



Centralna banka  
BOSNE I HERCEGOVINE  
Централна банка  
БОСНЕ И ХЕРЦЕГОВИНЕ



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

# Card Operations in BH in 2022

Sarajevo, 20 March 2023



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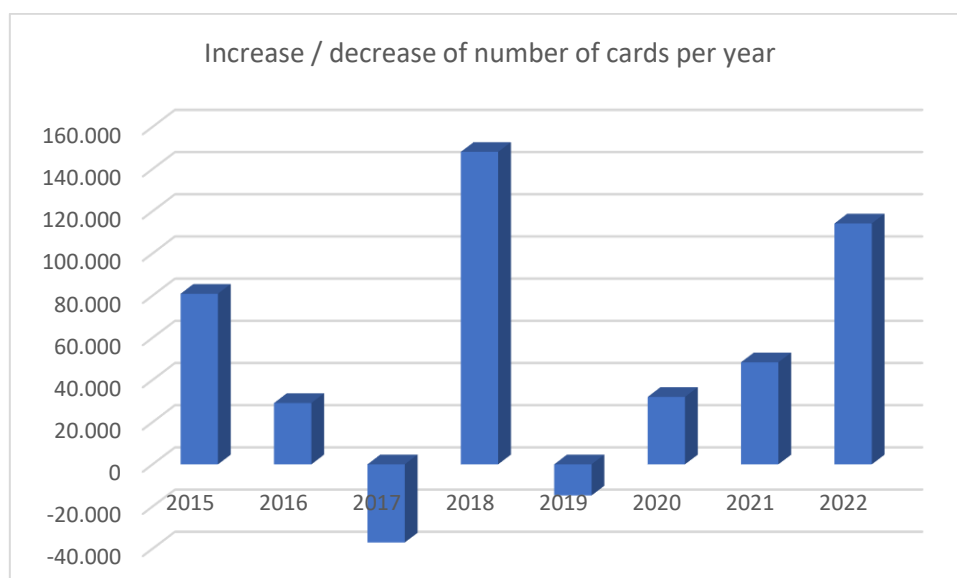
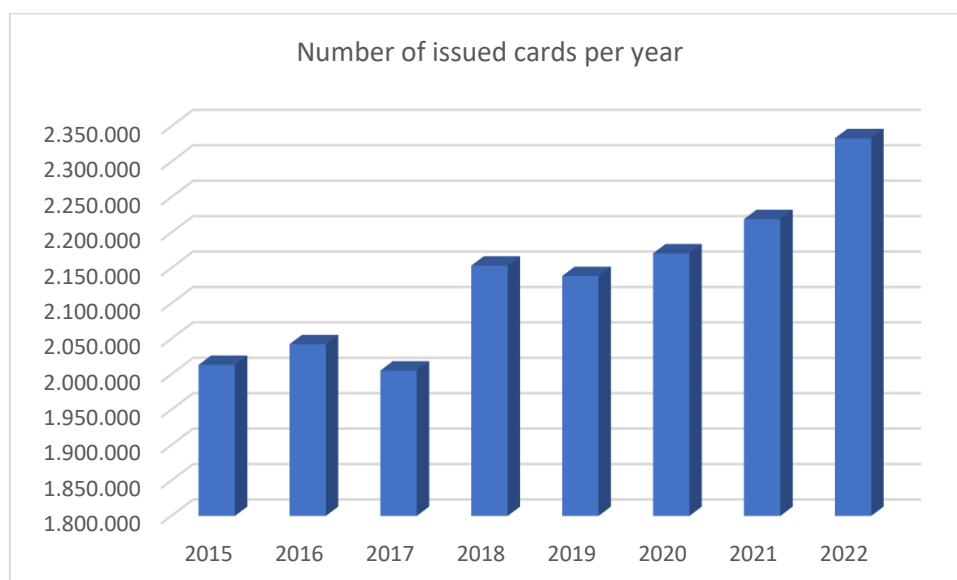
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## 1 Introduction

The report “Card Operations in BH in 2022” as a regular annual report on card business in Bosnia and Herzegovina (hereinafter: BH) was prepared on the basis of data collected from 22 banks in BH.

## 2 Number of active cards

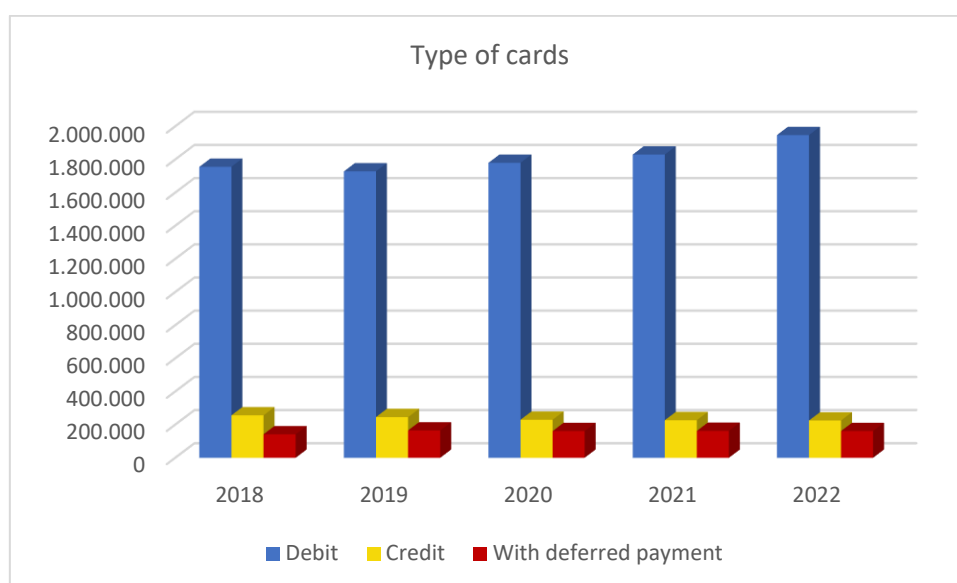
Cards are issued to their customers by 21 banks in BH. These are global brands: MasterCard, Visa, American Express and Diners, while only one bank - KIB dd Velika Kladuša offers the only domestic card - BamCard. The total number of active cards at the end of 2022 was 2,333,131, as opposed to 2,218,929 in 2021, and aggregately, in 2022 the number of active cards increased by 114,202 compared to 2021.



### 3 Share per type of card

Type of card			
Year	Debit	Credit	With deferred payment
2018	1.755.474	256.059	141.813
2019	1.728.040	245.573	164.991
2020	1.779.750	229.542	161.264
2021	1.829.734	226.876	162.319
2022	1.947.045	224.841	161.245

The highest share in the market belongs to debit cards, as illustrated in the Graph below:

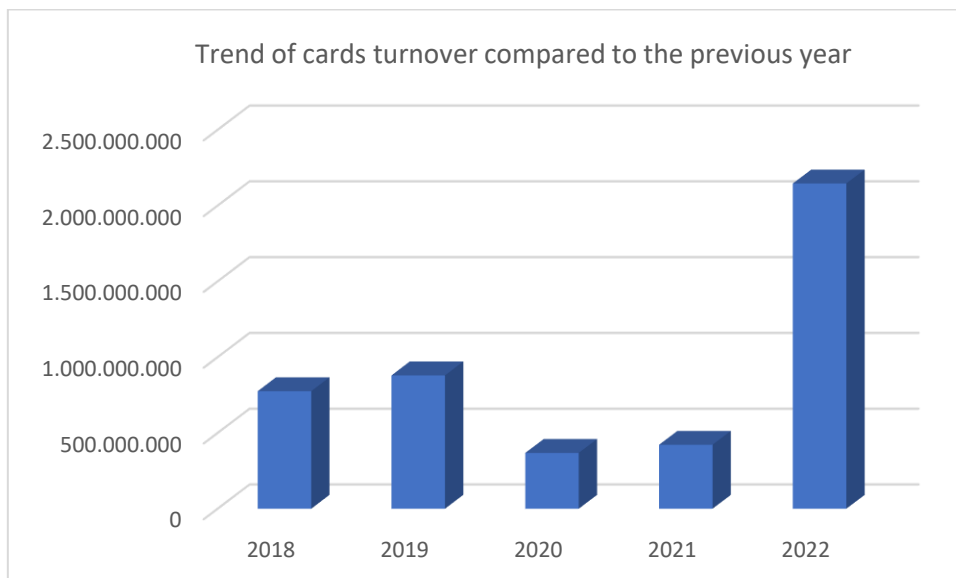
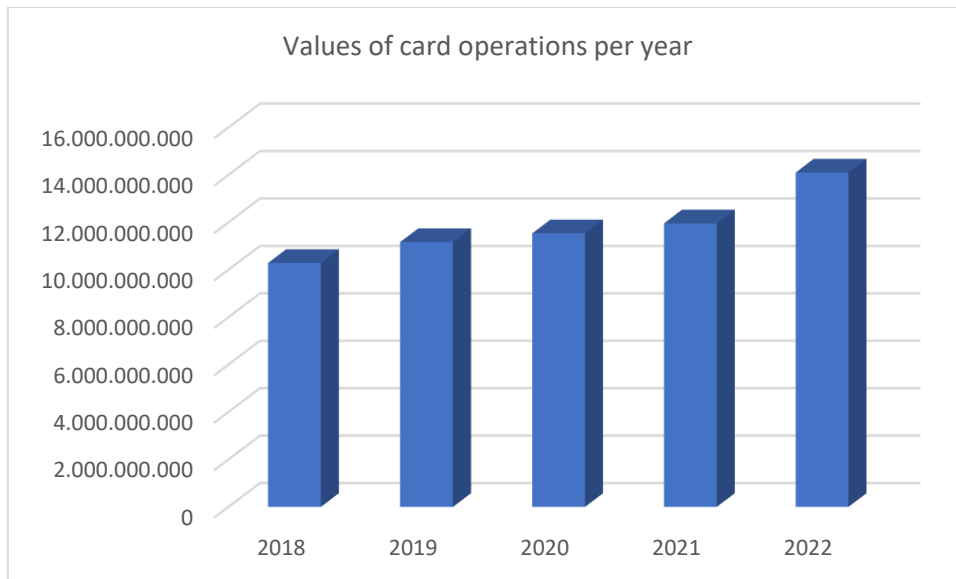


### 4 Turnover by cards

Last year, the cards operations transactions in BH and abroad amounted to KM 14.103.186.627. In 2021 the value of transactions was KM 11.957.151.297, which means that there was increase of transactions value by KM 2.146.035.330.

Starting with 2019 the Report covers the card transactions done via internet.

Values of card operations per year					
	2018	2019	2020	2021	2022
Value of transactions	10.286.958.664	11.166.890.301	11.535.123.080	11.957.151.297	14.103.186.627
Difference compared to the previous year		775.624.446	879.931.637	368.232.779	422.028.217
					2.146.035.330

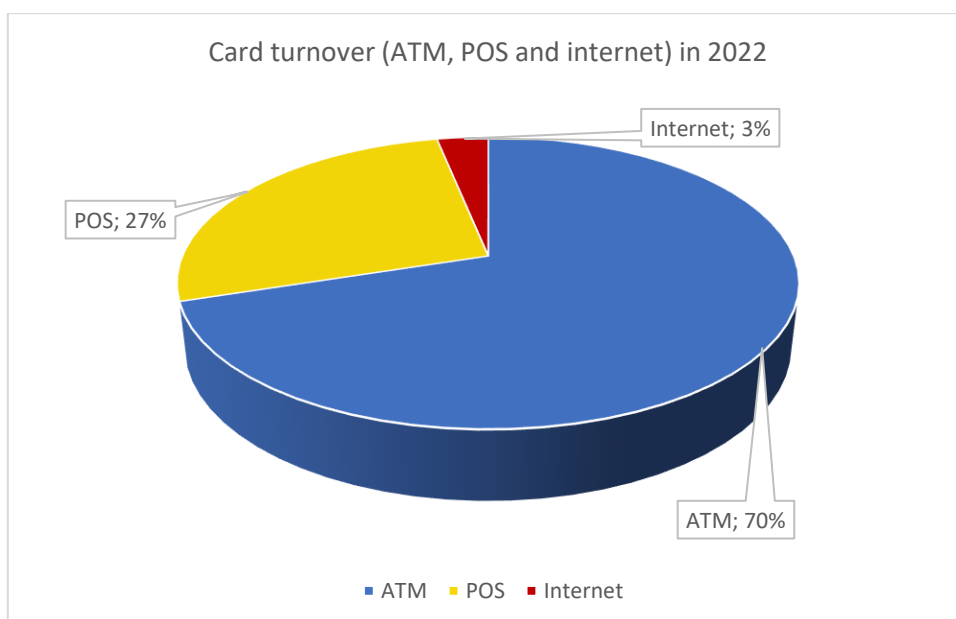
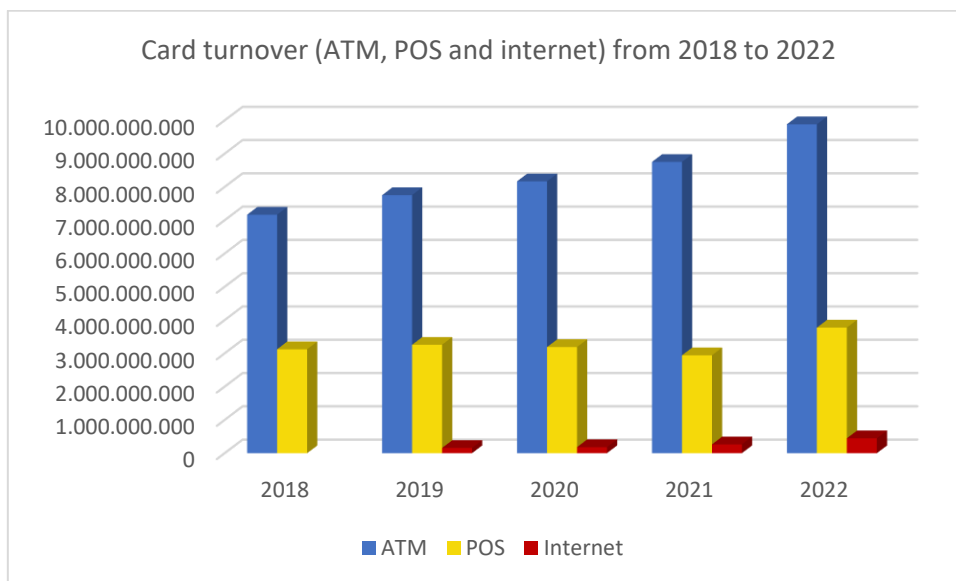


Structure of consumption (ATM, POS and internet) amounting to KM 14.103.186.627 is as below:

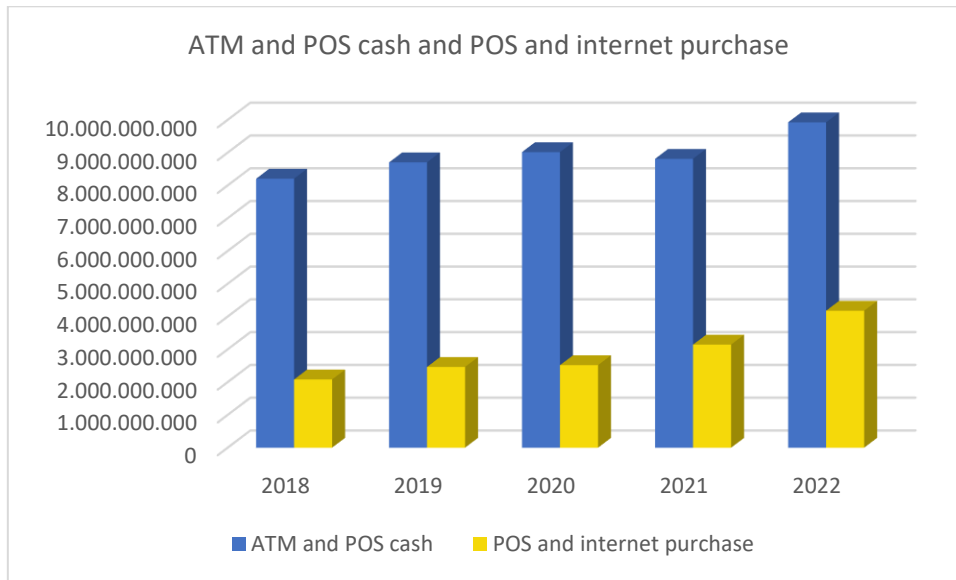
- Via ATMs, it was withdrawn, in the country and abroad, the cash amounting to KM 9.882.238.115 (in 2021 this amount was lower, being KM 8.750.565.618),
- via POS: KM 3.772.743.903 (in 2021 this amount was lower, being KM 2.941.546.480)
- via Internet: KM 448.204.608 (in 2021 this amount was lower, being KM 265.039.199),

Percentage wise, 70% of the value was turned over at ATMs, 27% via POS, while 3% of the value of card transactions was carried out through the Internet.

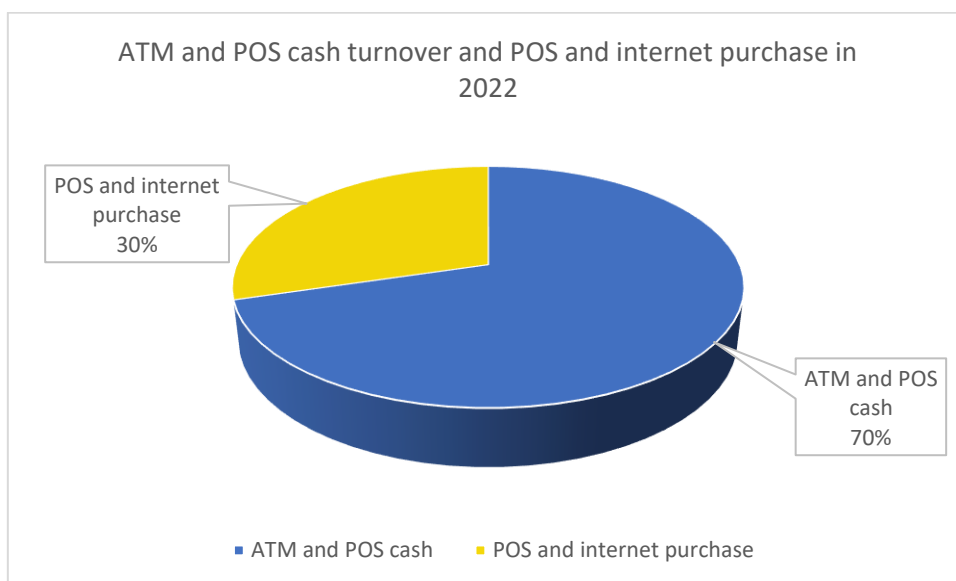
Card turnover (ATM, POS and internet) from 2018 to 2022					
	2018	2019	2020	2021	2022
ATM	7.164.868.325	7.752.955.054	8.165.945.556	8.750.565.618	9.882.238.115
POS	3.122.090.339	3.256.522.942	3.188.540.041	2.941.546.480	3.772.743.903
Internet		157.412.304	180.637.483	265.039.199	448.204.608
Total	10.286.958.664	11.166.890.301	11.535.123.080	11.957.151.297	14.103.186.627
Difference compared to the prior year	775.624.446	879.931.637	368.232.779	422.028.217	2.146.035.330



ATM and POS cash and POS and internet purchase			
Year	ATM and POS cash	POS and internet purchase	Total
2018	8.205.753.284	2.081.205.381	10.286.958.664
2019	8.704.171.225	2.462.719.076	11.166.890.301
2020	9.016.265.306	2.518.857.773	11.535.123.080
2021	8.811.546.958	3.145.604.339	11.957.151.297
2022	9.924.768.431	4.178.418.196	14.103.186.627

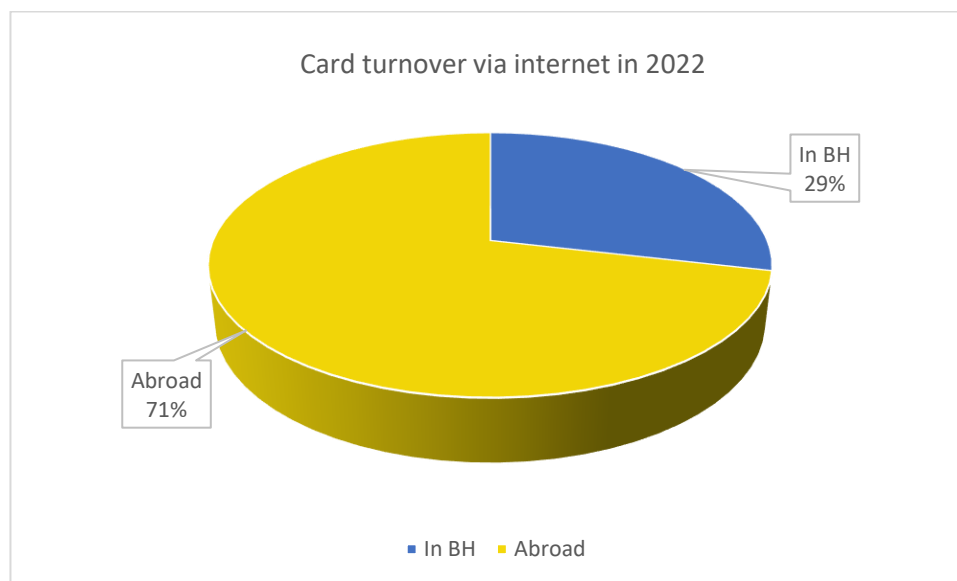


In 2022, the percentage of cash turned over on ATM and POS was 70%, and the value of goods and services was 30% of total card turnover, unlike in 2021, when the percentage of cash turned over on ATM and POS was 74%, and the value of goods and services was 26% of total card turnover.



In 2022, the percentage of card turnover via Internet in BH was 29%, and abroad 71% of total card turnover via internet, unlike in 2021 when the percentage of card turnover via Internet in BH was 35%, and abroad 65% of total card turnover via internet.

Card turnover via internet			
Year	In BH	Abroad	Total
2020	53.192.290	127.445.193	180.637.483
2021	93.145.912	171.893.287	265.039.199
2022	128.319.611	319.884.997	448.204.608

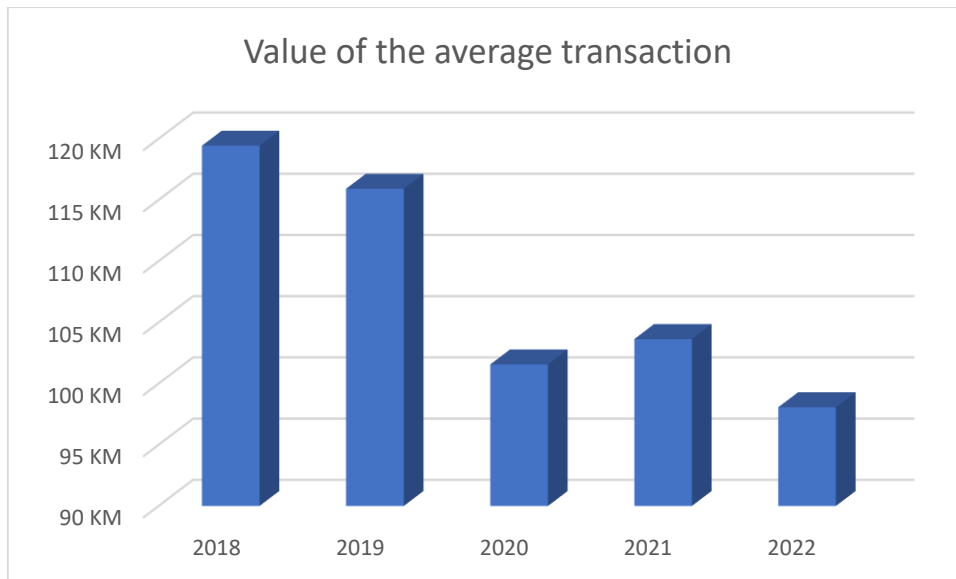


## 5 Number of transactions and value of the average card transaction

In 2022, the total number of transactions was 143.812.765 and it is higher compared to 2021, being 115.381.820. The average value of one transaction was KM 98 in 2022 and was lower by KM 6 compared to 2021.

Value of the average card transaction in past years					
	2018	2019	2020	2021	2022
Value of transactions	10.286.958.664	11.166.890.301	11.535.123.080	11.957.151.297	14.103.186.627
Number of transactions	86.134.742	96.338.688	113.574.237	115.381.820	143.812.765
Value of the average transaction	119 KM	116 KM	102 KM	104 KM	98 KM
Difference compared to the prior year	-2 KM	-3 KM	-14 KM	2 KM	-6 KM

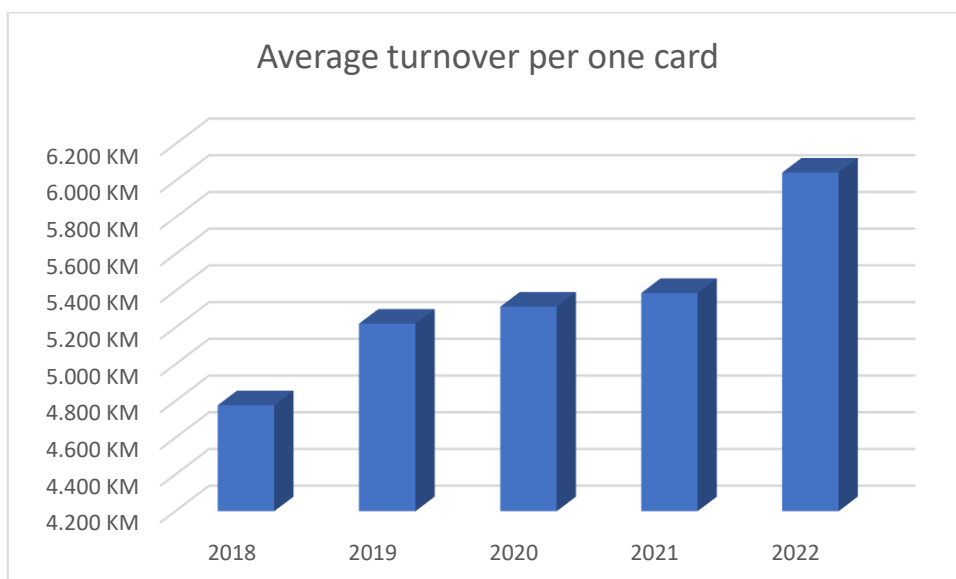




## 6 Average turnover per card

Average turnover per one card in 2022 was KM 6.045, compared to 2021, being lower and amounting to KM 5.389. Thus, the increase was recorded of KM 656.

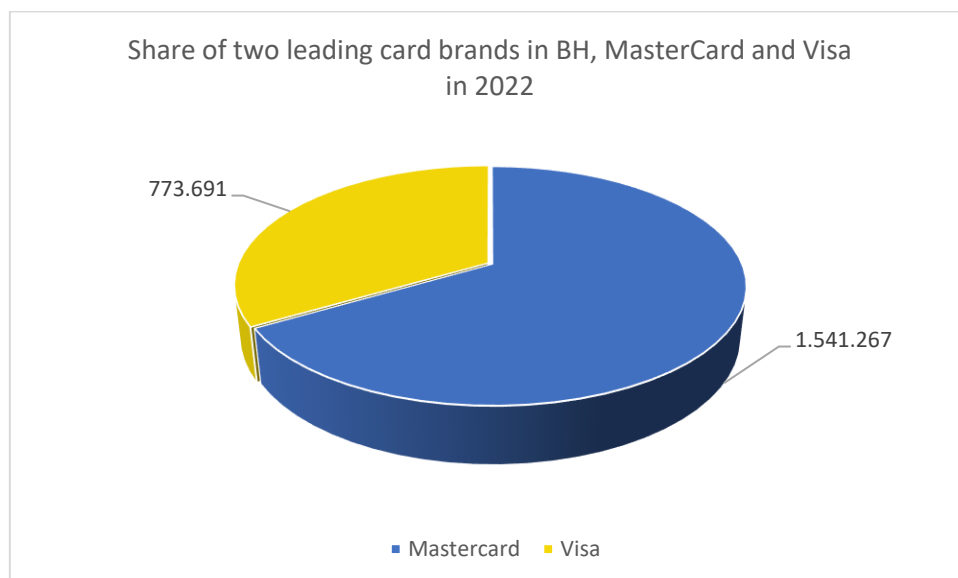
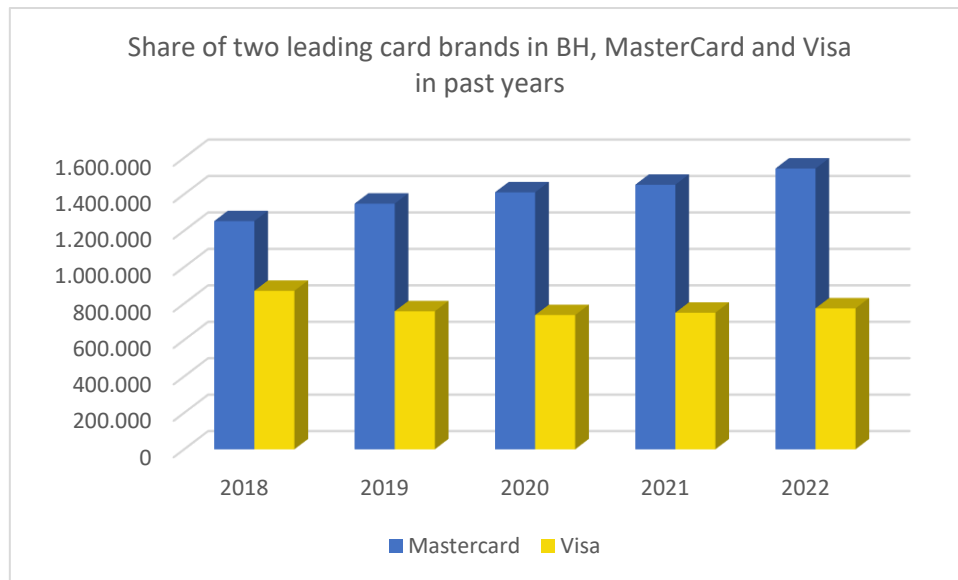
Average turnover per card in past years					
	2018	2019	2020	2021	2022
Number of cards	2.153.346	2.138.604	2.170.556	2.218.929	2.333.131
Average turnover per one card	4.777 KM	5.222 KM	5.314 KM	5.389 KM	6.045 KM
Difference compared to the prior year	34 KM	445 KM	92 KM	75 KM	656 KM



## 7 Share per brand

In BH, in reference to active cards, share per brand in the period from 2018 to 2022 was presented in the Table below:

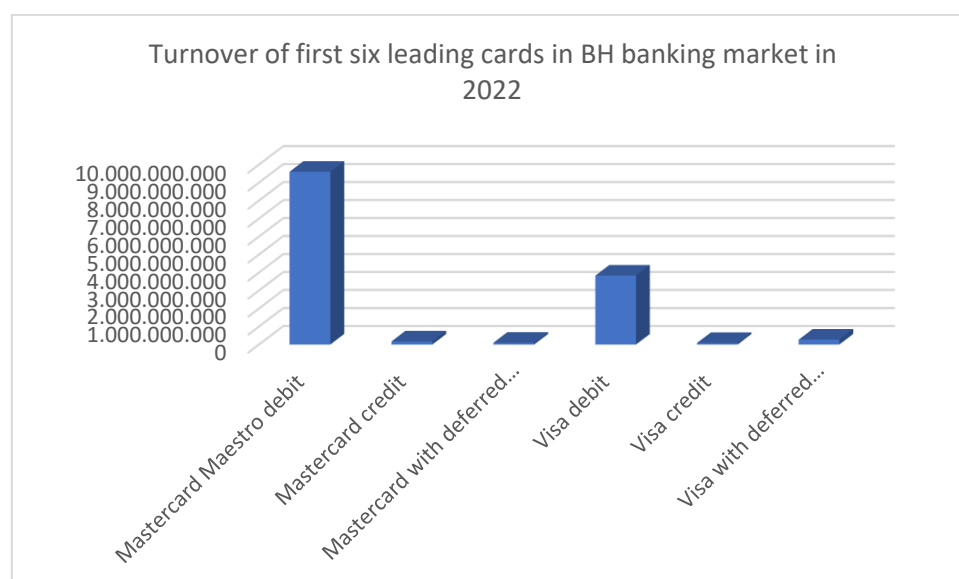
Share of cards in BH per brand						
Year	MasterCard	Visa	Diners	American	BamCard	Total
2018	1.252.486	870.018	13.350	7.123	10.369	2.153.346
2019	1.348.275	757.775	12.970	7.304	12.280	2.138.604
2020	1.410.718	736.947	6.324	6.901	9.666	2.170.556
2021	1.452.272	749.874	30	6.382	10.371	2.218.929
2022	1.541.267	773.691	1.299	5.984	10.890	2.333.131



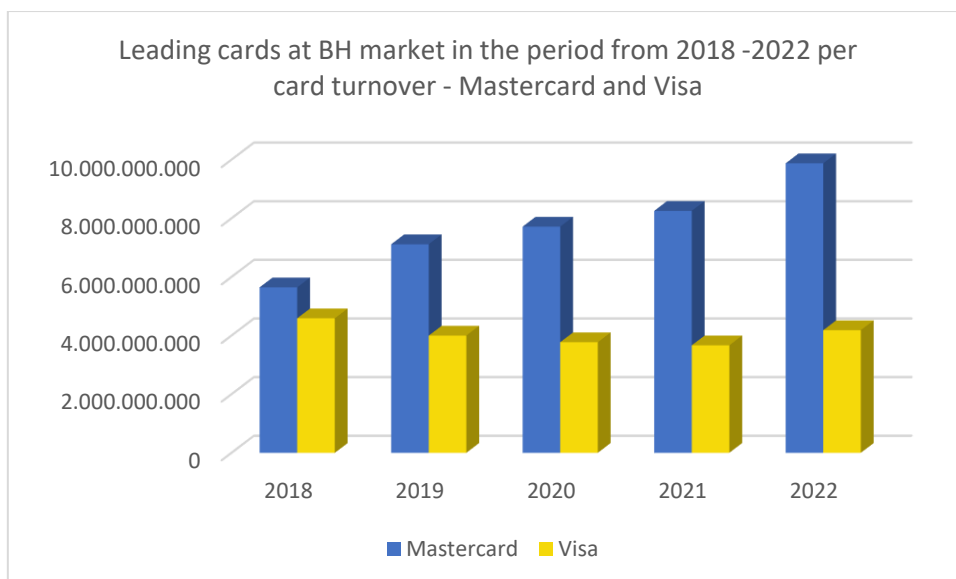
## 8 Leading brands in card operations per value of transactions

The highest turn-over in the past year was recorded by Maestro debit card with the turnover of KM 9.604.107.758, followed by Visa debit with the turnover of KM 3.828.458.079.

Turnover of first six leading cards in BH banking market in the period from 2018 to 2022						
	MasterCard Maestro debit	MasterCard credit	MasterCard with deferred payment	Visa debit	Visa credit	Visa with deferred payment
2018	5.423.054.267	140.742.500	80.676.156	4.182.851.733	100.862.576	304.928.133
2019	6.845.807.873	194.622.698	74.001.263	3.601.551.407	98.761.613	299.088.287
2020	7.499.312.977	127.874.232	89.012.602	3.431.551.015	84.894.231	256.697.902
2021	8.007.677.837	157.897.932	88.559.050	3.321.604.056	70.135.492	274.413.061
2022	9.604.107.758	173.587.993	99.537.612	3.828.458.079	85.581.743	270.474.836

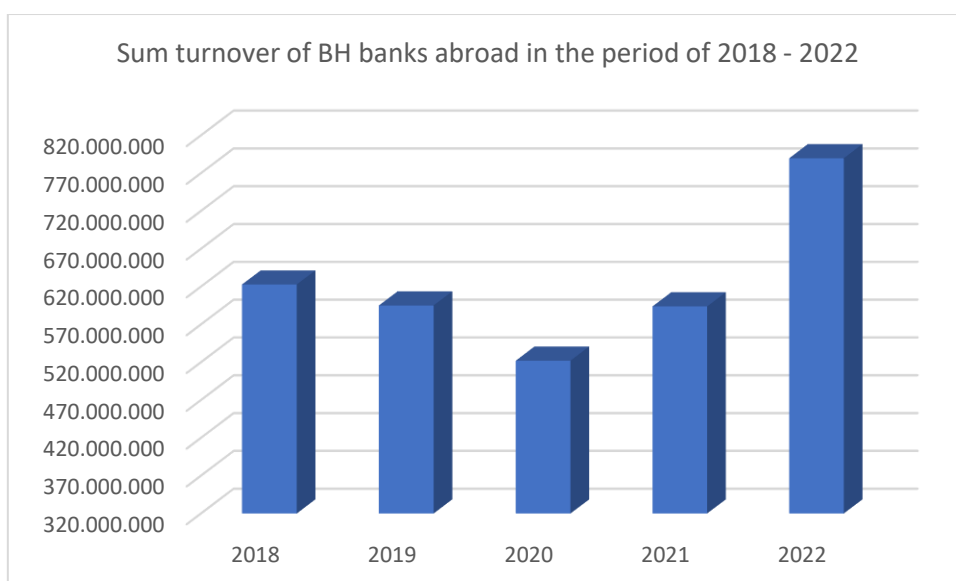


Leading cards at BH in the period from 2018 to 2022 per total card turnover in KM		
Year	MasterCard	Visa
2018	5.644.472.923	4.588.642.441
2019	7.114.431.834	3.999.401.306
2020	7.716.199.811	3.773.143.149
2021	8.254.134.819	3.666.152.609
2022	9.877.233.362	4.184.514.659

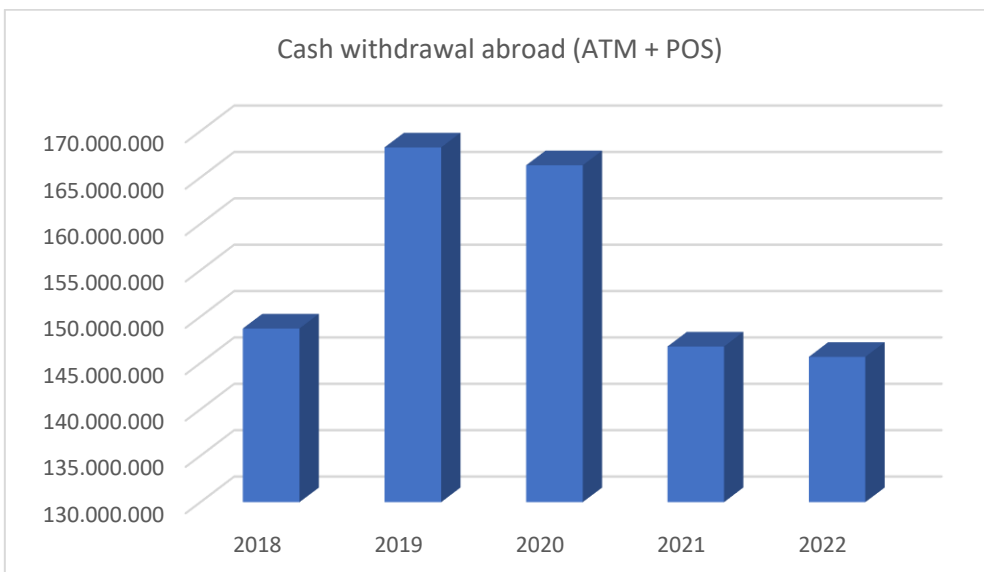
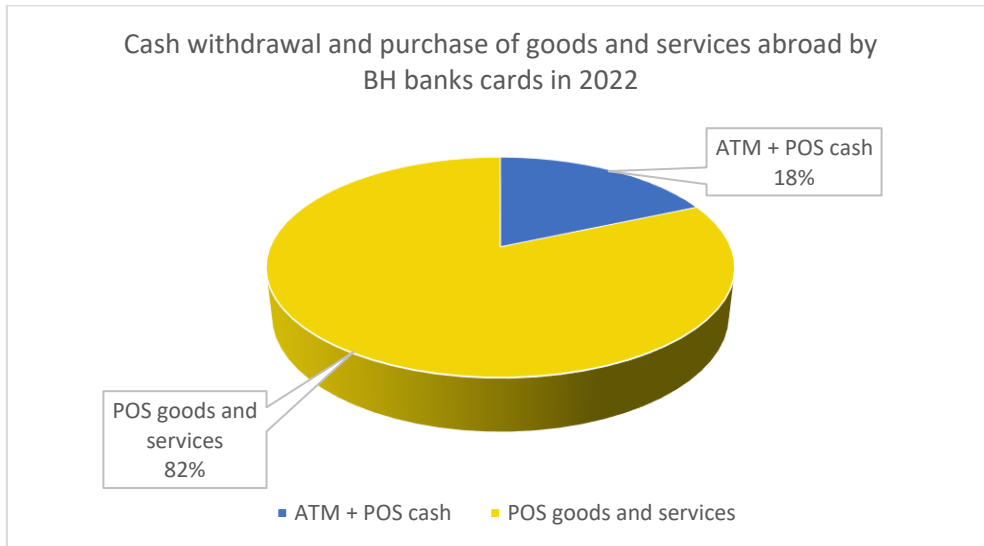


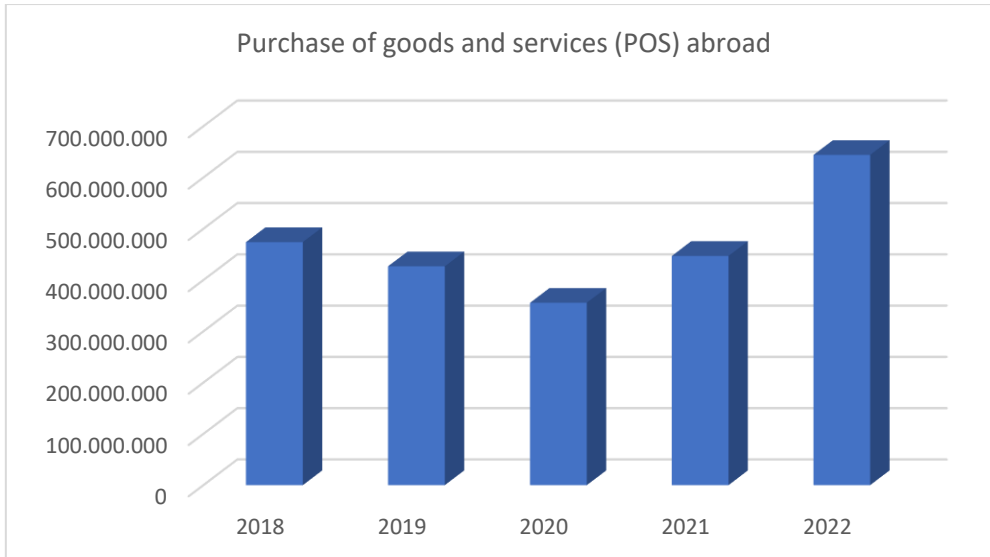
## 9 Operations of BH banks' cards abroad

Value of transitions carried out abroad by cards issued in BH banks per year (in KM)							
Year	POS cash	ATM	Cash withdrawal - ATM and POS of banks	%	Purchase of goods and services - POS	%	Total
2018	1.983.617	146.738.540	148.722.157	23,88%	474.027.695	76,12%	622.749.852
2019	2.975.777	165.271.808	168.247.586	28,27%	426.812.356	71,73%	595.059.942
2020	4.041.415	162.279.307	166.320.722	31,86%	355.723.272	68,14%	522.043.994
2021	3.398.472	143.387.033	146.785.505	24,72%	447.042.610	75,28%	593.828.115
2022	2.812.344	142.854.419	145.666.763	18,44%	644.075.385	81,56%	789.742.148



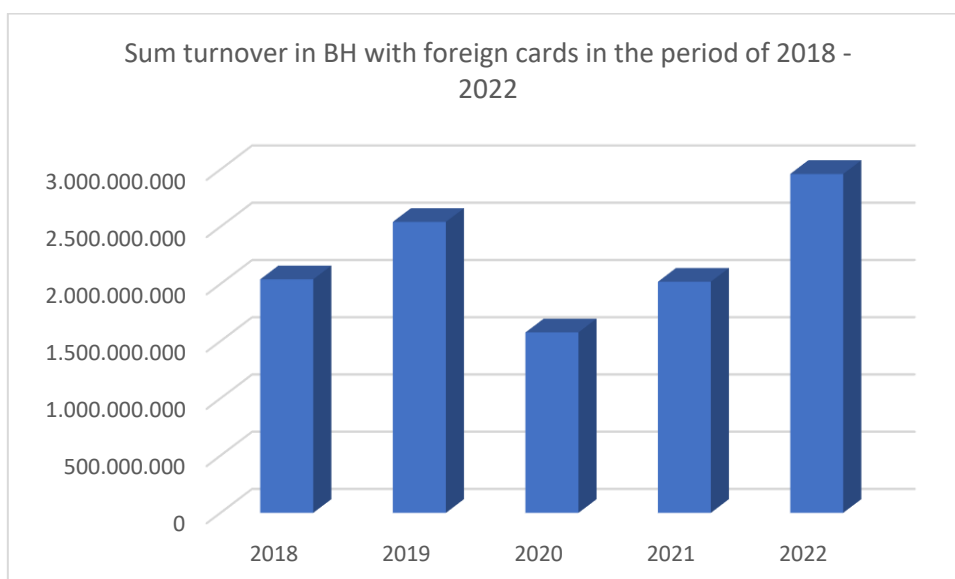
In 2022, via ATM and POS of banks abroad, owners of the cards issued in BH, performed the transactions in the value of KM 789.742.148, and during 2021: KM 593.828.115. Given the total sum, the total performed value of transactions is higher in 2022 than 2021 by KM 195.914.033. Out of this amount via ATM and POS there was withdrawn KM 145.666.763 cash (during 2021: KM 146.785.505). Goods and services were paid via POS in the amount of KM 644.075.385 (during: 2021: KM 447.042.610).



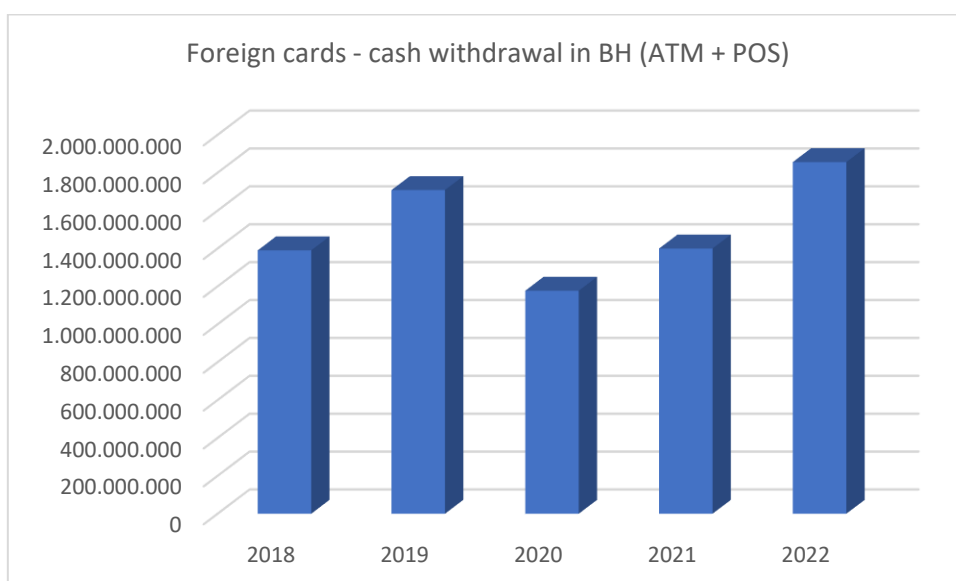
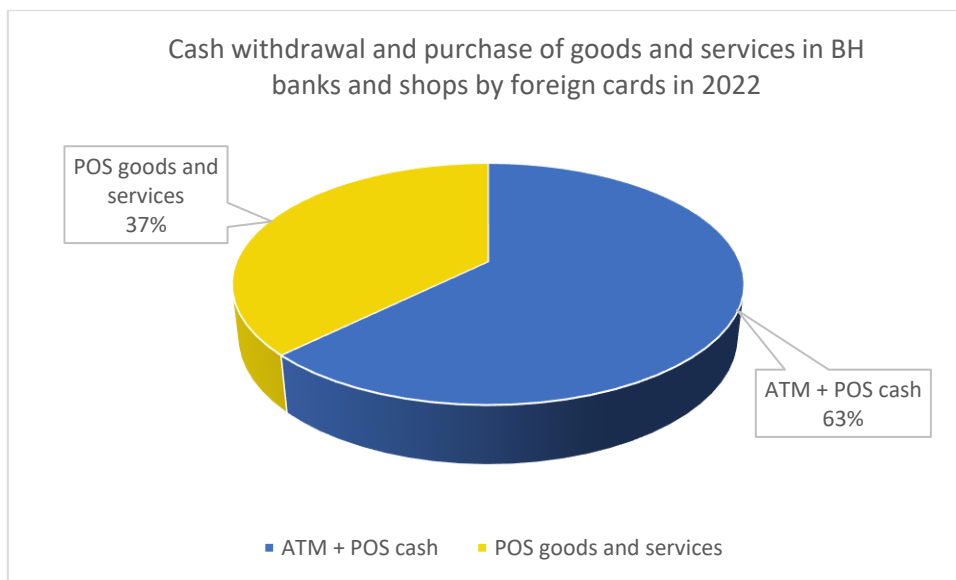


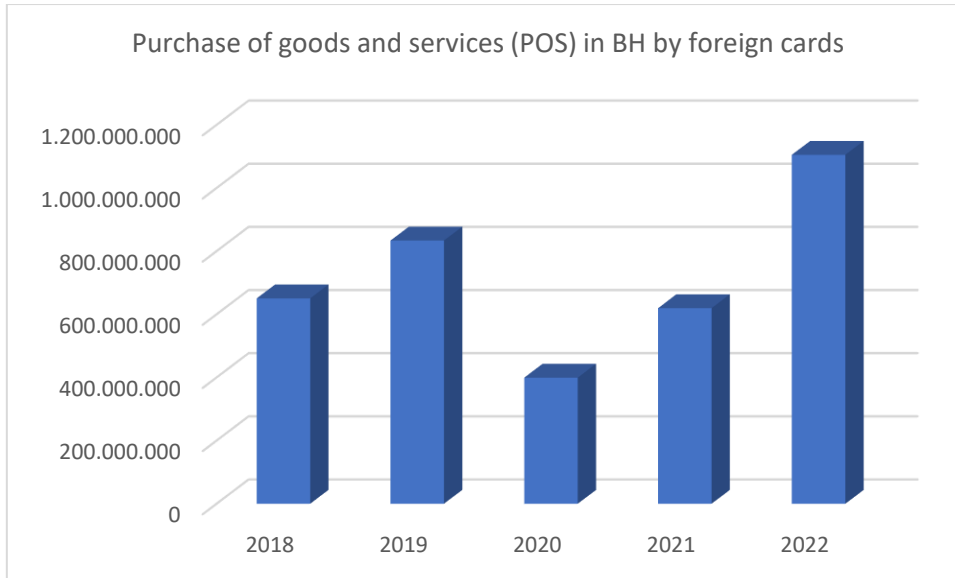
## 10 Operations of foreign cards in BH

Foreign cards transactions value in BH banks and shops per year (in KM)							
Year	POS cash	ATM	Cash withdrawal - ATM and POS of banks	%	Purchase of goods and services - POS	%	Total
2018	43.699.346	1.346.699.446	1.390.398.792	68,14%	650.248.273	31,86%	2.040.647.065
2019	59.669.825	1.648.828.037	1.708.497.862	67,21%	833.542.794	32,79%	2.542.040.656
2020	59.678.441	1.117.563.906	1.177.242.347	74,67%	399.316.410	25,33%	1.576.558.757
2021	39.277.265	1.360.672.289	1.399.949.554	69,33%	619.347.169	30,67%	2.019.296.723
2022	62.986.827	1.793.072.843	1.856.059.670	62,68%	1.105.074.657	37,32%	2.961.134.328



BH banks' ATM and POS transaction value of cards issued abroad was KM 2.961.134.328 in 2022 (during 2021: KM 2.019.296.723). Out of this amount, KM 1.856.059.670 were withdrawn via ATM and POS (during 2021: KM 1.399.949.554). Goods and services were paid via POS in the amount of KM 1.105.074.657 (2021: KM 619.347.169).

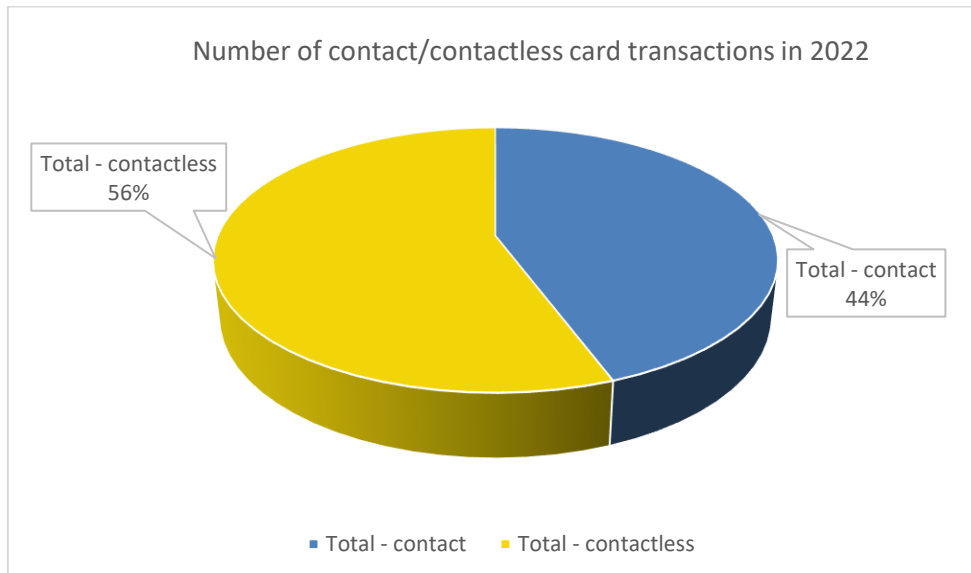




## 11 Usage of contact/contactless cards in BH

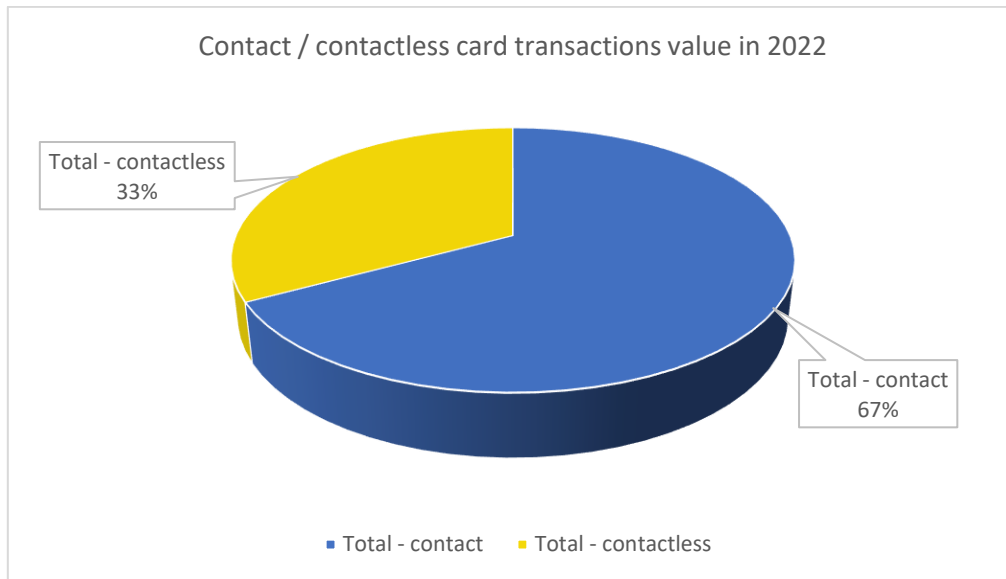
In percentage terms, in the total number of settled card transactions, 44% were contact transactions, as opposed to 56% contactless transactions.

Number of contact/contactless card transactions in 2022		
Total - contact	Total - contactless	Total
44%	56%	100%





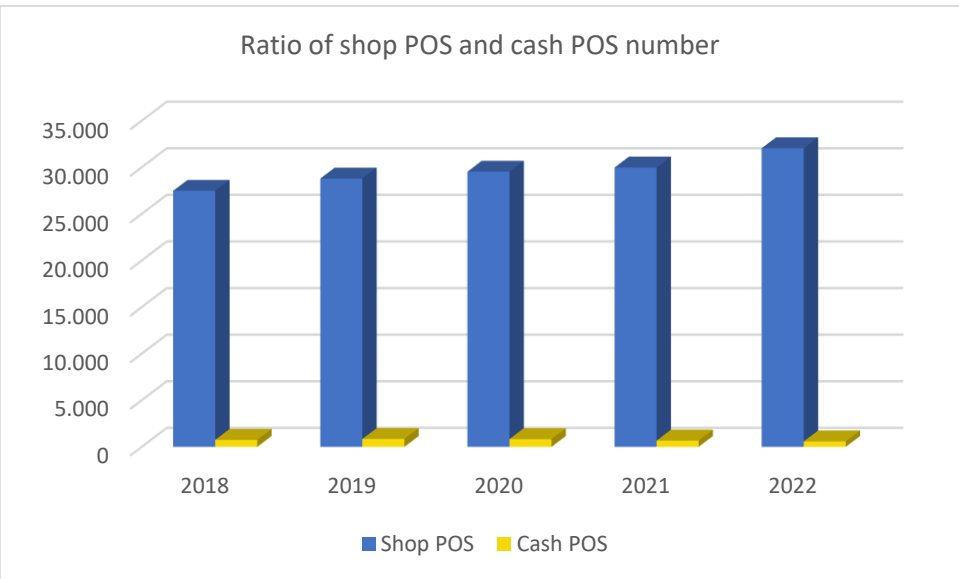
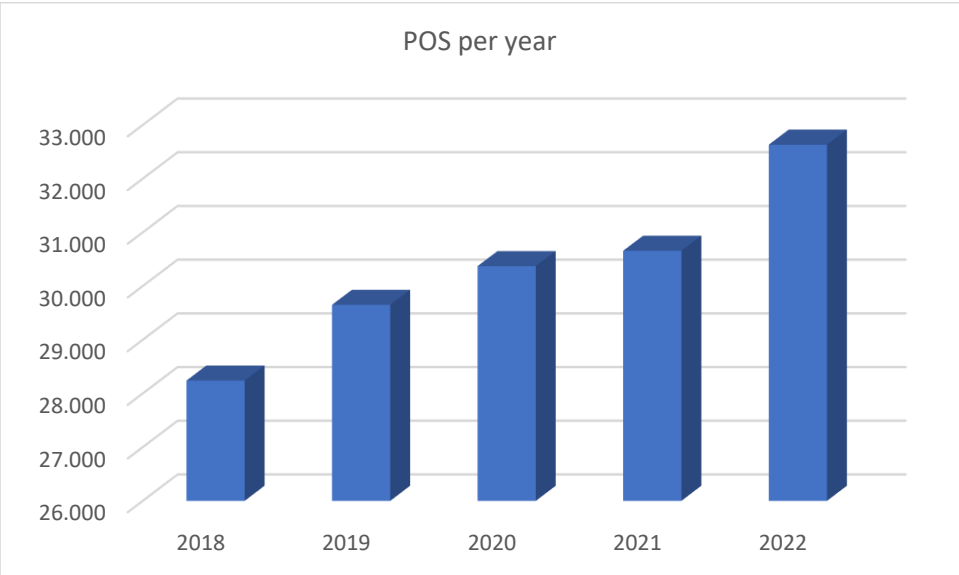
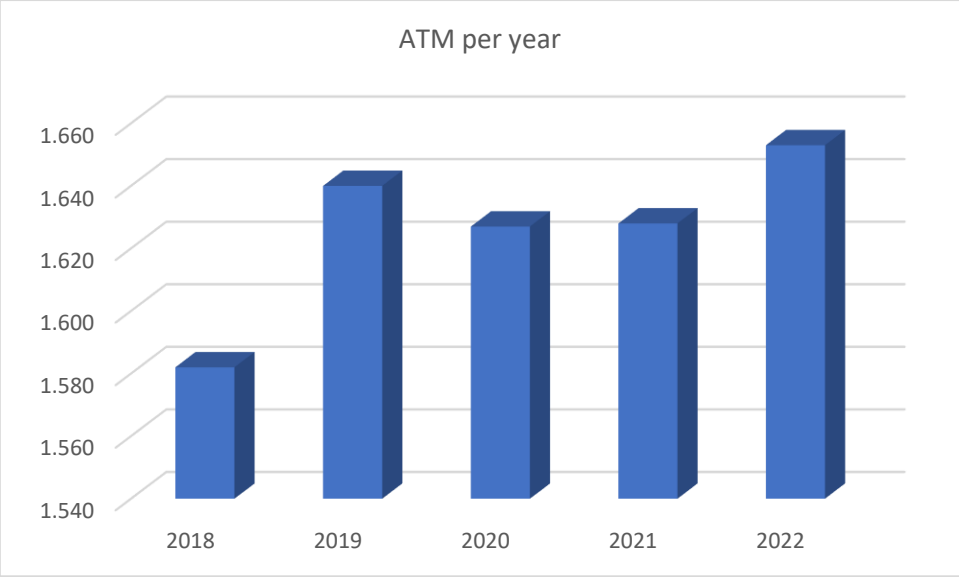
Contact/contactless card transactions value in 2022		
Total - contact	Total - contactless	Total
67%	33%	100%

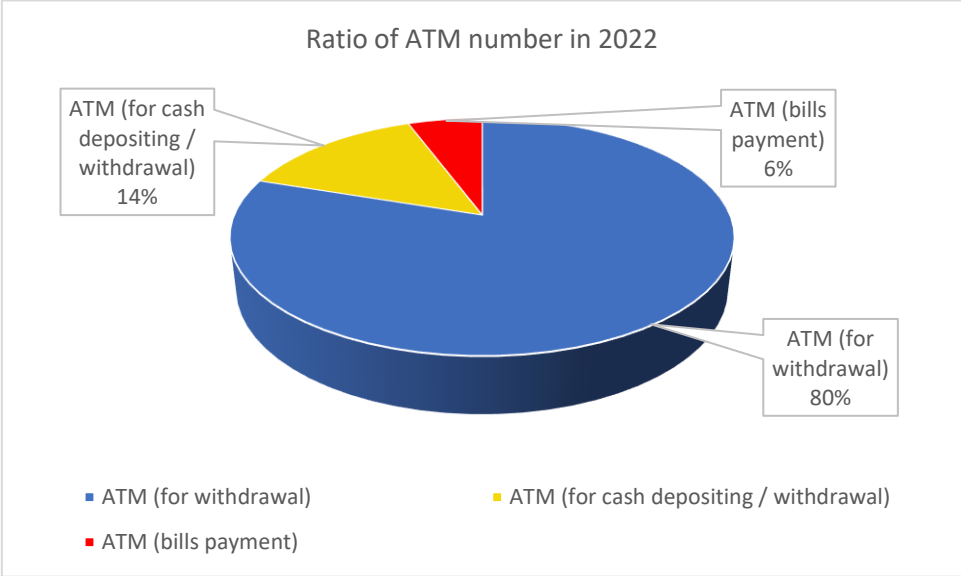
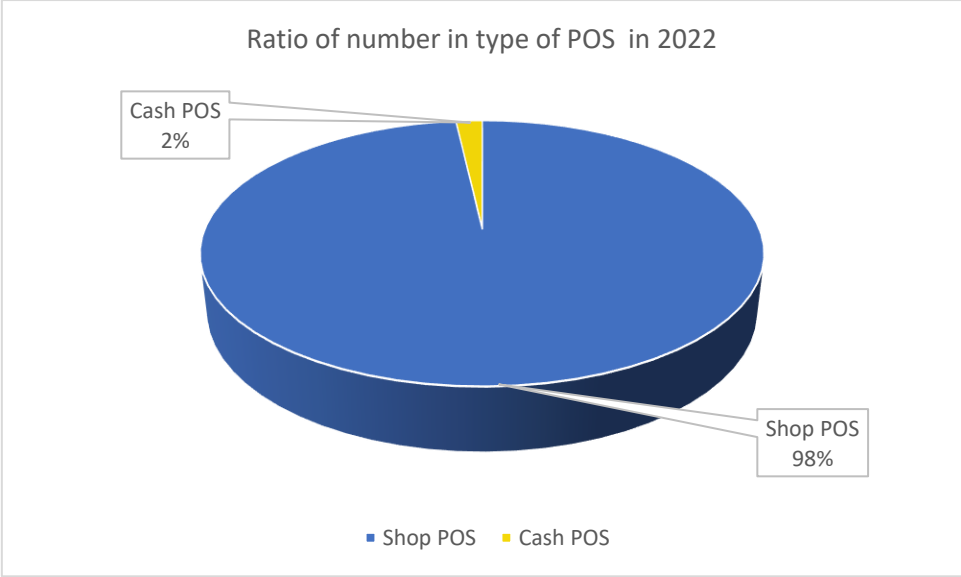


## 12 ATM and POS infrastructure

Banks continuously incorporate more and more ATM and/or POS infrastructure. During the last year there were 1.653 ATM installed in total (in 2021: 1.628) and 32.633 POS (in 2021: 30.657). Out of total number of installed POS, 32.047 are installed in shops and 586 on banks counters.

Number of installed ATM and POS in BH								
Year	ATM (for withdrawal)	ATM (for cash depositing/withdrawal)	ATM (bills payment)	Total ATM	Shop POS	Cash POS	Total POS	Total ATM and POS
2018	1.403	179		1.582	27.481	758	28.239	29.821
2019	1.430	177	33	1.640	28.796	854	29.650	31.290
2020	1.390	194	43	1.627	29.534	837	30.371	31.998
2021	1.334	230	64	1.628	29.977	680	30.657	32.285
2022	1.324	235	94	1.653	32.047	586	32.633	34.286





## 13 Card acceptance

The table below shows the number of banks that accept certain brands of cards on their ATM and POS as of 31.12.2022.

<b>Card brand</b>	<b>ATM</b>	<b>POS</b>
Mastercard Maestro debit	16	12
Mastercard credit	16	12
Mastercard with deferred payment	15	12
Visa debit	18	13
Visa credit	18	13
Visa with deferred payment	17	13
Diners credit	3	6
Diners with deferred payment	3	6
American credit	3	4
American with deferred payment	3	4
BamCard debit	5	1
BamCard credit	5	1
China UnionPay	2	1