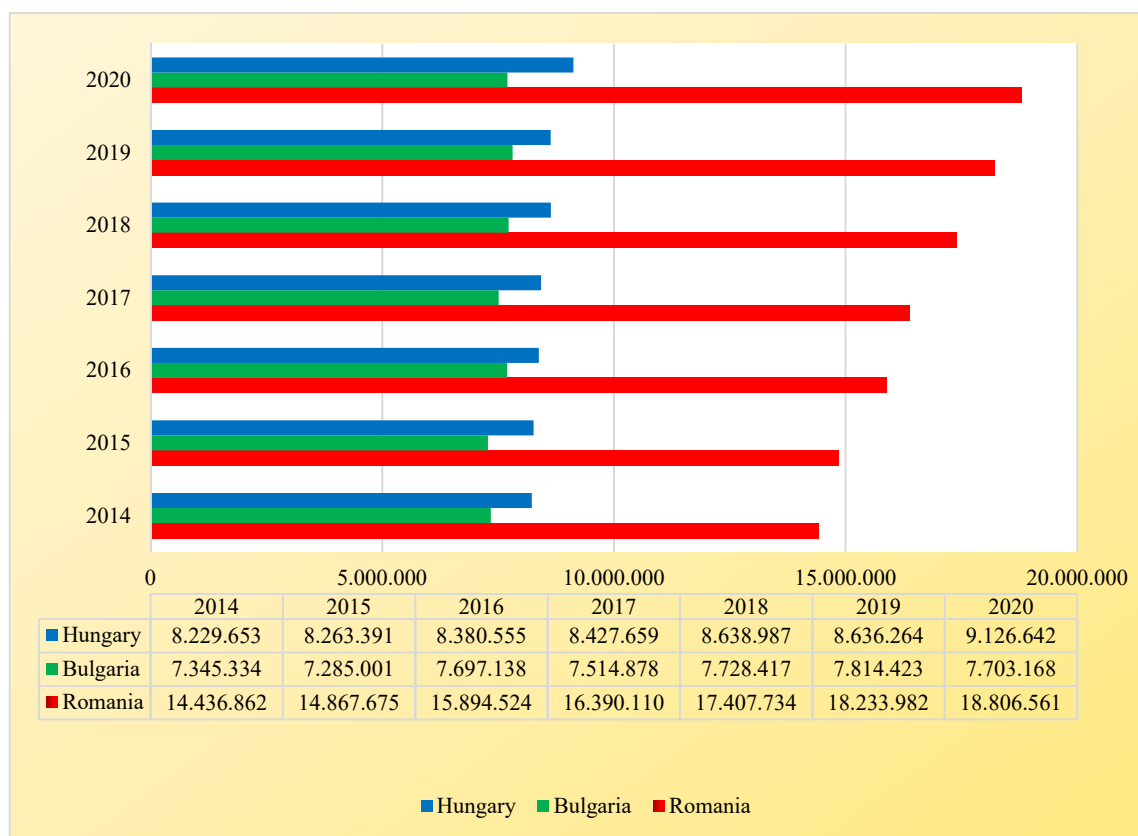
If we analyse the situation in 2014 for the three countries we can see that Hungary had the highest percentage of orders for goods and/or services, i.e. 42%, followed by Bulgaria with 28% and then Romania with only 17%. In 2021 the situation changes a little.

Hungary remains in the same position as in 2014, while Romania is in second place this time, with 45% of orders for goods and/or services, followed by Bulgaria with 31%.

4.2. Evolution of the number of cards in Romania, Bulgaria and Hungary - Comparative study

In the analysis we have processed the available data from the ECB published statements to illustrate the evolution of the number of cards with cash function in Romania, Bulgaria and Hungary over the period 2014-2020.

Figure no. 2 Number of cards with cash function



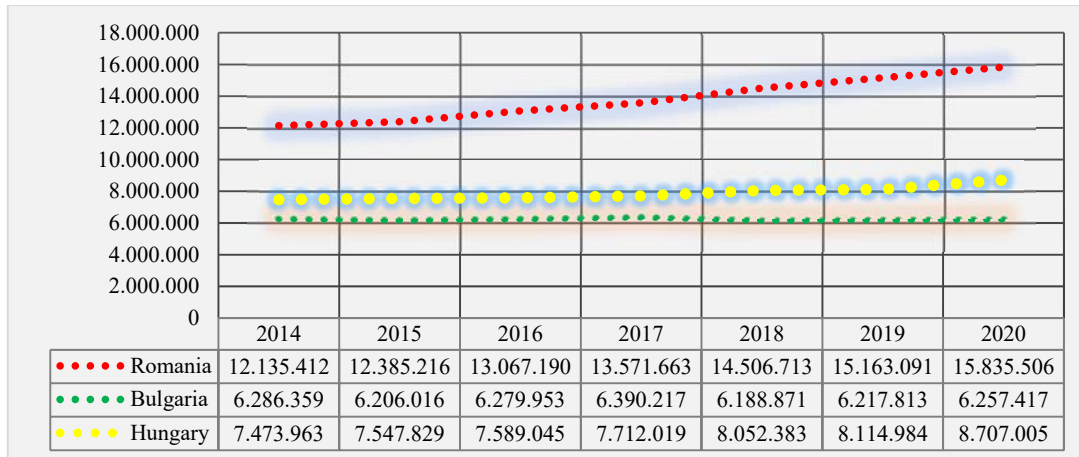
Source: ECB data processing <https://sdw.ecb.europa.eu/browse.do?node=9691545> [Accessed sept. 2022]

The number of cards with a cash function in Romania is higher than in Bulgaria throughout the study period. In Romania, the peak of the period was recorded in 2020, (18,806,561 cards), while Bulgaria recorded the maximum number of cards in 2019 (7,814,423 cards).

Hungary is showing comparative developments with Bulgaria. The maximum number of cards with cash function was recorded in 2020. In 2020, Romania recorded twice as many cards with cash function as Hungary.

The study went on to analyse the number of cards with a debit function. Chart 3 shows that from 2014 to 2020 the number of cards with debit function in Romania increased by 3,700,094 cards while in Bulgaria from 2014 to 2020 the number of cards with debit function decreased by 28,942 cards.

Figure no. 3 Number of cards with debit function

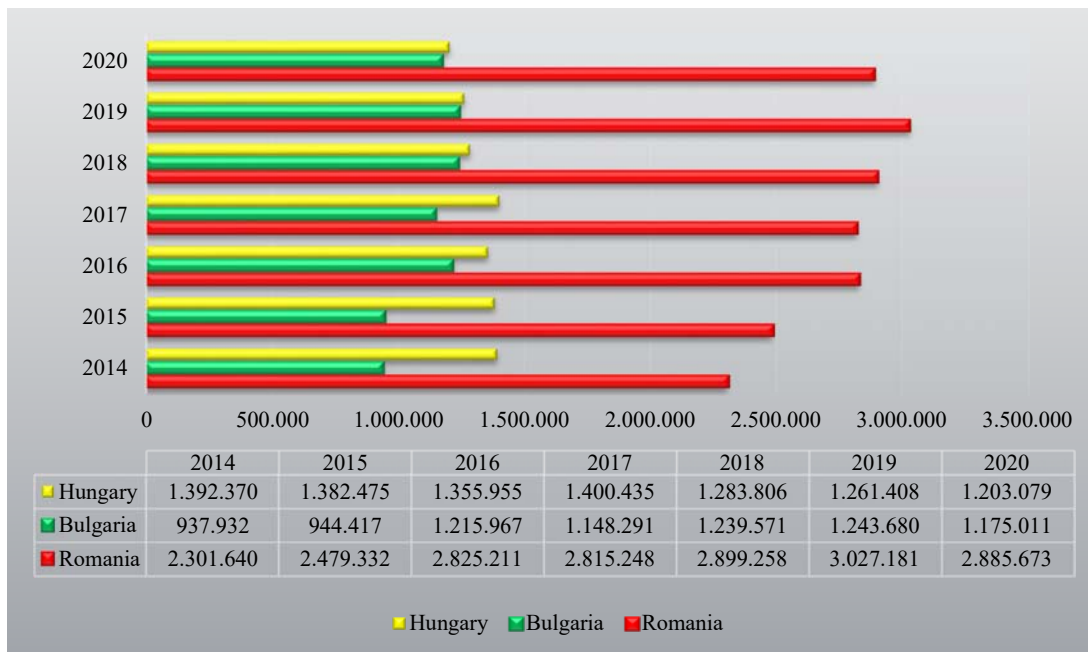


Source: Own design based on ECB data processing <https://sdw.ecb.europa.eu/browse.do?node=9691545> [Accessed Sept. 2022]

In Hungary, the number of debit function cards increased from 2014 to 2020, while the values recorded by Bulgaria during the period under study were volatile.

Regarding the evolution of the number of cards with a credit function from 2014 to 2020, we note that Bulgaria had an uneven evolution, while Romania had an even evolution from 2014 to 2019. In 2020 the number of these cards decreased by 141,508 compared to 2019.

Figure no.4 Number of cards with credit function



Source: Own design based on data processing from the link <https://sdw.ecb.europa.eu/browse.do?node=9691545> [Accessed sept. 2022]

Both Romania and Bulgaria recorded the maximum number of cards with cash function in 2019, (3,027,181 cards and 1,243,680 respectively).

As for Hungary, the number of cards with a cash function was increasing from 2014 to 2017, but decreased in the following years. The minimum value within the period under study was recorded in 2020, and the maximum value was 1,400,435 cards, which was recorded by Hungary in 2017.

It can be seen that Romania and Bulgaria recorded the maximum number of cards in 2019, and Hungary in 2017.

Studies in recent years have shown that there is a tendency to use electronic payment systems rather than cash. Analyses at EU level and in the countries studied support this conclusion.

For the three countries, the comparative study showed that in Romania all types of cards showed an increase in volume, in the case of Bulgaria we have a powerful increase and in Hungary we have contradictory trends. Based on a recent study, Pinter, Nagy, Toth & Varga (2022) concluded that Hungarians find it difficult to abandon cash payments.

Cards with cash function in Romania grew by more than 28 percent. In Bulgaria and Hungary, the number of cards in this category has remained roughly constant over the period. This may indicate market saturation or a lack of confidence in the use of e-money.

During the period under review, the total number of credit cards in Romania increased by more than 25%, although the active population is slightly decreasing. A similar trend can be observed in Bulgaria, with an increase of 25.4%. In Hungary the number of credit cards has decreased.

Again in Romania, a different consumer behaviour is observed. On the one hand, the situation is explained by access to electronic payment systems (large number of ATMs, POS and electronic payment platforms), but also by the fact that there is confidence in electronic money.

5. Conclusions

Currency is and always will be a hot topic. It is a concern for everyone and an important economic indicator. Over time the concept of currency has changed with the emergence of different forms of currency and especially with the ongoing digital progress.

Lately, bank cards have been used for payment. According to their function they are classified as: debit cards, credit cards, deferred debit cards and cash cards.

In the countries analysed, there was a favourable trend in bank card payments in the case of Romania and Bulgaria and a decrease in the number of cards issued in the case of Hungary.

There is a study in Hungary based on a survey of 499 people. The authors examined the reasons behind people's decisions, with a particular focus on financial awareness. The result shows that the vast majority of Hungarian consumers are not yet ready to fully accept electronic payments (Pinter, Nagy, Toth & Varga, 2022).

Consumer behaviour may be extremely important in the near future, as the battle between cash and e-currency has reached a tipping point and electronic payments are slowly overtaking cash.

As future research directions we propose to analyse the influence of macroeconomic indicators on the bank card industry. It has already been confirmed that the unemployment rate (UR) is a main macroeconomic indicator used in credit card risk analysis. The COVID-19 pandemic has caused an unprecedented level of volatility in the labour market, leading to new challenges for the use of UR in credit risk modelling. (Liu Z., Liang H, 2022)

In today's age of continuous digitisation, it can be said that the use of cash internationally is declining and e-currency is increasingly used. We cannot ignore the fact that the concept of *cryptocurrency* is increasingly present in studies dealing with the currency of the future.

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