



Centralna banka
BOSNE I HERCEGOVINE
Централна банка
БОСНЕ И ХЕРЦЕГОВИНЕ



**PAYMENT SYSTEMS DEPARTMENT
SECTION FOR OVERSIGHT AND DEVELOPMENT OF PAYMENT SYSTEMS**

Payment Systems in BH in 2022

Sarajevo, 24 March 2023



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1 Introduction

The report „Payment Systems in BH in 2022“ as a regular annual report on the payment system operations in Bosnia and Herzegovina (hereinafter: BH), has been prepared on the basis of the data collected from 22 banks in BH and internal data of the Central Bank of Bosnia and Herzegovina (hereinafter: CBBH).

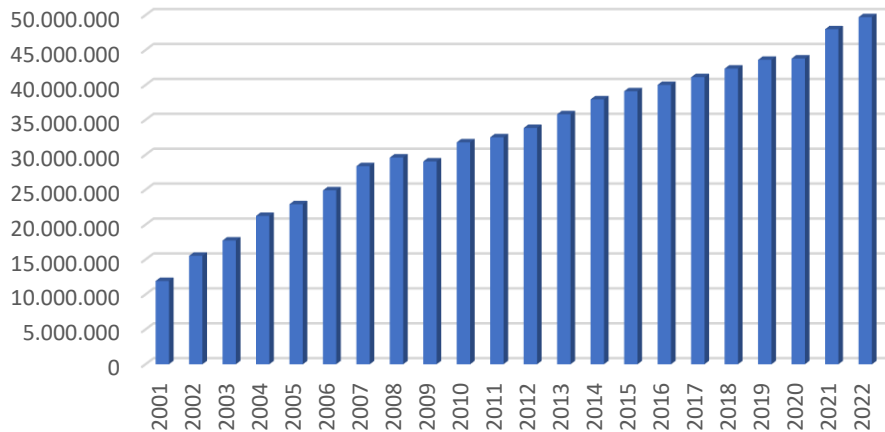
During 2022, the CBBH successfully responded to all tasks related to the stable functioning of the Payment system owned and operated by CBBH, and all transactions were settled during the working hours of the systems.

2 RTGS and Giro Clearing transactions

During 2022, the growth of both the number and value of transactions was recorded in the payment systems of the CBBH.

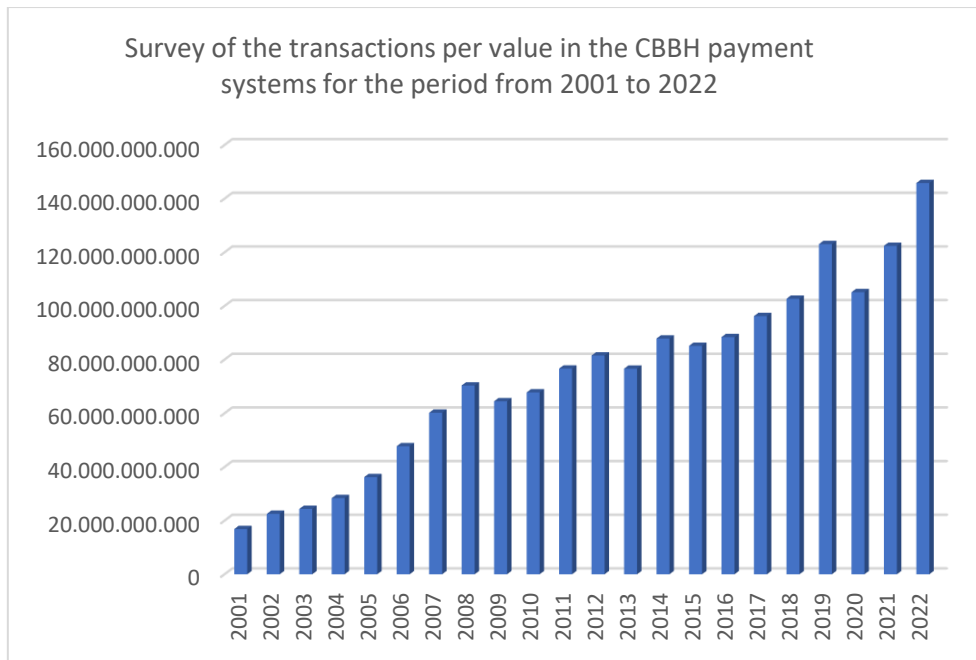
Survey of the number of transactions in the CBBH payment systems for the period from 2001 to 2022	
Year	Number of transactions
2001	11.916.222
2002	15.526.839
2003	17.721.251
2004	21.242.162
2005	22.909.427
2006	24.900.936
2007	28.367.097
2008	29.598.572
2009	29.039.567
2010	31.774.686
2011	32.489.826
2012	33.837.361
2013	35.799.626
2014	37.930.337
2015	39.086.648
2016	40.004.202
2017	41.107.361
2018	42.334.026
2019	43.601.606
2020	43.774.406
2021	47.971.726
2022.	49.700.235
Total:	720.634.119

Survey of the number of transactions in the CBBH payment systems for the period from 2001 to 2022

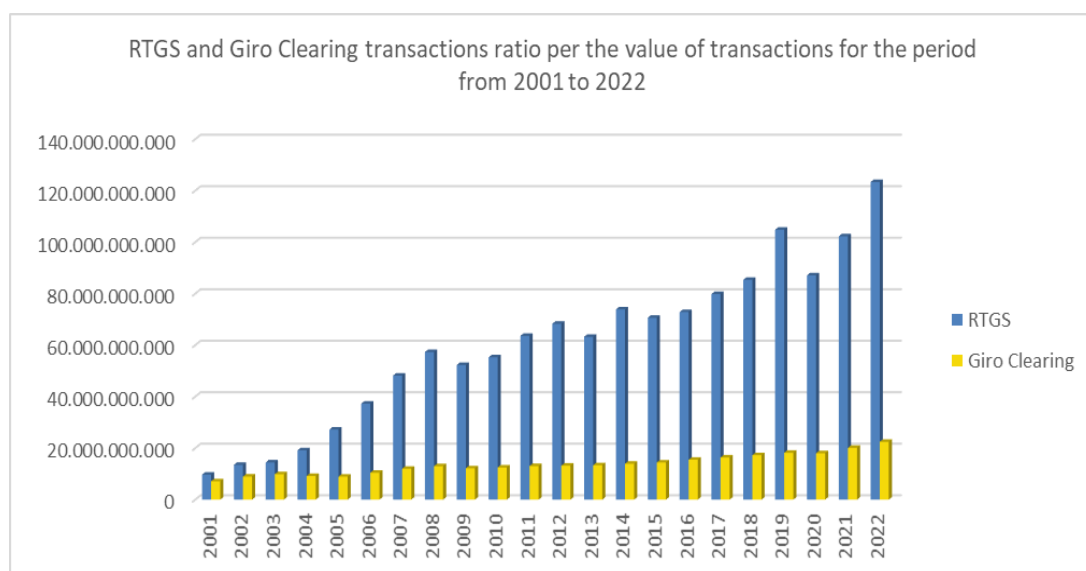
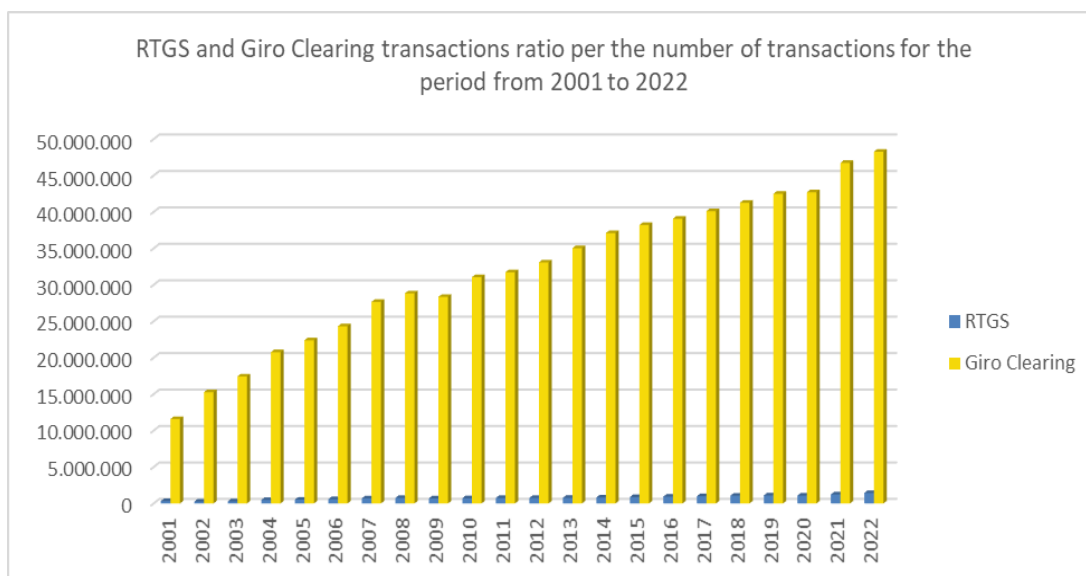


Survey of transactions per value in the CBBH payment systems for the period from 2001 to 2022

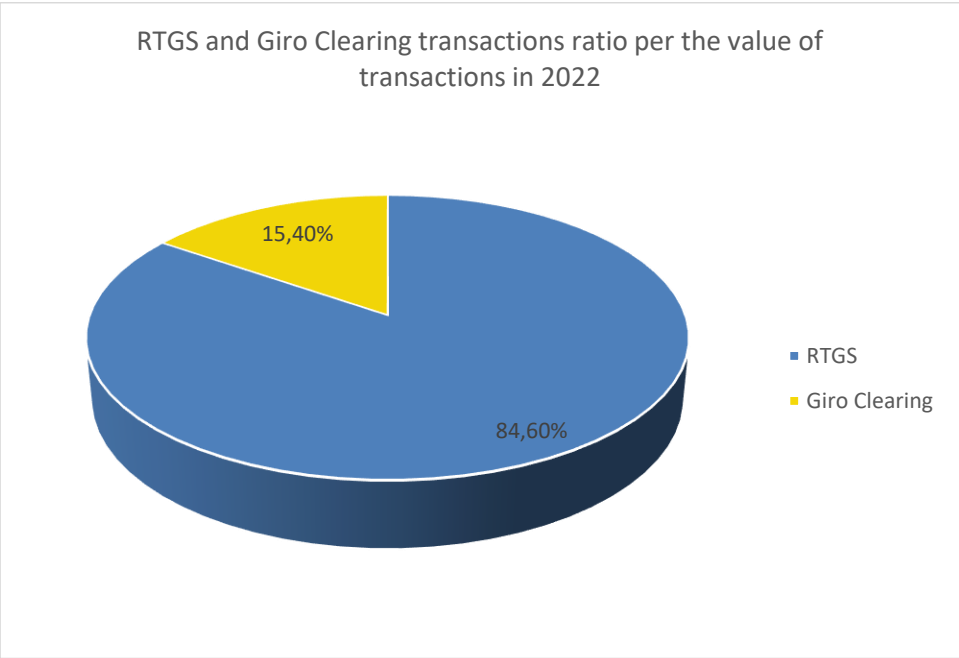
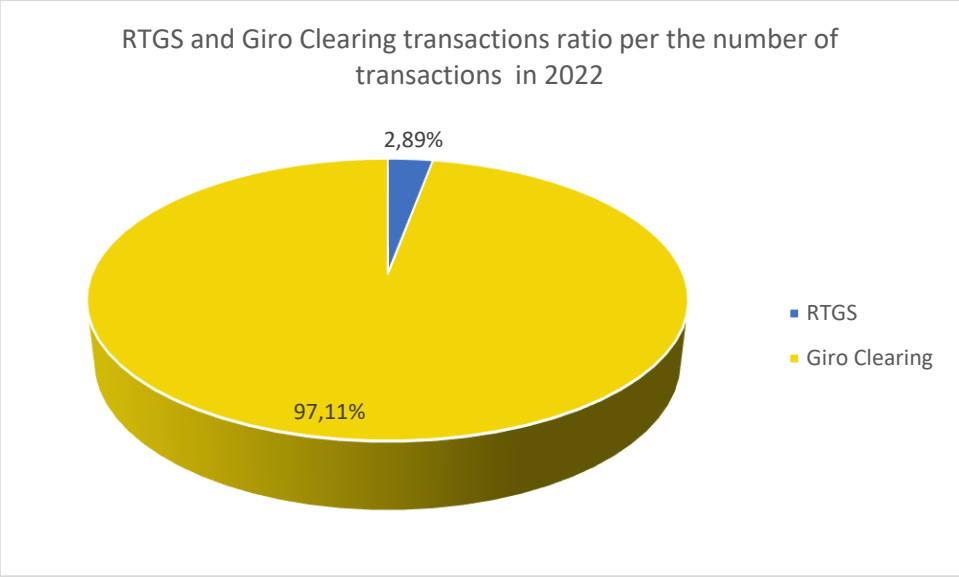
Year	Transactions per value in KM
2001	16.844.843.315
2002	22.509.671.792
2003	24.342.825.574
2004	28.383.452.792
2005	36.194.883.247
2006	47.727.696.822
2007	60.192.696.720
2008	70.344.517.441
2009	64.457.938.969
2010	67.778.691.332
2011	76.653.471.820
2012	81.533.268.431
2013	76.604.896.747
2014	87.858.114.404
2015	85.105.843.766
2016	88.379.953.010
2017	96.243.249.000
2018	102.669.704.908
2019	123.046.070.387
2020	105.132.312.596
2021	122.403.038.511
2022	145.825.330.468
Total:	1.630.232.472.051



Year	RTGS		Giro Clearing	
	Number of transactions	Value in KM	Number of transactions	Value in KM
2001	332.622	9.701.270.430	11.583.600	7.143.572.885
2002	257.691	13.519.780.127	15.269.148	8.989.891.665
2003	293.847	14.460.652.316	17.427.404	9.882.173.258
2004	480.935	19.178.523.535	20.761.227	9.204.929.257
2005	521.014	27.236.549.476	22.388.413	8.958.333.771
2006	591.823	37.280.188.111	24.309.113	10.447.508.711
2007	704.702	48.174.209.589	27.662.395	12.018.487.131
2008	766.690	57.335.307.266	28.831.882	13.009.210.175
2009	692.669	52.283.260.876	28.346.898	12.174.678.093
2010	713.775	55.281.115.708	31.060.911	12.497.575.624
2011	760.459	63.607.787.849	31.729.367	13.045.683.971
2012	763.522	68.310.225.344	33.073.839	13.223.043.087
2013	773.099	63.231.533.830	35.026.527	13.373.362.917
2014	821.897	73.896.929.048	37.108.440	13.961.185.356
2015	874.575	70.654.654.893	38.212.073	14.451.188.873
2016	935.319	72.871.045.267	39.068.883	15.508.907.743
2017	996.043	79.855.384.343	40.111.318	16.387.864.656
2018	1.067.256	85.393.044.051	41.266.770	17.276.660.857
2019	1.105.320	104.825.511.544	42.496.286	18.220.558.843
2020	1.072.023	87.108.346.289	42.702.383	18.023.966.308
2021	1.236.315	102.287.161.783	46.735.411	20.115.876.728
2022	1.435.980	123.369.551.063	48.264.255	22.455.779.405
Total:	17.197.576	1.329.862.032.738	703.436.543	300.370.439.313



RTGS and Giro Clearing transactions ratio in 2022				
	Number of transactions	Share in the total number of transactions	Value in KM	Share in the total value
RTGS	1.435.980	2,89%	123.369.551.063	84,60%
Giro Clearing	48.264.255	97,11%	22.455.779.405	15,40%
Total:	49.700.235	100%	145.825.330.468	100%



The share of the number of RTGS transactions in the total transactions in 2022 was 2.89%, while the share in the value was 84.60%.

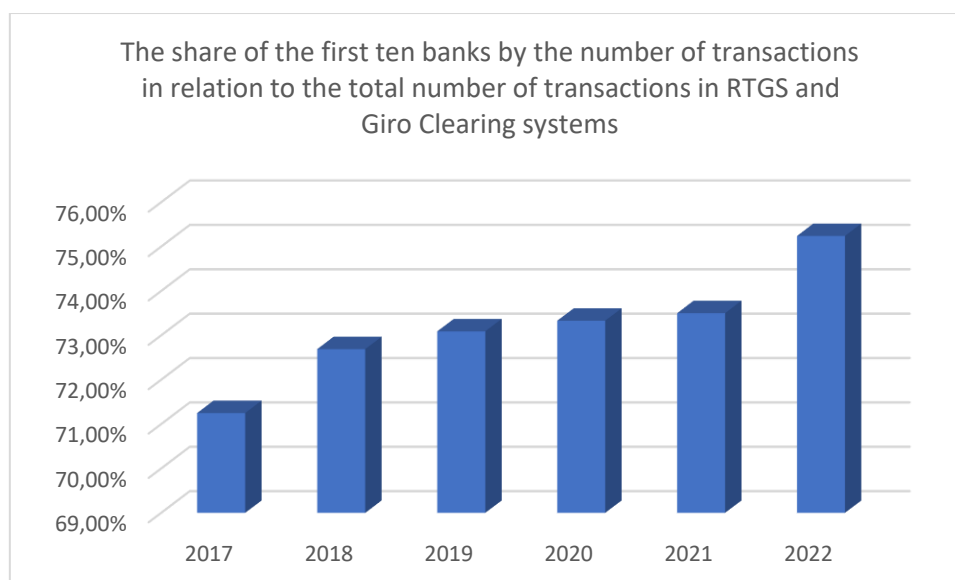
The share of Giro Clearing transactions in the number of the total transactions was 97.11, and that in the value was 15.40%.

3 Concentration by the number and value of transactions

The first ten banks participated in the total number of RTGS and Giro Clearing interbank transactions during 2022 with 75.24%, this being an increase compared to 2021 (in 2021, ten banks accounted for 73.50% of all transactions).

The first five banks participated in the total number of RTGS and Giro Clearing interbank transactions during 2022 with 53.32%, this being an increase compared to 2021 (in 2021, the first five banks accounted for 52.40% of all transactions).

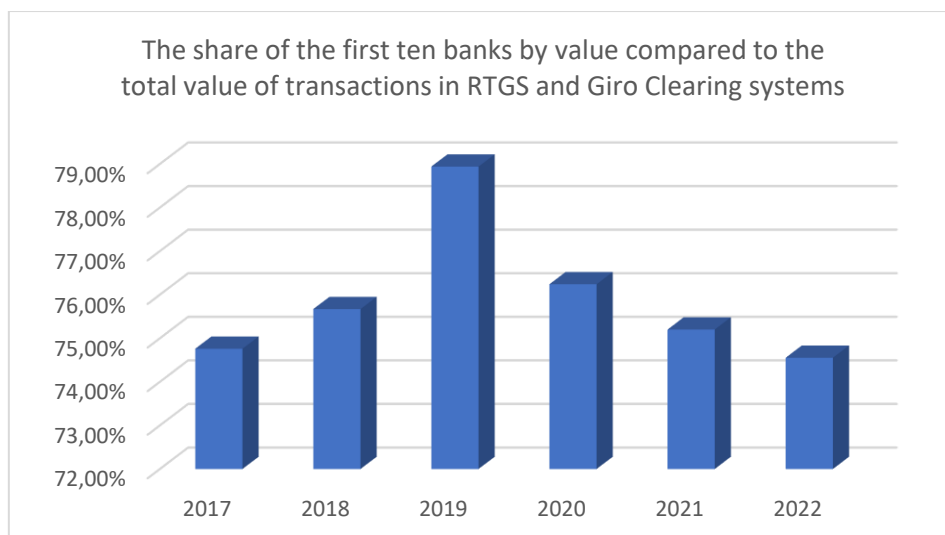
The share of the first ten banks by the number of transactions in relation to the total number of transactions in RTGS and Giro Clearing systems in 2022		
Year	Number of transactions	%
2022	37.394.511	75,24



In the total value of transactions, the top ten banks participated with 74.55%, thus reducing their share, since in 2021 their share was 75.20%.

In the total value of transactions, the top five banks participated with 50.42%, thus increasing their share, since in 2021 their share was 50.36%.

The share of the first ten banks by value compared to the total value of transactions in RTGS and Giro Clearing systems in 2022		
Year	Value of transactions	%
2022	108.704.967.488	74,55

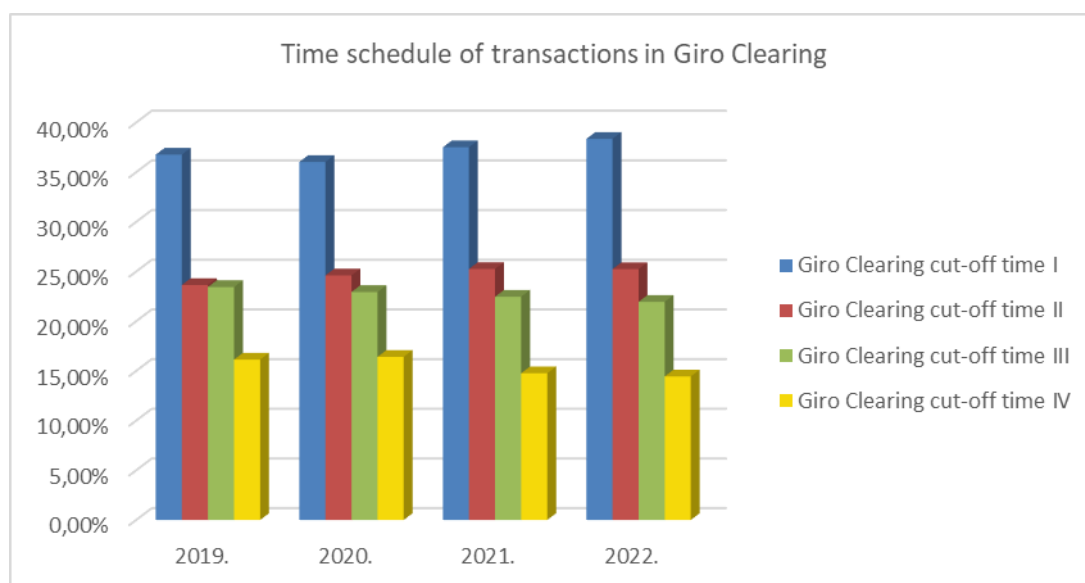


4 Time schedule of transactions

In accordance with the Operating Rules for Gyro clearing, net position settlement is carried out in the RTGS payment system for four clearing cycles during the day.

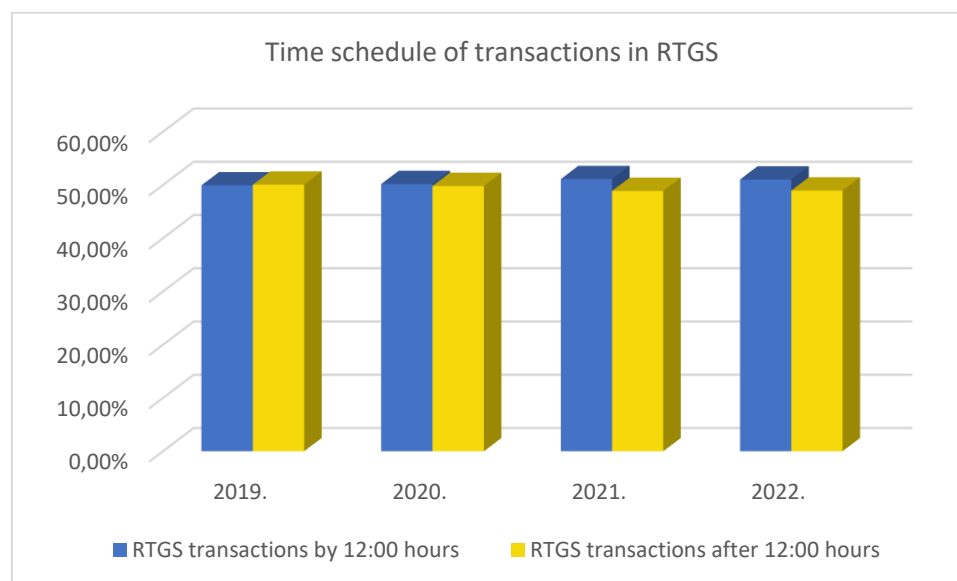
The percentual shares of banks' orders sent in particular clearing cycles in the Giro Clearing payment system during 2022 are the following:

Time schedule of transactions in Giro Clearing in %				
Giro Clearing cut-off time	2019	2020	2021	2022
Giro Clearing cut-off time I	36.77%	36.03%	37,51%	38,36%
Giro Clearing cut-off time II	23.65%	24.61%	25,26%	25,24%
Giro Clearing cut-off time III	23.44%	22.94%	22,47%	21,96%
Giro Clearing cut-off time IV	16.14%	16.42%	14,76%	14,44%



Percentual shares of banks' orders sent in the RTGS payment system during 2022 are the following:

Time schedule of transactions in RTGS expressed in %				
RTGS cut-off time	2019	2020	2021	2022
RTGS transactions by 12:00 hours	49.94%	50.18%	51.11%	51,03%
RTGS transactions after 12:00 hours	50.06%	49.82%	48.89%	48,97%



5 International clearing

Through the system of international clearing of payments with Serbia, the total of 10.395 orders were sent by banks from BH during 2022 (12.236 orders in 2021), in the value of EUR 288.120.247 (EUR 352.790.320 in 2021). Six banks from BH participated in the clearing system of international payment between the two countries, as it follows:

No.	Participant	BIC code
1	ASA Banka d.d. Sarajevo	IKBZBA2XXXX
2	Bosna Bank International d.d. Sarajevo	BBIBBA22XXX
3	ProCredit Bank d.d. Sarajevo	MEBBBA22XXX
4	NAŠA BANKA a.d. Bijeljina	PAVLBA22XXX
5	Atos bank a.d. Banja Luka	SABRBA2BXXX
6	MF banka a.d. Banja Luka	MFBLBA22XXX

The total number of orders and their value by years:

Year	Number of orders	Value of orders
2010	5.877	€ 56.895.162
2011	6.852	€ 84.244.664
2012	6.819	€ 93.651.205
2013	7.929	€ 122.641.627
2014	8.769	€ 131.046.506
2015	9.637	€ 176.275.344
2016	10.319	€ 197.607.823
2017	10.602	€ 172.103.917
2018	10.853	€ 224.074.932
2019	11.931	€ 265.096.190
2020	10.622	€ 235.143.401
2021	12.236	€ 352.790.320
2022	10.395	€ 288.120.247

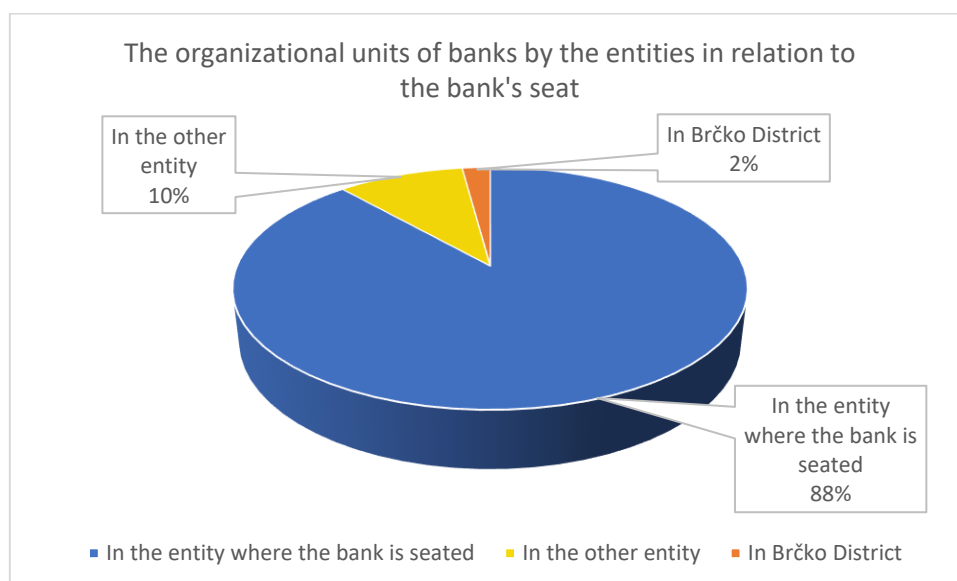
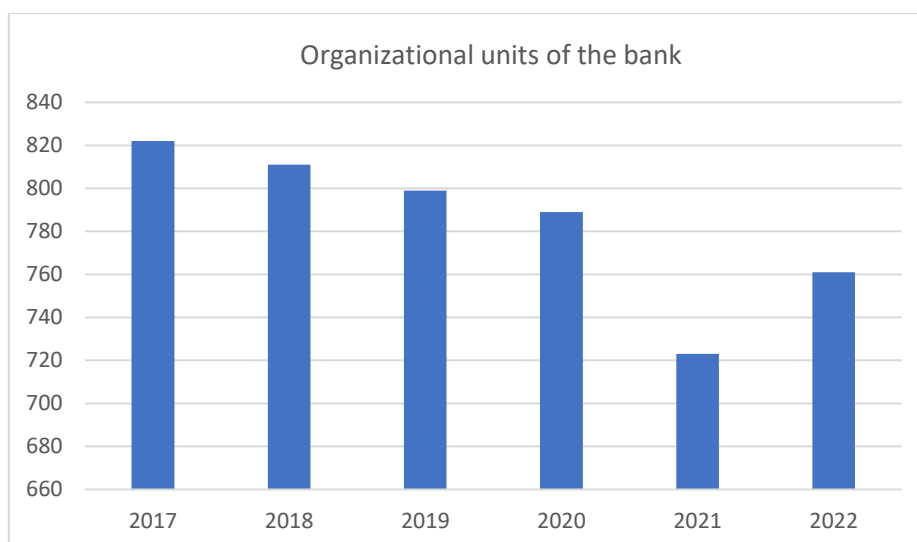


6 Organizational charts of banks

The total number of organizational units of banks at the end of 2022 was 761 (in 2021, banks had 723 organizational units).

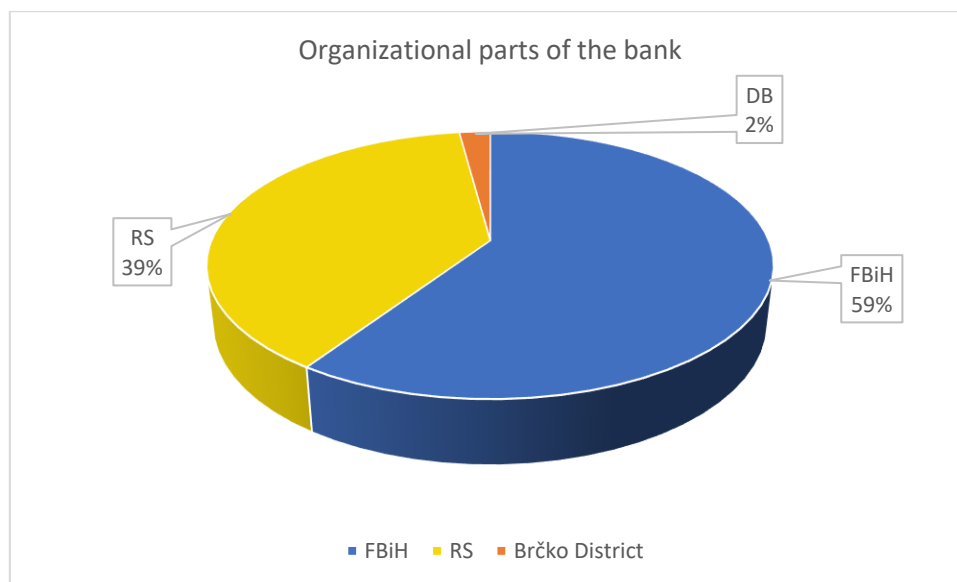
The table provides a survey of organizational units by the entities in relation to banks' headquarters:

Organizational units of the bank				
Year	In the entity where the bank is seated	In the other entity	In Brčko District	Total
2017	726	72	24	822
2018	699	92	20	811
2019	706	75	18	799
2020	695	76	18	789
2021	643	64	16	723
2022	673	72	16	761



The following table shows the number of organizational units of banks in the Federation of Bosnia and Herzegovina (hereinafter: FBiH), Republic of Srpska (hereinafter: RS) and Brcko District (hereinafter: DB):

Organizational parts of the bank				
Year	FBH	RS	DB	Total
2022	452	293	16	761

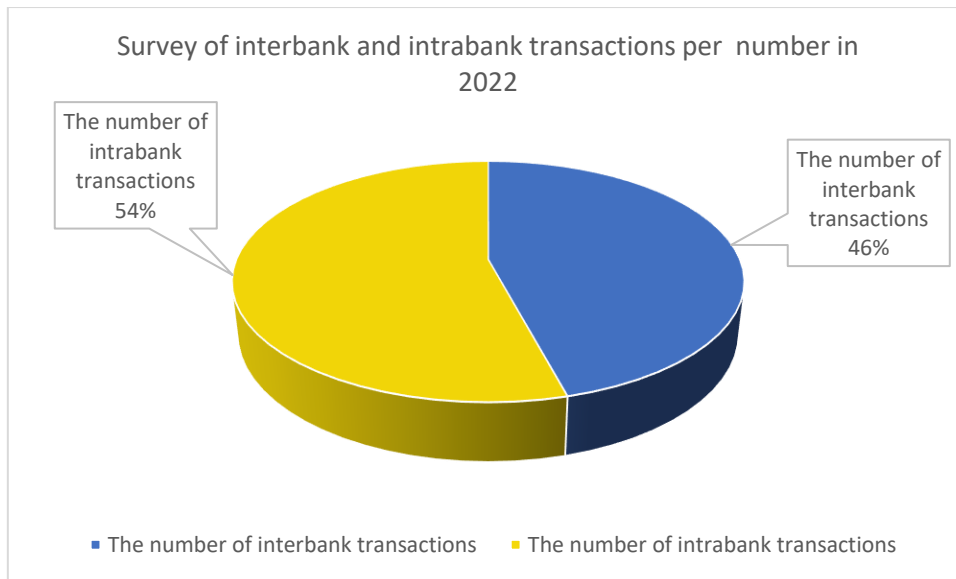


7 Interbank and intrabank transactions

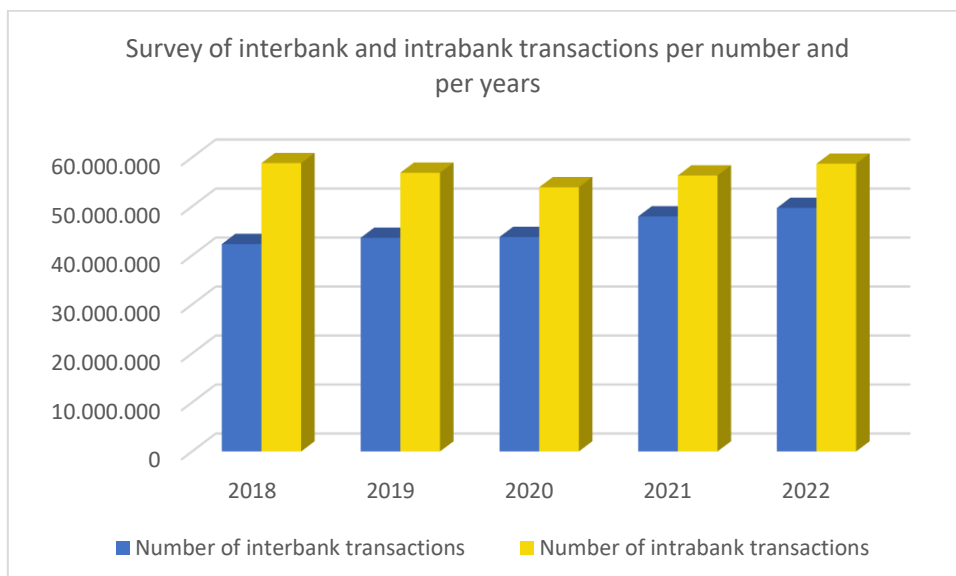
During 2022, 49.700.235 interbank payments were performed (in 2021, 47.971.726) and 58.727.637 intrabank payments were performed (in 2021, 56.325.952).

In percent, out of the total number of transactions, 46 % were interbank transactions (through the CBBH payment systems: RTGS and Giro Clearing), and 54 % orders sent within banks.

Survey of interbank and intrabank transactions per number in 2022		
The number of interbank transactions	The number of intrabank transactions	Total
49.700.235	58.727.637	108.427.872
46%	54%	100%

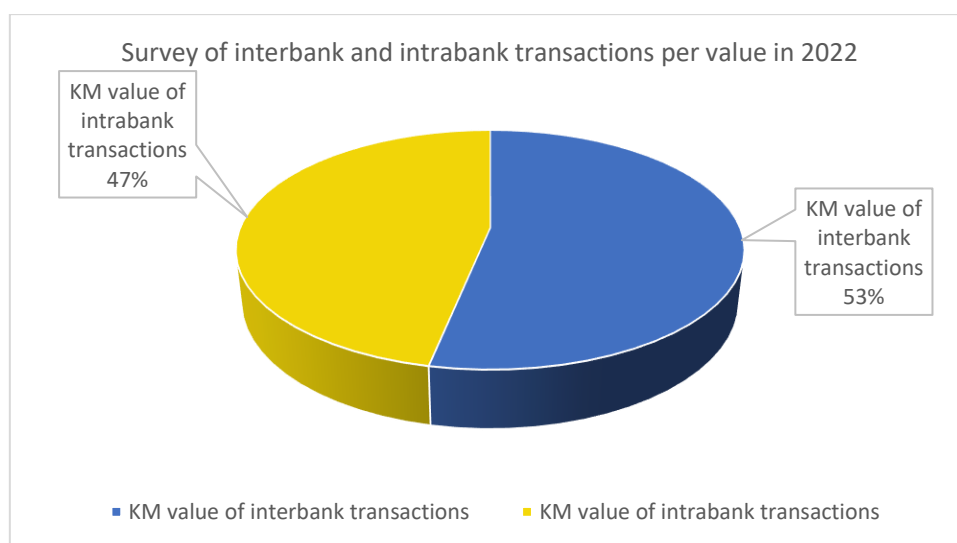


Survey of interbank and intrabank transactions per number and per years			
Year	Number of interbank transactions	Number of intrabank transactions	Total
2018	42.334.026	58.847.941	101.181.967
2019	43.601.606	56.879.236	100.480.842
2020	43.774.406	53.927.204	97.701.610
2021	47.971.726	56.325.952	104.297.678
2022	49.700.235	58.727.637	108.427.872

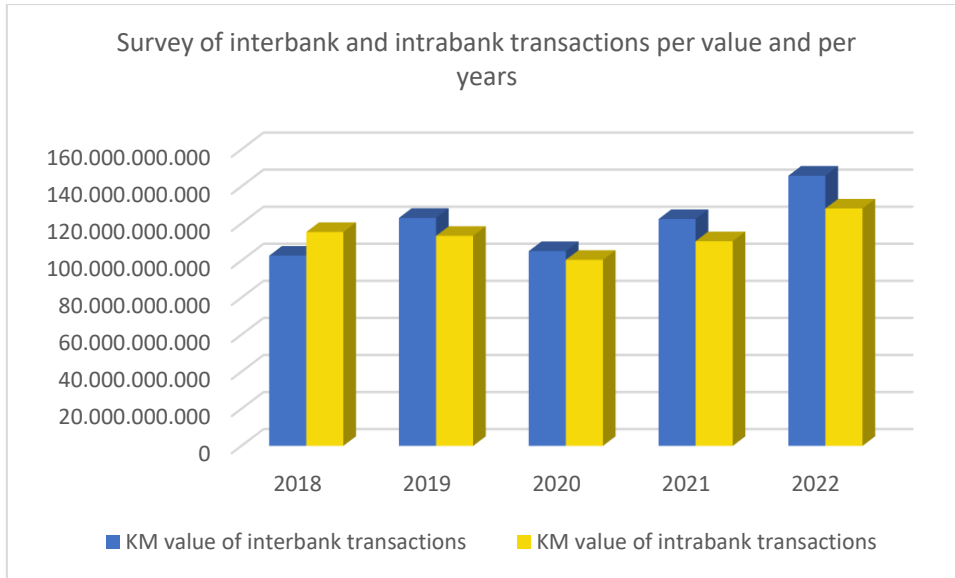


Observing the value in 2022, interbank orders amounted to KM 145.825.330.468 (in 2021, KM 122.403.038.511) and intrabank orders amounted to KM 128.127.838.936 (in 2021, KM 110.469.030.643). Interbank to intrabank orders ratio is as presented in the table:

Survey of interbank and intrabank transactions per value in 2022		
KM value of interbank transactions	KM value of intrabank transactions	Total
145.825.330.468	128.127.838.936	273.953.169.404
53%	47%	100%

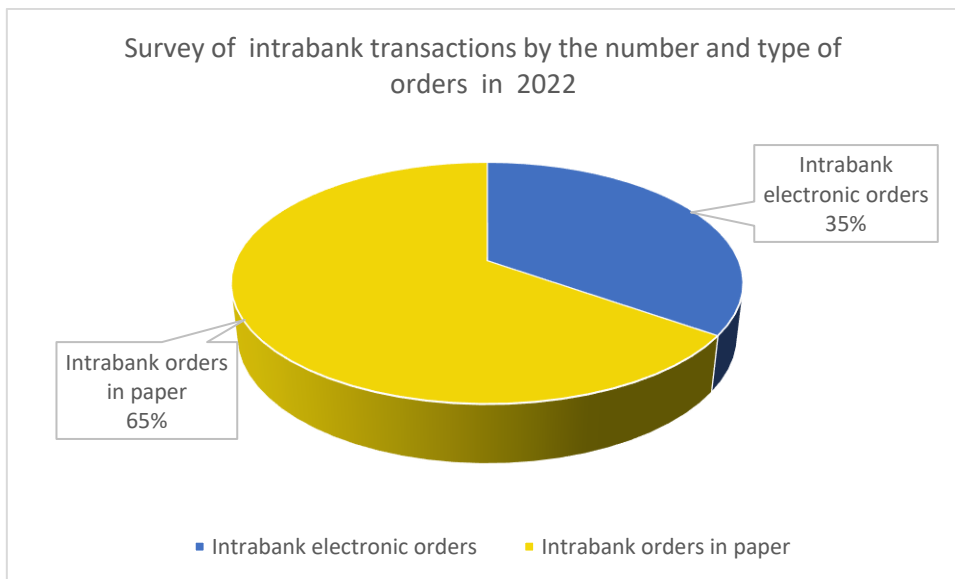


Survey of interbank and intrabank transactions per value and per years			
Year	KM value of interbank transactions	KM value of intrabank transactions	Total
2018	102.669.704.908	115.435.540.439	218.105.245.347
2019	123.046.070.387	113.372.584.035	236.418.654.422
2020	105.132.312.596	100.429.423.241	205.561.735.837
2021	122.403.038.511	110.469.030.643	232.872.069.154
2022	145.825.330.468	128.127.838.936	273.953.169.404

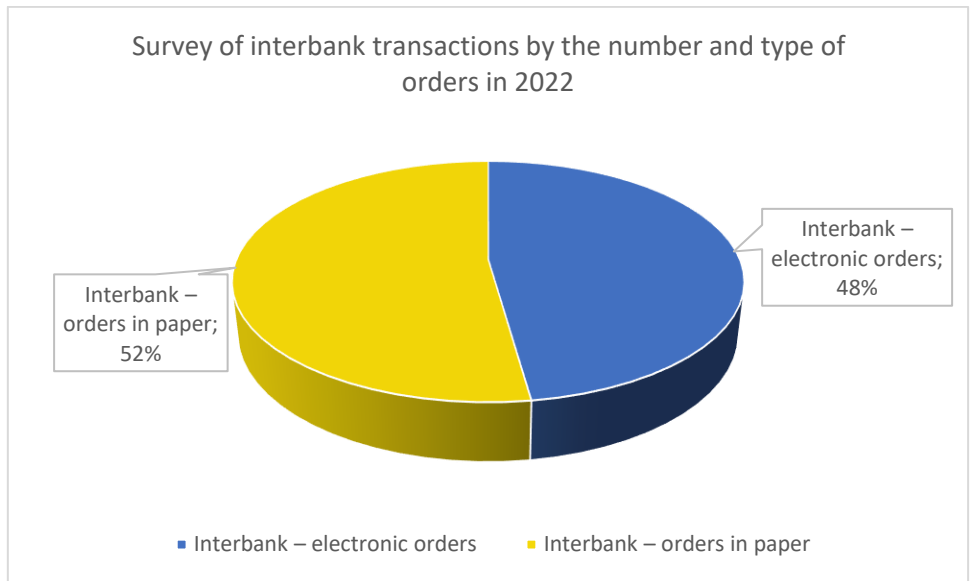


The survey of intrabank and interbank transactions per type of order initiation (electronic and paper) for 2022 is presented below. Survey provides the number and the value of orders:

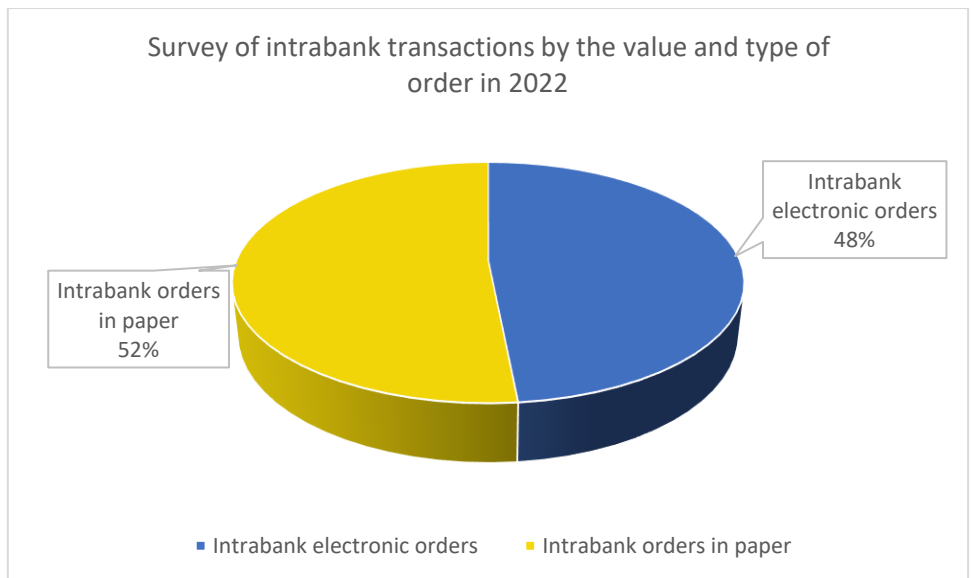
Survey of intrabank transactions by the number and type of orders in 2022		
Intrabank electronic orders	Intrabank orders in paper	Total
35%	65%	100%



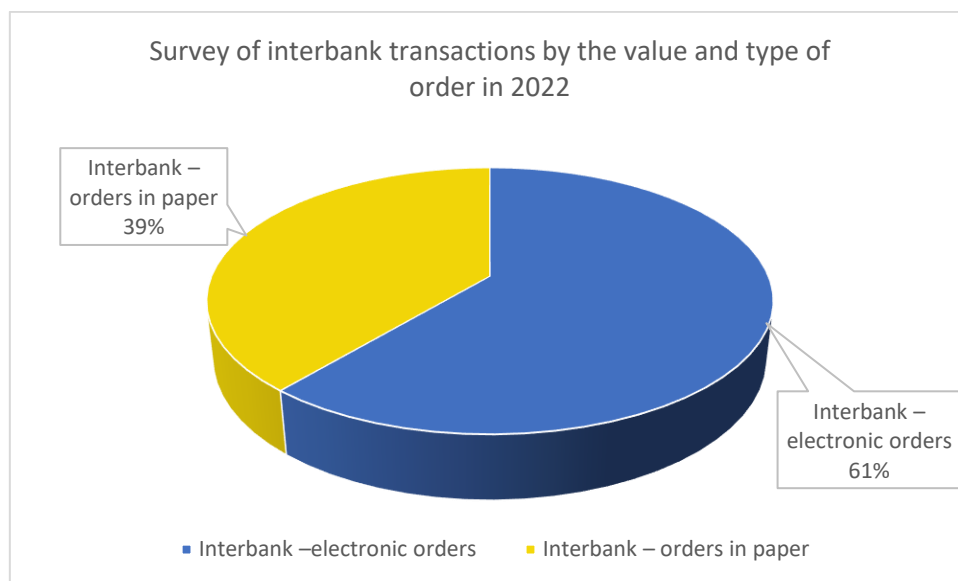
Survey of interbank transactions by the number and type of orders in 2022		
Interbank – electronic orders	Interbank – orders in paper	Total
48%	52%	100%



Survey of intrabank transactions by the value and type of order in 2022		
Intrabank electronic orders	Intrabank orders in paper	Total
48%	52%	100%

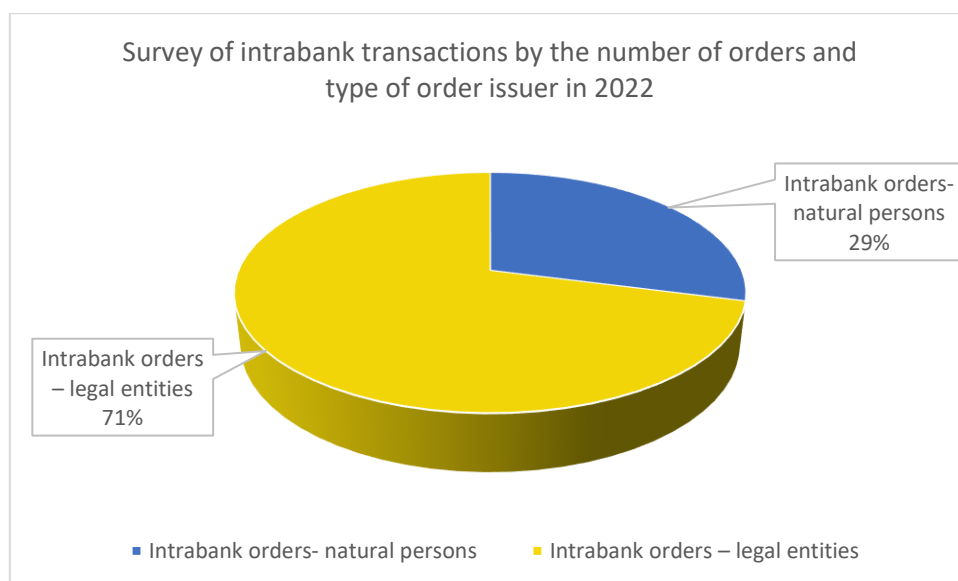


Survey of interbank transactions by the value and type of order in 2022		
Interbank –electronic orders	Interbank – orders in paper	Total
61%	39%	100%

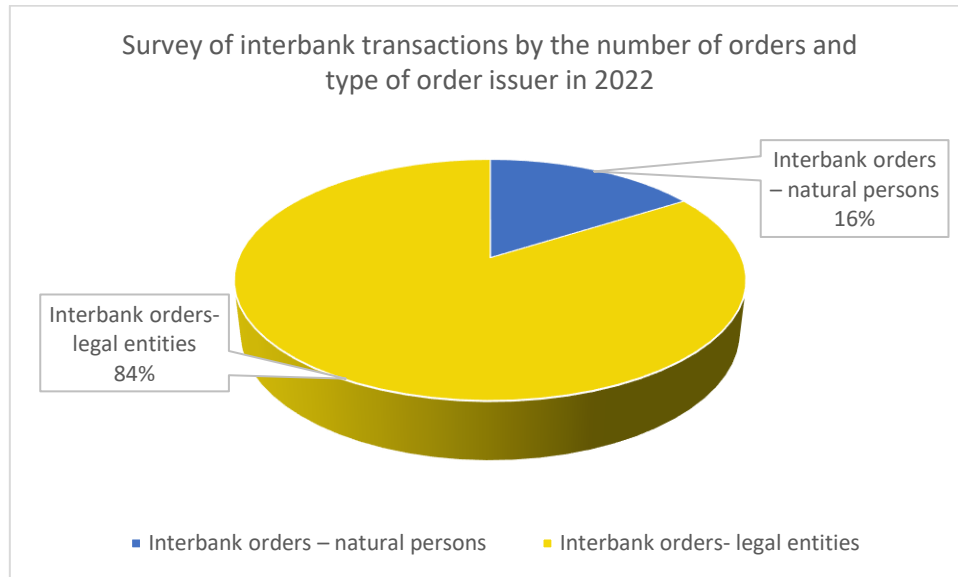


Survey of intrabank and interbank transactions by the type of order issuer (natural persons and legal entities) for 2022:

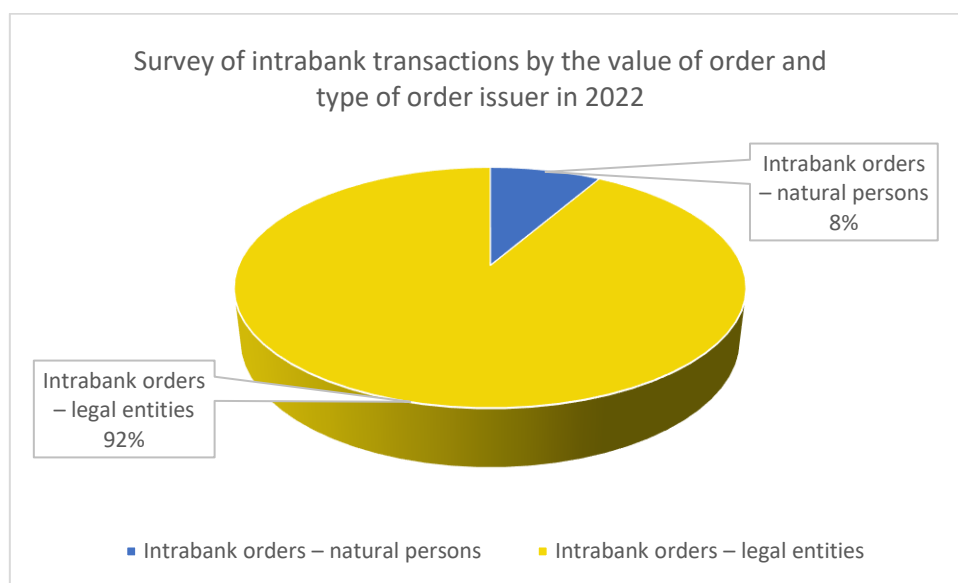
Survey of intrabank transactions by the number of orders and type of order issuer in 2022		
Intrabank orders- natural persons	Intrabank orders – legal entities	Total
29%	71%	100%



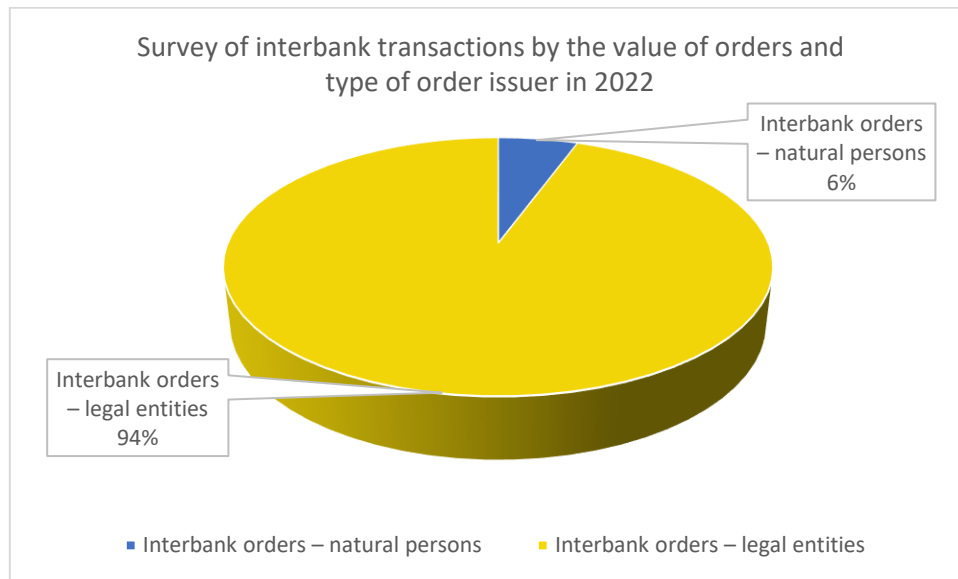
Survey of interbank transactions by the number of orders and type of order issuer in 2022		
Interbank orders – natural persons	Interbank orders- legal entities	Total
16%	84%	100%



Survey of intrabank transactions by the value of order and type of order issuer in 2022		
Intrabank orders – natural persons	Intrabank orders – legal entities	Total
8%	92%	100%



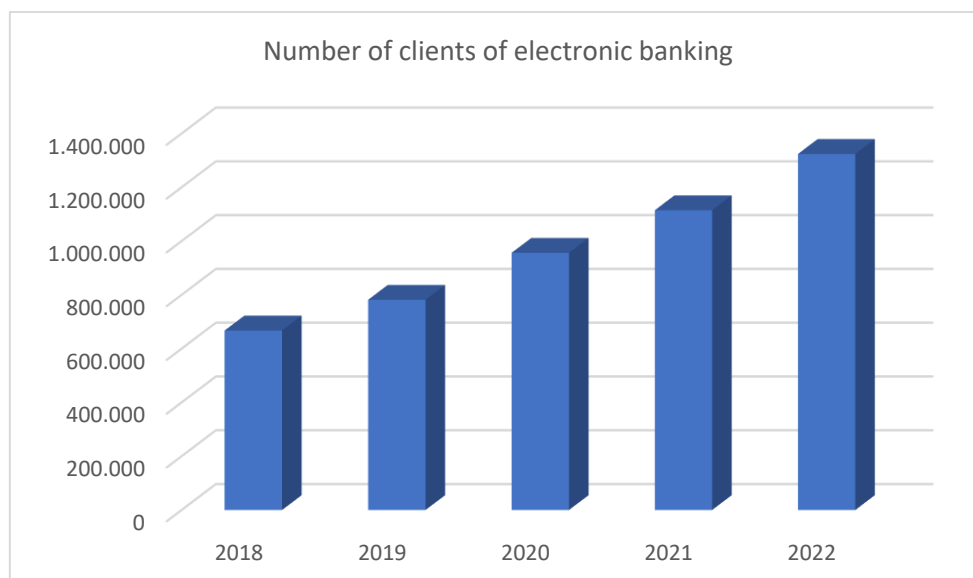
Survey of interbank transactions by the value of orders and type of order issuer in 20202		
Interbank orders – natural persons	Interbank orders – legal entities	total
6%	94%	100%

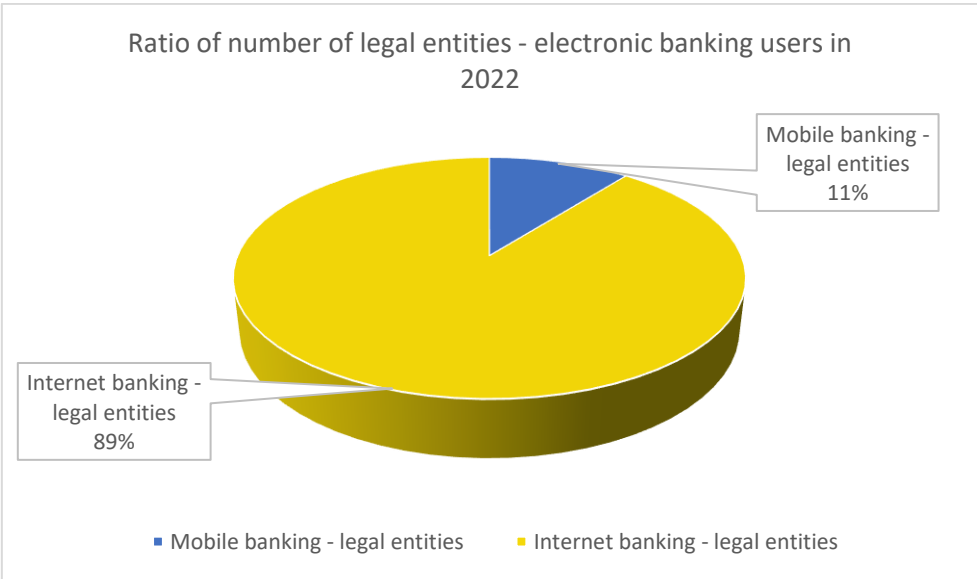
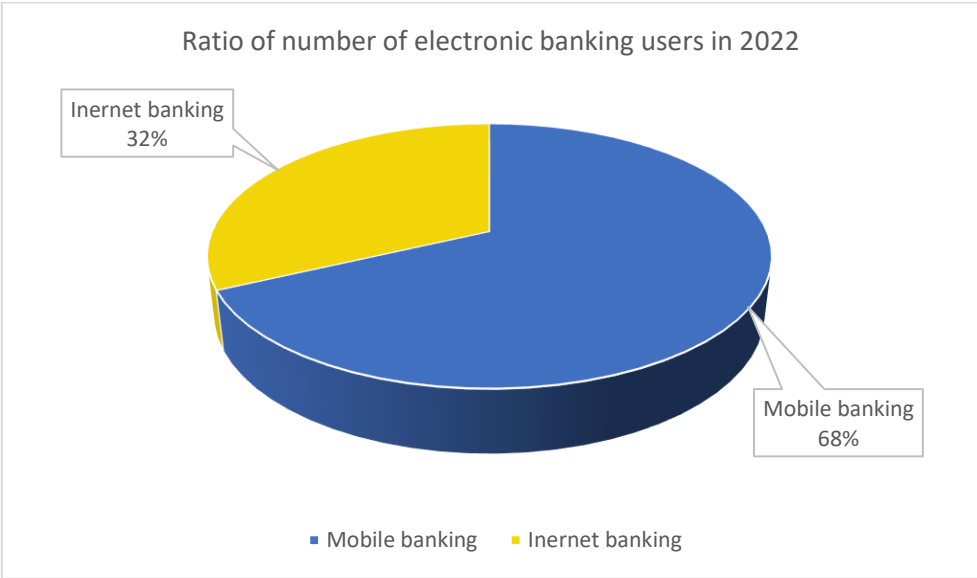
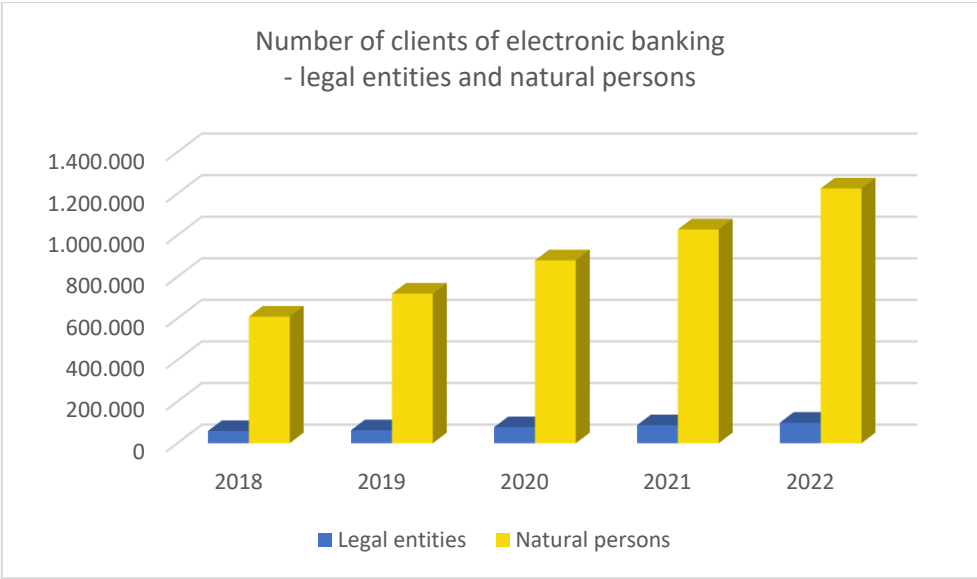


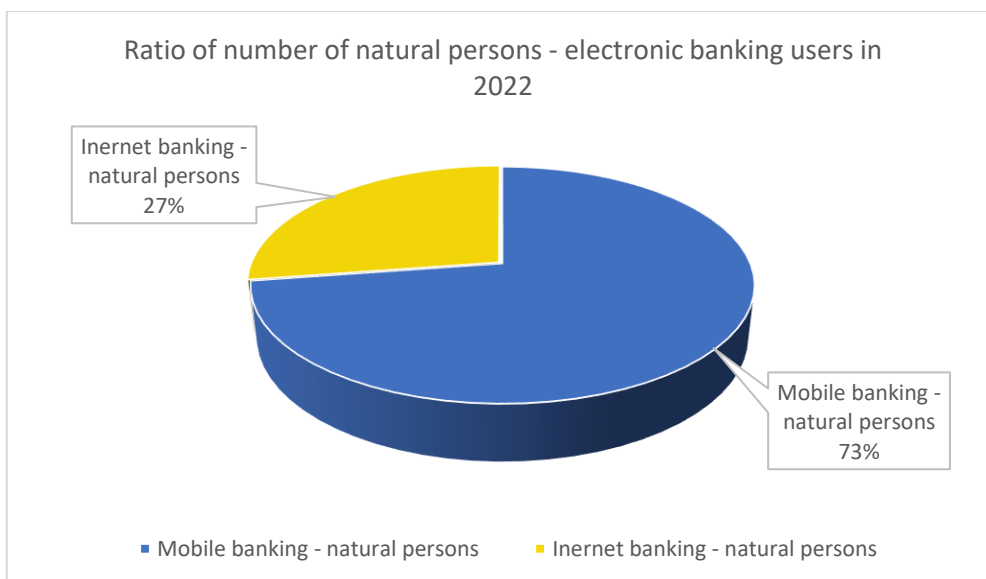
8 Bank channels

The electronic banking (mobile and/or internet banking) was offered by 22 banks in BH.

This kind of service covers in total 1.324.202 entities (during 2021 there were 1.114.863), more specifically 98.704 legal entities (during 2021 there were 86.627) and 1.225.498 natural persons (during 2021 there were 1.028.236). The trend of increase in number of the clients using these services is evident.



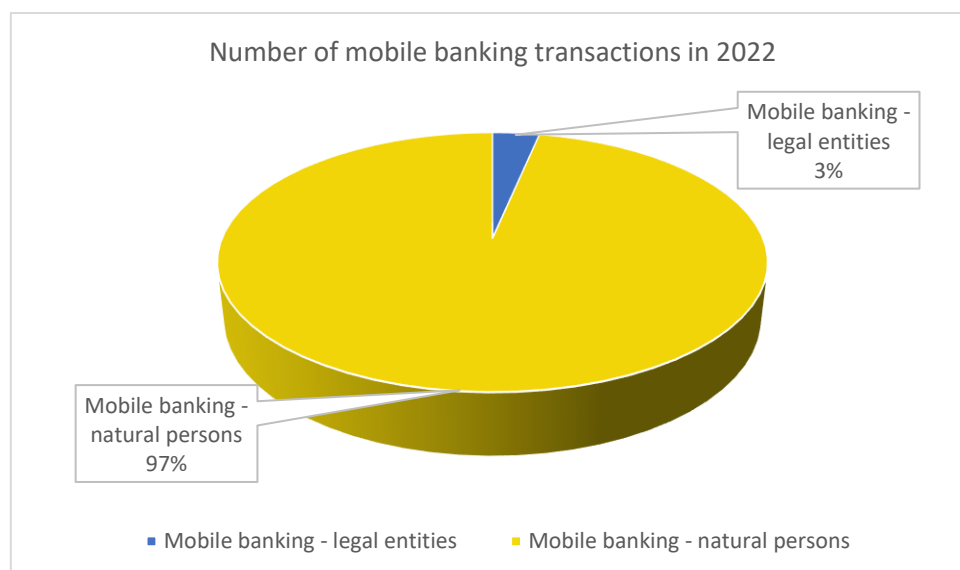


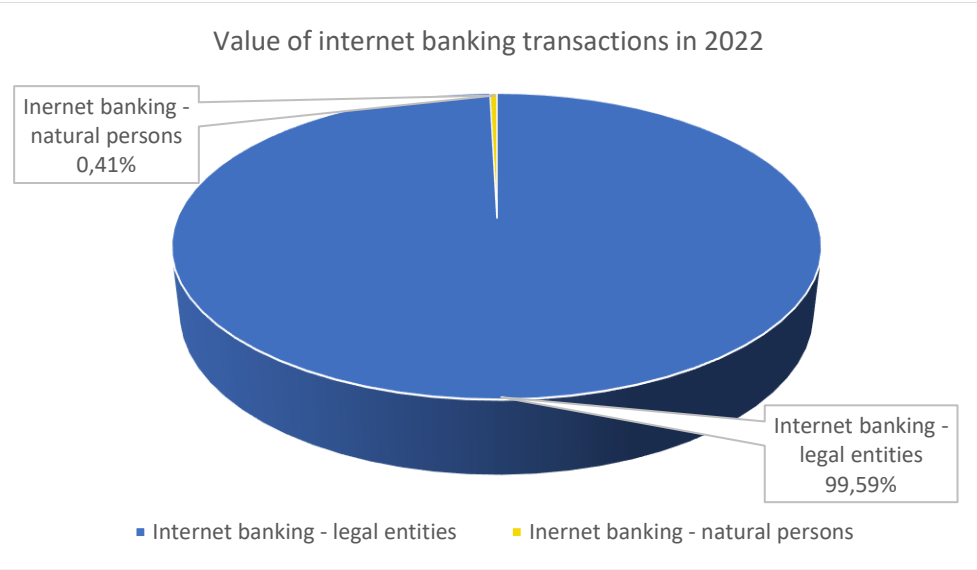
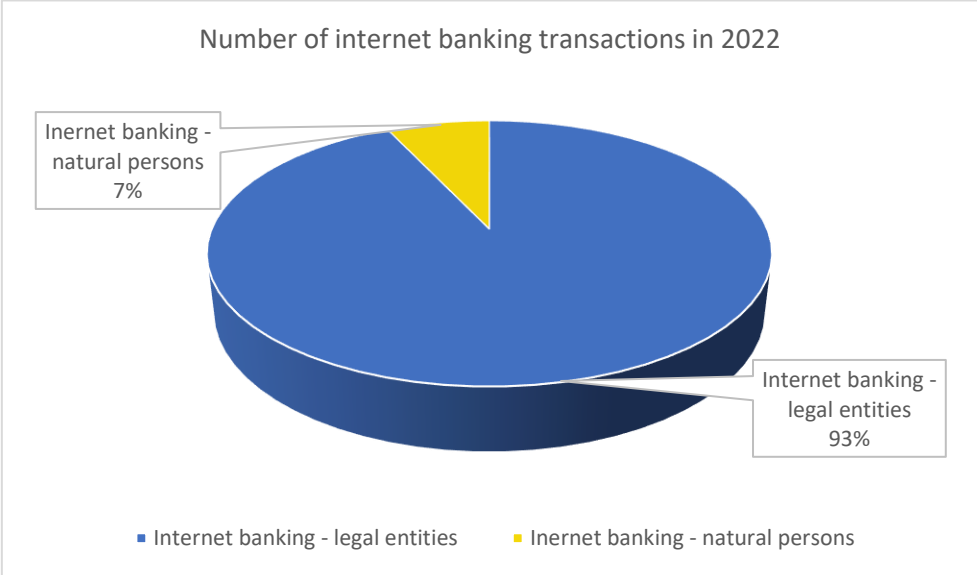
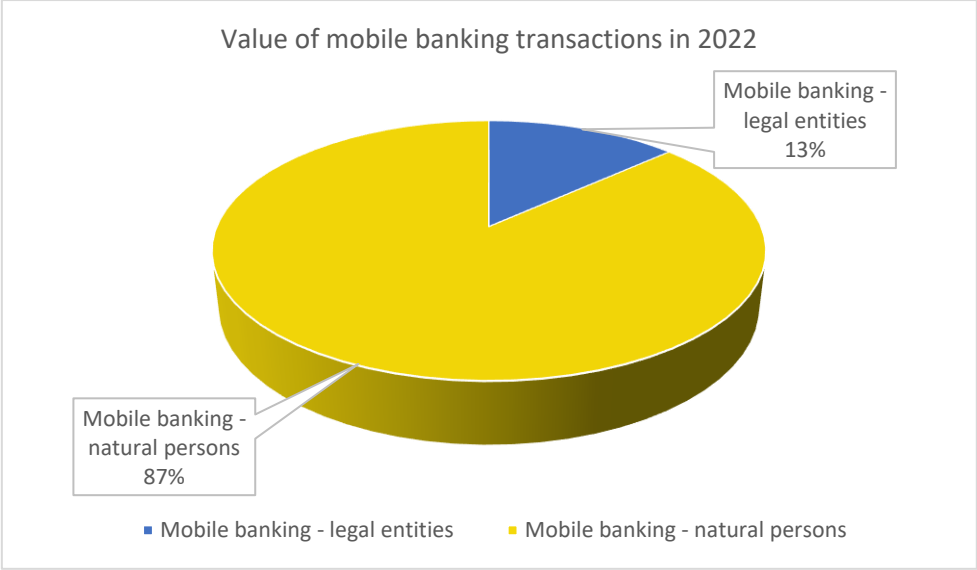


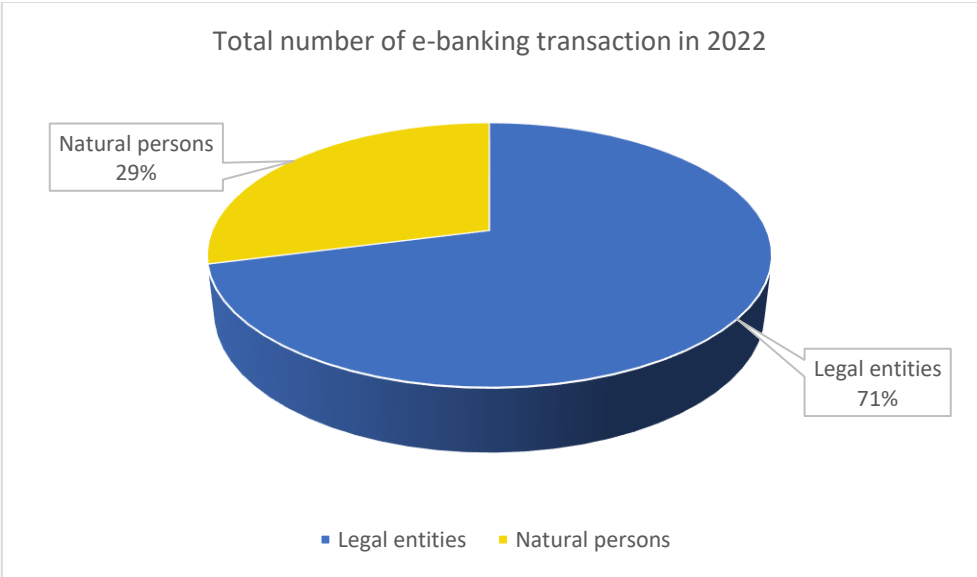
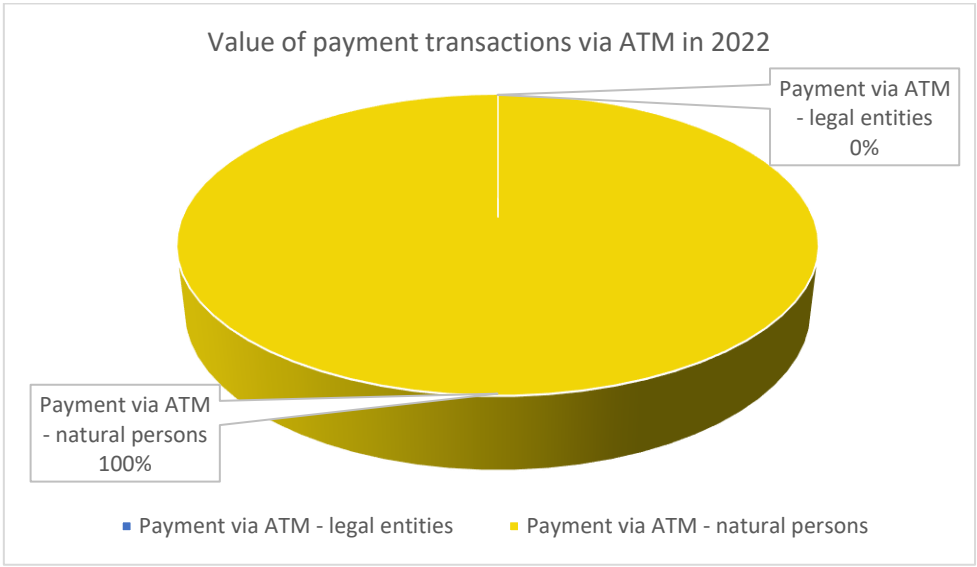
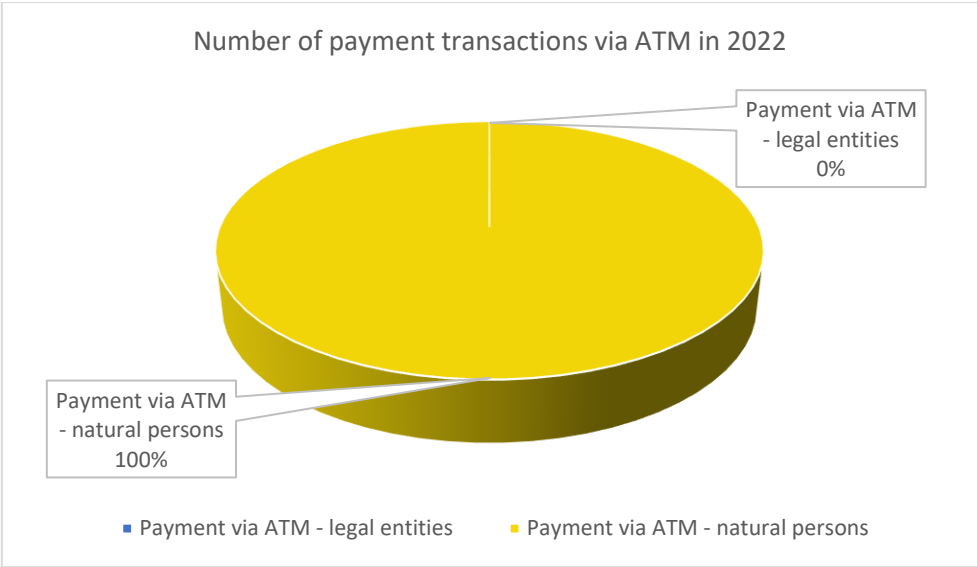
Number and value of transactions of the e-banking:

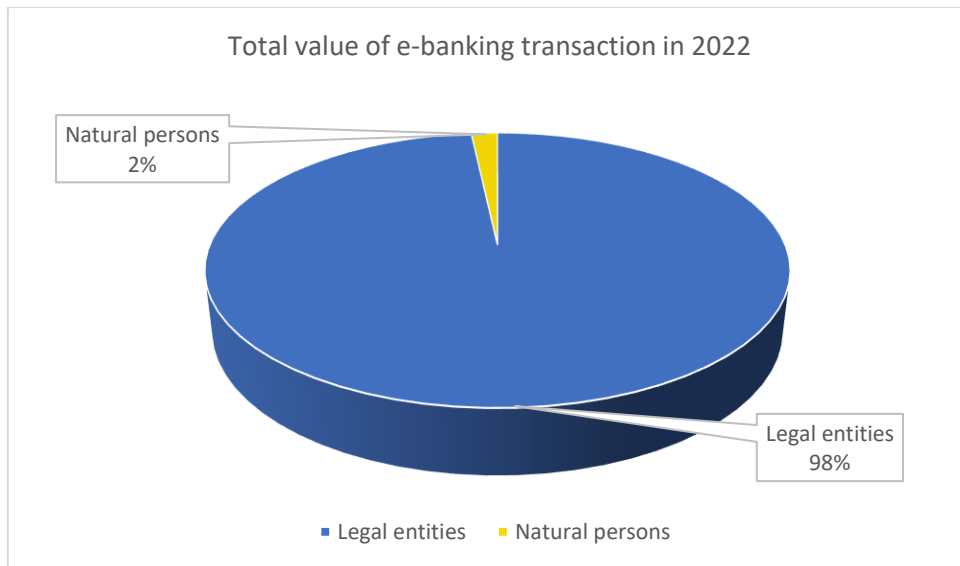
E-banking transaction number							
Year	Mobile banking - legal entities	Mobile banking - natural persons	Internet banking - legal entities	Internet banking - natural persons	Payment via ATM - legal entities	Payment via ATM - natural persons	Total
2022	313.815	9.241.000	27.344.367	2.068.581	0	4.178	38.971.941

E-banking transaction value							
Year	Mobile banking - legal entities	Mobile banking - natural persons	Internet banking - legal entities	Internet banking - natural persons	Payment via ATM - legal entities	Payment via ATM - natural persons	Total
2022	313.948.201	2.038.372.471	151.865.576.098	632.474.145	0	787.601	154.851.158.515



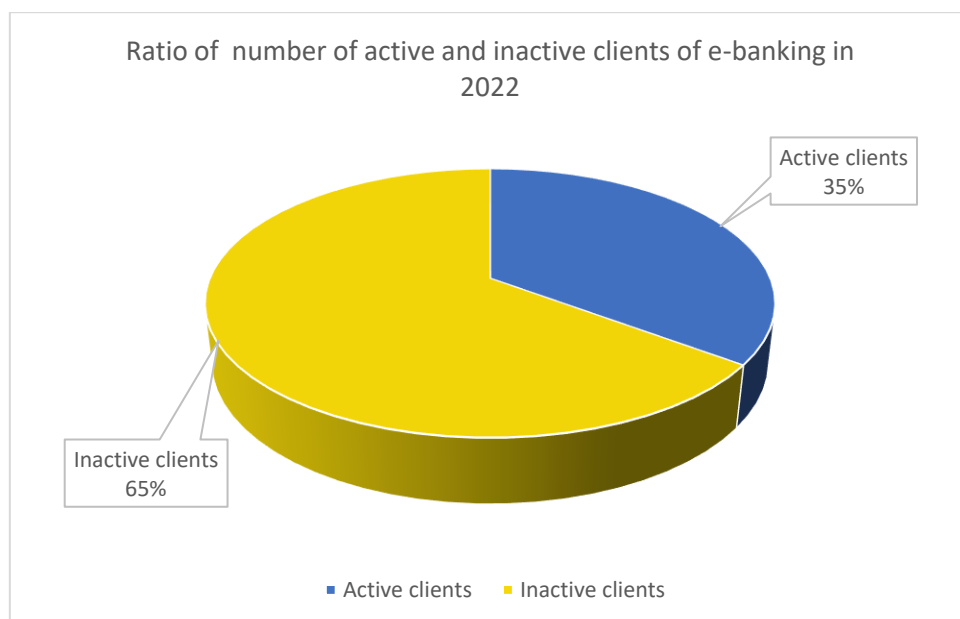






Survey of the number of active e-banking clients (those who had at least one transaction during the calendar year 2022) is presented below:

Godina	Mobilno bankarstvo - pravna lica	Mobilno bankarstvo - fizička lica	Mobilno bankarstvo	Internet bankarstvo - pravna lica	Internet bankarstvo - fizička lica	Internet bankarstvo	Ukupno
2022	6.721	344.939	351.660	66.668	47.252	113.920	465.580

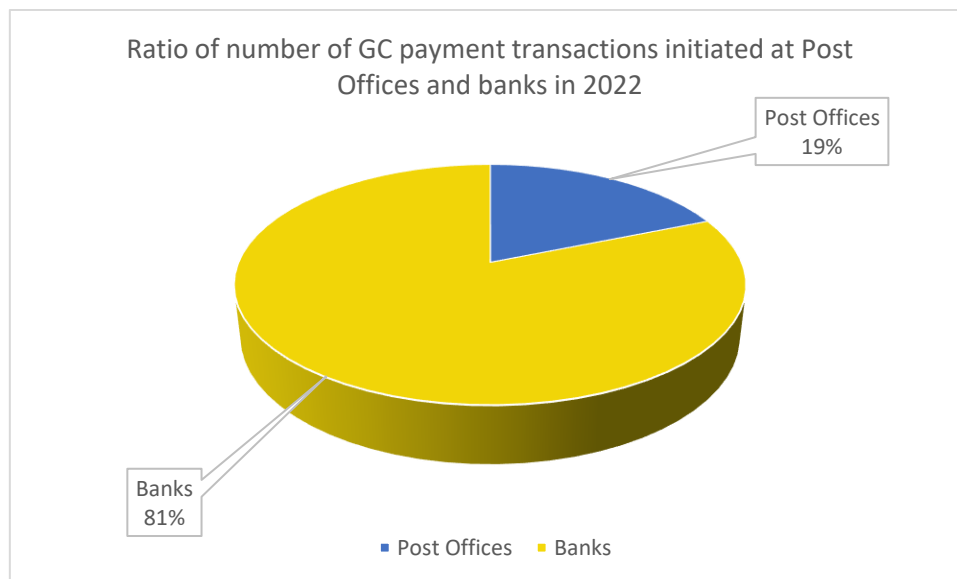


Out of a total of 22 banks in BH, 5 banks processed interbank payment orders received at Post Offices.

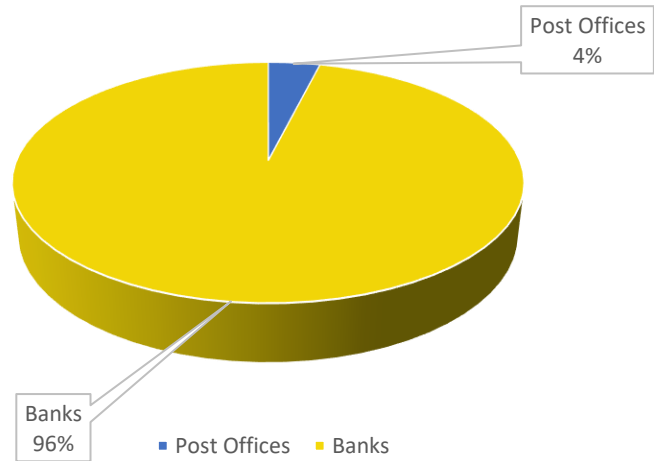
The survey provides data of interbank payment transactions initiated at Post Offices in 2022, which were processed through RTGS and Gyro Clearing (hereinafter: GC) system:

Number of interbank payment transactions initiated at Post Offices			
Year	Giro Clearing	RTGS	Total
2022	9.080.918	5.838	9.086.756

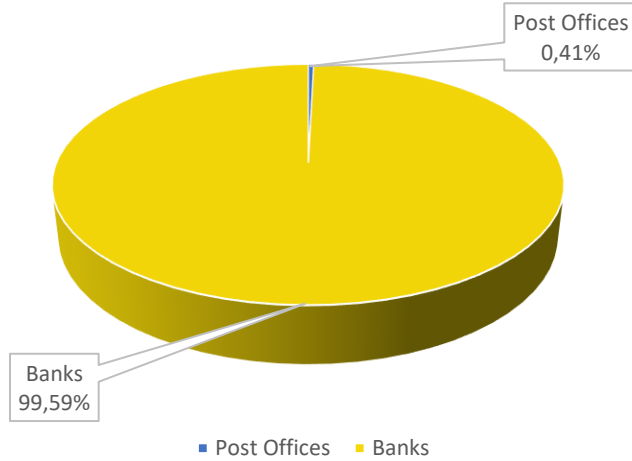
Value of interbank payment transactions initiated at Post Offices			
Year	Giro Clearing	RTGS	Total
2022	873.434.602	106.338.796	979.773.398



Ratio of value of GC payment transactions initiated at Post Offices and banks in 2022



Ratio of number of RTGS payment transactions initiated at Post Offices and banks in 2022



Ratio of value of RTGS payment transactions initiated at Post Offices and banks in 2022

