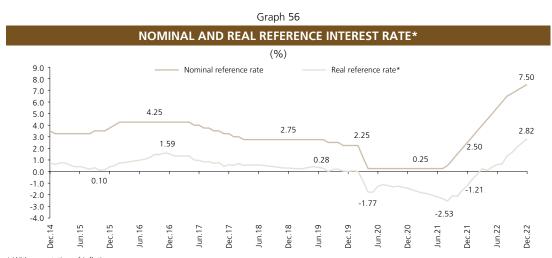
5 LIQUIDITY AND CREDIT

1. MONETARY POLICY

During 2022, the BCRP's Board of Directors decided to continue the adjustment of the monetary policy stance initiated in August 2021. Thus, the policy rate went from 0.25 percent in July 2021 (the lowest level since the implementation of the inflation targeting scheme) to 7.50 percent in December 2022. Between January and August, there were increases of 50 basis points each, while between September and December there were increases of 25 basis points each, with a total of 17 rate increases being recorded by December 2022. The real benchmark rate, for its part, stood at 2.82 percent in December 2022 (above the estimated neutral real rate of 1.50 percent), after reaching a historical low of -2.53 percent in August 2021.

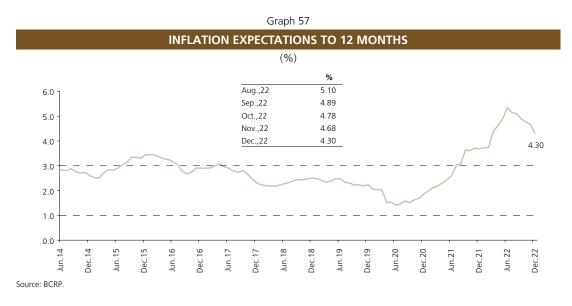
The Board sets the policy rate each month taking into account inflation forecasts and inflation determinants, such as the evolution of the output gap, changes in international prices, the exchange rate, supply factors, and the formation of inflation expectations by economic agents. Since 2021, the BCRP has made the necessary adjustments to its monetary policy stance to ensure that inflation expectations return to the target range within a reasonable timeframe, in a context of higher international food and energy prices, whose effect is accentuated by the international conflicts unleashed in early 2022. In the absence of a timely response, the central bank would have had to adopt a more restrictive monetary policy in order to regain credibility in controlling inflation. In such a scenario, the increases in the benchmark rate needed to control inflation would have been higher and, consequently, the potential impact on economic activity would have been greater.



^{*} With expectation of inflation. Source: BCRP.

The monetary policy decisions adopted between January and December 2022 were based on the following:

- i. The 12-month inflation rate increased from 6.43 percent in December 2021 to 8.45 percent in November 2022, while the 12-month inflation rate excluding food and energy prices increased from 3.24 percent in December 2021 to 5.71 percent in November 2022. Both indicators were above the inflation target range.
- ii. The significant increase in international energy and food prices since the second half of 2021, exacerbated by international conflicts, led to a sharp increase in global inflation rates at the global level, on a scale not seen for many years, and to levels well above the inflation targets of central banks in both advanced economies and the region.
- iii. The projection of a declining trend in year-on-year inflation with a return to the target range in the fourth quarter of 2023, taking into account the moderation of the impact of international food and energy prices and a reduction in inflation expectations.
- iv. Twelve-month inflation expectations increased from 3.68 percent in December 2021 to 4.68 percent in November 2022, above the inflation target range.
- v. Most leading indicators and expectations for the economy were in the pessimistic range during the year.
- vi. The outlook for global economic growth declined due to the effects of restrictive monetary policies in advanced economies, the impact of inflation on consumption, slower growth in China, and international conflicts.

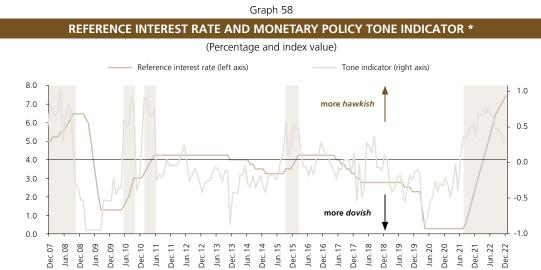


Regarding communication, the following points should be highlighted in the BCRP Board's monetary policy statements:

- The following sentence was retained, with some modifications: "The Board of Directors pays particular attention to new information on inflation and its determinants, including the evolution of inflation expectations and economic activity, in order to consider further changes in the monetary policy stance".
- The following statement was included until January and then withdrawn: "Based on the available information, it is considered advisable to continue with the normalization of monetary policy in the coming months".

- Until August, the phrase "to consider further changes in the monetary policy stance" was
 followed by "to ensure the return of inflation to the target range over the projection horizon".
 The latter phrase was deleted in September and replaced by the following wording: "The
 Board reaffirms its commitment to take the necessary actions to ensure that inflation returns
 to the target range over the projection horizon".
- Additionally, as of October, in connection with the increase in the benchmark rate, the expression "continuing with the normalization of the monetary policy stance" was replaced by "continuing with the adjustments in the monetary policy stance".
- Finally, as from April, the following sentence was deleted: "Financial markets have continued to show volatility in a context of uncertainty and the BCRP's actions have been aimed at mitigating such volatility".

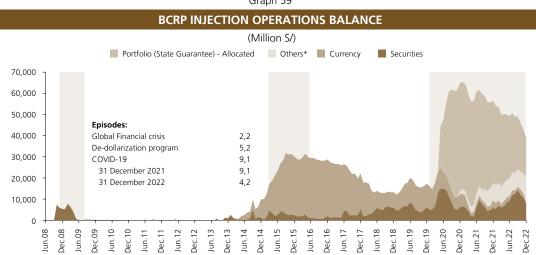
Regarding the tone of monetary policy, the tone indicator used by the BCRP in 2022 showed a stance in favor of the withdrawal of monetary stimulus throughout the period. Likewise, since May 2022, the indicator recorded a declining trend, although it remains in the positive range, which also shows that the monetary policy statement took a stance in favor of the withdrawal of monetary stimulus.



* For the monetary policy tone indicator, positive values of the index indicate a tone in favor of a contractionary position (hawkish), while negative values imply a communication with an expansionary position (dovish). The shaded areas correspond to periods of rising interest rates. Based on Vega and Lahura (2020)⁹.

The balance of liquidity injection operations in domestic currency decreased from S/ 56.7 billion at the end of 2021 to S/ 39.3 billion at December 31, 2022, mainly due to the amortization of credit portfolio repos backed by the government's Reactiva Perú program (S/ 20.1 billion). This balance of liquidity injection operations at the end of 2022 is equivalent to 4.2 percent of GDP, of which S/ 18.7 billion corresponds to the amount settled of government-backed credit portfolio repos. In comparative terms, the total balance of liquidity injection operations is 4.9 times higher than the maximum balance of these operations reached during the 2008-2009 international financial crisis (S/ 7.9 billion) and 1.2 times higher than the balance reached during the period of falling commodity prices (2013-2016) and the de-dollarization program (S/ 31.8 billion).

⁹ Vega, M. and E. Lahura (2020). Assessing central bank communication through monetary policy statements: Results for Colombia, Chile and Peru. Working Papers 2020-017, Banco Central de Reserva del Perú.



Graph 59

Table 60

	BCRP INJECTION OPERATIONS BALANCE								
			(Milli	on soles)					
Episode	Date	Securities	Currency (Regular)	Currency (Expansion)	Currency (Substitution)	Portfolio (General and alternative)	Others*	Total	
	Oct-08	7,383	300	0	0	0	0	7,683	
	Nov-08	5,959	30	0	0	0	0	5,989	
Financial crisis	Dec-08	5,412	0	0	0	0	0	5,412	
2008-2009	Jan-09	5,239	0	0	0	0	0	5,239	
	Feb-09	7,877	0	0	0	0	0	7,877	
	Mar-09	5,989	735	0	0	0	0	6,724	
	Dec-14	1,300	8,600	0	0	0	0	9,900	
	Mar-15	4,900	8,600	2,200	1,500	0	0	17,200	
De-dollarization	Jun-15	2,631	11,500	5,100	4,305	0	0	23,536	
program	Sep-15	3,034	16,050	7,900	4,805	0	0	31,789	
	Dec-15	2,500	14,900	7,900	4,805	0	0	30,105	
	Feb-20	5,100	9,650	0	0	0	0	14,750	
	Mar-20	6,675	11,150	0	0	0	0	17,825	
	Apr-20	13,015	10,030	0	0	0	250	23,295	
	May-20	15,060	10,145	0	0	19,017	260	44,482	
	Jun-20	14,947	8,095	0	0	24,338	260	47,640	
	Sep-20	8,604	5,895	0	0	47,002	304	61,805	
	Dec-20	6,309	5,970	0	0	50,729	1,785	64,793	
	Jan-21	6,554	6,030	0	0	50,497	2,258	65,339	
COVID-19 crisis	Mar-21	4,454	2,430	0	0	49,907	2,812	59,603	
	Jun-21	6,476	1,922	0	0	47,968	4,408	60,774	
	Sep-21	6,470	1,842	0	0	43,770	6,590	58,672	
	Dec-21	5,963	3,342	0	0	38,827	8,519	56,651	
	Mar-22	5,962	1,522	0	0	33,910	8,503	49,897	
	Jun-22	9,362	2,077	0	0	29,418	8,461	49,318	
	Sep-22	14,258	1,577	0	0	24,728	8,446	49,009	
	Dec-22	7,803	1,112	0	0	18,721	11,653	39,289	

^{*} The item "Other" includes the purchase of Public Treasury bonds, in line with article 61 of the Organic Law of the BCRP, and Repo operations of loan portfolio.

Source: BCRP.

^{*} The item "Other" includes the purchase of Public Treasury bonds, in line with article 61 of the Organic Law of the BCRP, and Repo operations of loan portfolio.

Source: BCRP.

The maximum balance of injection operations was recorded in January 2021. Since then, it has been decreasing, as the amortizations of the Reactiva Perú program imply a decrease in the balance of credit repos guaranteed by the national government. This dynamic has been partially offset by other programs such as credit rescheduling repos and long-term credit expansion repos, in addition to purchases of Treasury bonds. On the other hand, credit rescheduling under Reactiva Perú served to extend the maturity of the injection operations.

Table 61

LIQUIDITY INJECTION PROGRAMS								
(Billion soles)								
Program	Dec.19	Dec.20	Dec.21	Jun.22	Sep.22	Dec.22		
Government-guaranteed credit repos	0	50.7	38.8	29.4	24.7	18.7		
of which: balance of repos for rescheduling	0	0	14.3	15.3	15.3	10.1		
Credit rescheduling repos	0	0.5	4.8	4.7	4.7	4.7		
Long-term credit expansion repos	0	0	5.5	5.5	5.5	5.4		
Purchase of Public Treasury Bonds*	0	1.3	2.1	2.1	2.1	5.3		
Rest**	17.4	12.2	5.4	7.6	12.0	5.2		
Total	17.4	64.8	56.7	49.3	49.0	39.3		

^{*} At acquisition value.

On October 31, 2022, the BCRP announced that between November and December of the same year, it could purchase Treasury bonds (BTPs) with maturities up to 2040. These operations form part of the range of instruments available to the BCRP to inject liquidity into the financial system on a permanent basis. In circumstances where they are deemed necessary, they are carried out in a precautionary manner and are specifically aimed at an adequate regulation of the liquidity of the financial system. Thus, in 2022 auctions of BTPs with maturities between 2028 and 2037 were called for a total settled value of S/ 3,235 million. This value, added to the purchases made in 2020 and 2021, implies a settled balance of BTP purchases by the BCRP of S/ 5,313 million at the end of 2022.

It should be noted that Article 61 of the Organic Law of the BCRP establishes that the issuing entity is authorized to purchase in the secondary market securities issued by the Treasury, provided that the annual increase in the holdings of such securities, valued at their acquisition price, does not exceed 5 percent of the balance of the monetary base at the end of the previous year.

Table 62

	PURCHASES OF PUBLIC TREASURY BONDS								
		(Million soles)							
Bond	Maturity Date	Nominal Amount	Acquisition Amount	N° Operations					
BTP 2028	12-Aug-28	426	417	12					
BTP 2029	12-Aug-29	520	493	11					
BTP 2031	12-Aug-31	547	535	10					
BTP 2032	12-Aug-32	692	628	9					
BTP 2034	12-Aug-34	563	466	10					
BTP 2037	12-Aug-37	750	696	10					
TOTAL 2022	_	3,499	3,235	62					

The following domestic currency reserve requirements were approved during 2022:

Circular No. 003-2022-BCRP of January 20, 2022

Source: BCRP.

This circular approved the increase of the minimum legal reserve requirement to 5.25 percent in February, 5.5 percent in March, 5.75 percent in April, and 6.0 percent as from May 2022.

^{**} Regular repos such as securities repos and currency repos. Source: BCRP.

Thus, after a period of increased reserve requirements aimed at strengthening the BCRP's monetary control in a context of gradual withdrawal of monetary stimulus, a 6 percent minimum legal reserve rate was in effect as of May 2022.

Circular No. 025-2022-BCRP of November 2, 2022

This circular raised the limits for additional reserve requirements in domestic currency associated with the sale of derivative instruments (forwards and swaps). It was specified that the reserve requirement ratio would be increased when: (i) the weekly operations of sales of foreign exchange derivatives exceed US\$ 770 million; (ii) the balance of sales of foreign exchange derivatives exceeds the greater of the limit in effect in September 2022, 140 percent of the average daily balance of foreign exchange derivatives as of September 2022, or US\$ 1,335 million. In both cases, the rate increase is equal to twice the excess as a percentage of the total obligations subject to reserve requirements.

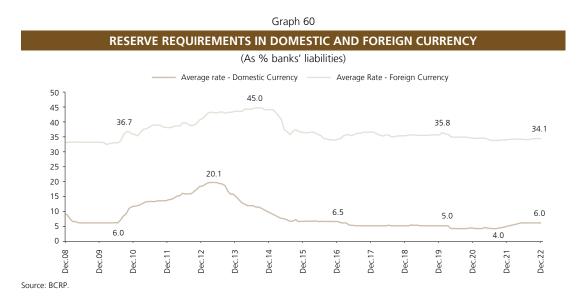


Table 63

RESERVE REQUIREMENTS IN DOMESTIC CURRENCY (%)										
Reserve requirement rate	Aug.21	Sep.21	Oct.21	Nov.21	Dec.21	Jan.22	Feb.22	Mar.22	Apr.22	May.22
Minimum reserve requirement rate in soles	4.00%	4.00%	4.00%	4.50%	4.75%	5.00%	5.25%	5.50%	5.75%	6.00%
Minimum reserve requirement rate for the current level in soles	0.75%	0.75%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Marginal reserve requirement rate in soles	-	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
Minimum average reserve requirement rate in soles	4.00%	4.00%	4.25%	-	-	-	-	-	-	-
Maximum average reserve requirement rate of the general regime	-	-	-	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%

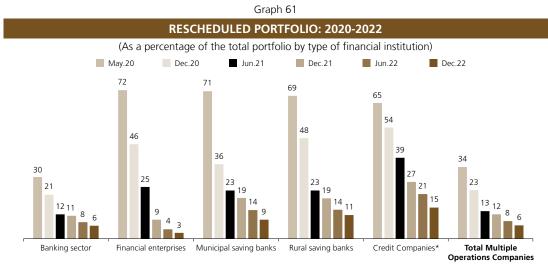
Source: BCRP.

In addition, on January 21, 2022, an information note was published on the reserve requirement remuneration rates that would apply as from the February 2022 reserve requirement period. In the case of domestic currency, the current provision was maintained, according to which the reserve funds corresponding to the additional reserve requirement, as long as they are deposited with the

BCRP and, if applicable, are remunerated at the higher of zero percent and the interest rate on overnight deposits in soles minus 195 basis points.

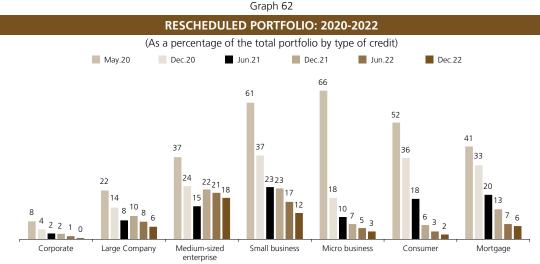
In the case of foreign currency, it was determined that reserve funds for the additional reserves, if deposited with the BCRP, will earn interest, if any, at the higher of: (i) 25 percent of: the 1-month Chicago Mercantile Exchange (CME) Term Secured Overnight Financing Rate (SOFR) minus 10 basis points, and (ii) the 1-month CME Term SOFR minus 50 basis points. In no event shall this fee be negative. Previously, since April 2020, these funds bore interest at the greater of zero percent and 25 percent of the difference between the 1-month London Interbank Offered Rate (LIBOR) minus 1/8 of one percent.

In addition to the rescheduling of loans carried out under the regulations of the Superintendency of Banks and Insurance (SBS) during the state of emergency, rescheduling was recorded for credit support programs with government guarantees, such as Reactiva Perú and FAE MYPE, and also within the framework of government guarantees for rescheduling, such as the COVID-19 Guarantee Program. The rescheduling of loans carried out under the Reactiva Perú program stand out among these reprogrammings.



* Legislative Decree No. 1531 (03/19/2022) introduced the "Credit Company" as a new type of company with multiple operations. As of its validity, any reference to EDPYME must be understood as referring to the Credit Company.

Source: SBS.



Source: SBS.

2. INTEREST RATES

During 2022, the evolution of the interbank rate closely followed that of the monetary policy benchmark rate, which recorded an increase of 5.0 percentage points. As a result, interest rates in soles in the lending and deposit markets increased sharply during the year. Deposit rates increased on average between 2.8 and 4.0 percentage points, depending on the agreed maturity. Interest rates on loans increased between 3.0 and 7.5 percent, depending on the type of loan. Mortgage rates, on the other hand, were relatively more stable, increasing by only 3.0 percentage points, as their evolution is more closely linked to long-term rates, such as those of government bonds. Similarly, the prime rate for corporate customers increased by 5.9 points. Rates on operations in dollars increased as international interest rates rose.

Table 64

INTEREST	RATES ON OPE	RATIONS I	N SOLES	
	(%)			
	2020	2021	2022	% change 2022/2021
Interbank rate	0.2	2.3	7.5	5.2
Deposits up to 30 days 1/	0.2	0.7	3.7	3.0
31-day to 60-day term deposits 1/	0.5	0.8	3.7	2.8
61-day to 180-day term deposits 1/	0.5	0.9	4.8	3.8
181-day to 360-day term deposits 1/	1.3	2.9	6.9	4.0
More than 360-day term deposits 1/	2.0	3.1	5.9	2.8
90-day corporate prime rate	0.6	2.9	8.7	5.9
Loans to large companies	4.6	5.7	10.6	5.0
Loans to medium-sized enterprises	6.1	8.8	14.1	5.4
Loan to small businesses 3/	17.2	19.3	22.5	3.2
Loan to microbusinesses 3/	22.6	37.2	39.3	2.1
Consumer loans	41.5	40.4	47.7	7.3
Mortgage loans	6.4	6.9	9.9	3.0
FTAMN 2/	17.4	20.8	28.3	7.5

^{1/} Interest rates on deposits correspond to individuals.

Source: BCRP.

Table 65

(%)								
	2020	2021	2022	Change 2022/2021				
3-month Libor rate	0.4	1.2	3.8	2.5				
Interbank rate	0.3	0.3	4.2	4.0				
Deposits up to 30 days 1/	0.0	0.1	1.1	1.0				
31-day to 60-day term deposits 1/	0.2	0.2	1.7	1.5				
61-day to 180-day term deposits 1/	0.2	0.3	2.1	1.8				
181-day to 360-day term deposits 1/	0.3	0.4	3.2	2.8				
More than 360-day term deposits 1/	0.5	0.8	2.9	2.2				
90-day corporate prime rate	1.1	1.0	5.5	4.5				
Loans to large companies	4.5	4.3	7.8	3.5				
Loans to medium-sized enterprises	5.9	5.9	8.8	2.9				
Loan to small businesses	5.3	10.3	12.2	1.9				
Loan to microbusinesses	8.5	7.4	12.7	5.3				
Consumer loans	35.1	33.4	41.0	7.6				
Mortgage loans	5.4	5.0	8.3	3.3				
FTAMEX 2/	6.6	8.0	11.4	3.4				

^{1/} Interest rates on deposits correspond to individuals.

Source: BCRP.

^{2/} Average market lending rate of the operations carried out in the last 30 business days.

^{3/} Correspond to the average interest rates of the financial system.

^{2/} Average market lending rate of the operations carried out in the last 30 business days.

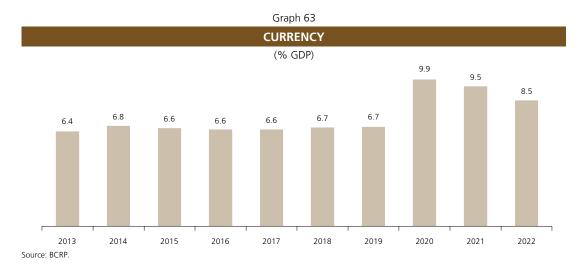
3. MONETARY AND CREDIT AGGREGATES

In 2022, credit to the private sector grew by 4.6 percent and deposits by 1.5 percent. Taking into account the amortization of the Reactiva program loans, a contraction of 1.4 percent per year was recorded in loans to the corporate sector (excluding this effect, credit growth to the corporate sector would have been 8.4 percent). In particular, there was a 13.7 percent annual decline in credit to the SME sector (excluding the effect of Reactiva loans, this segment would have recorded a growth rate of 3.3 percent).

In 2022 the growth of credit in foreign currency was higher than the growth of credit in domestic currency (12.1 percent versus 2.5 percent). As a result, the dollarization ratio of credit increased from 21.8 percent in December 2021 to 23.4 percent in December 2022.

3.1 CURRENCY IN CIRCULATION

Currency in the hands of the public amounted to S/79.89 billion in December 2022. This amount, which represents 8.5 percent of GDP, also reflects a decrease of 3.8 percent compared to December 2021, approaching the levels recorded before the COVID-19 pandemic.



3.2 LIQUIDITY

During 2022, private sector liquidity recorded a growth rate of 1.0 percent. As a percentage of GDP, the value of this aggregate decreased from 50.9 percent in 2021 to 47.5 percent in 2022, also approaching the levels recorded before the pandemic.

By type of liability, the most liquid components had negative variation rates, while the value reserve components had positive rates. Thus, currency held by the public fell by 3.8 percent, demand deposits by 9.5 percent, and savings deposits by 7.1 percent. On the other hand, time deposits, excluding CTS deposits, grew by a remarkable 32.8 percent. This can be explained as a consequence of the withdrawals made by the AFPs' members in accordance with Law No. 31478, which authorizes the extraordinary withdrawal of up to four tax units from the total of their accumulated funds in their individual capitalization accounts.

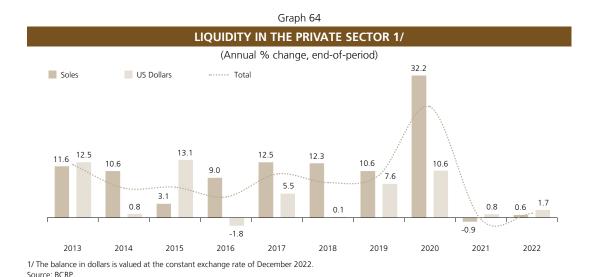
On the other hand, a law was passed in May 2021 allowing the withdrawal of 100 percent of the CTS (Law No. 31171). As a result of this law, which was in force until December 2021, total withdrawals were estimated at S/12,539 million. A similar law was approved in May 2022 (in force since June, Law

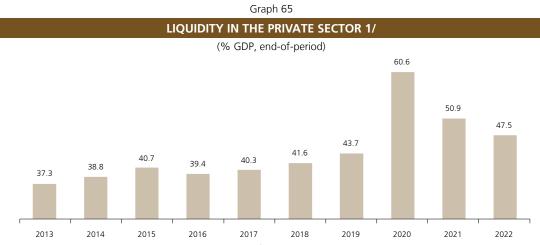
No. 31480) that allows withdrawals until December 2023. Therefore, withdrawals associated with this law are estimated at S/3,993 million during 2022.

In terms of currencies, liquidity increased in both domestic currency (0.6 percent) and foreign currency (1.7 percent), although the growth was higher in the latter segment.

By type of depositor, individuals and non-profit legal entities increased their deposits by 5.4 percent during the year. The increase was stronger in the case of dollar deposits (10.3 percent per year) than in soles (3.1 percent per year). Corporations, on the other hand, decreased their deposits by 3.1 percent, the reduction being stronger in dollars (-6.9 percent) than in soles (-0.4 percent). A fact worth noting is that individuals increased their term deposits by 55.5 percent during the year: term deposits in soles increased by 47.3 percent and term deposits in dollars increased by 92.6 percent. These figures do not include CTS accounts.

The liquidity dollarization ratio at constant exchange rates rose slightly by 0.2 percentage points year-on-year, from 29.4 percent in December 2021 to 29.6 percent in December 2022. In contrast, deposit dollarization decreased from 35.7 percent to 35.6 percent in the same period, also at constant exchange rates. Individual deposit dollarization increased from 31.0 percent to 32.5 percent, but corporate dollarization decreased from 41.3 percent to 39.7 percent.





 $1/\operatorname{The}$ balance in dollars is valued at the average exchange rate at the end of period Source: BCRP.

Table 66

	E	Balance in million s	oles	Growth r	ates (%)
	2020	2021	2022	2021	2022
Currency Money	71,576 143,100	83,058 144,621	79,890 136,968	16.0 1.1	-3.8 -5.3
Deposits 1/	364,358	350,754	356,185	-3.7	1.5
In Soles	239,122	225,658	229,456	-5.6	1.7
Demand deposits	71,524	61,563	57,078	-13.9	-7.3
Savings deposits	95,720	106,469	95,310	11.2	-10.5
Terms deposits Term deposits without cou	71,877 Inting	57,626	77,068	-19.8	33.7
Compensation for Time of S	ervice (CTS) 54,403	48,346	68,576	-11.1	41.8
CTS	17,475	9,280	8,492	-46.9	-8.5
In dollars (Million US\$)	32,870	32,834	33,262	-0.1	1.3
Demand deposits	13,078	13,523	11,887	3.4	-12.1
Savings deposits	10,799	12,035	12,134	11.4	0.8
Terms deposits Term deposits without cou	8,994 Inting	7,275	9,241	-19.1	27.0
Compensation for Time of S	Service (CTS) 7,620	6,536	8,564	-14.2	31.0
CTS	1,373	740	677	-46.1	-8.4
Liquidity 1/	442,837	441,091	445,306	-0.4	1.0
In soles	314,229	311,451	313,409	-0.9	0.6
In dollars (Million US\$)	33,755	34,026	34,619	0.8	1.7

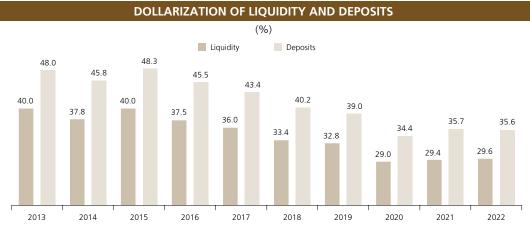
^{1/} The balance in dollars is valued at the exchange rate of December 2022. Source: BCRP.

Table 67

	E	Growth rates (%)			
	2020	2021	2022	2021	2022
Individuals 2/	195,384	192,544	202,866	-1.5	5.4
In soles	134,316	132,880	137,028	-1.1	3.1
In US Dollars (Million US\$)	16,028	15,660	17,280	-2.3	10.3
Legal entitites	168,973	158,210	153,319	-6.4	-3.1
In soles	104,806	92,778	92,428	-11.5	-0.4
In US Dollars (Million US\$)	16,842	17,174	15,982	2.0	-6.9
Total	364,358	350,754	356,185	-3.7	1.5
In soles	239,122	225,658	229,456	-5.6	1.7
In US Dollars (Million US\$)	32,870	32,834	33,262	-0.1	1.3

^{1/} The balance in dollars is valued at the constant exchange rate of December 2022.

Graph 66

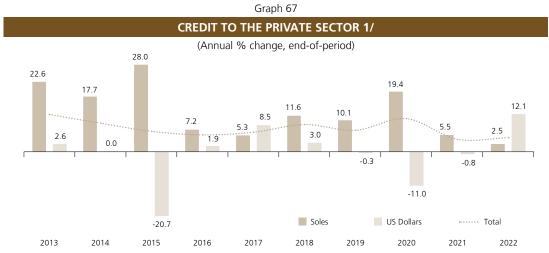


^{1/} Balances in dollars are valued at the exchange rate of December 2022.

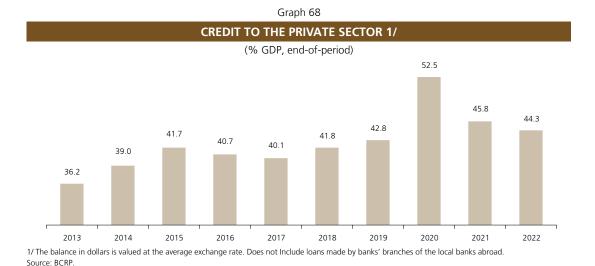
^{2/} Includes non-profit legal persons. Source: BCRP.

3.3 CREDIT TO THE PRIVATE SECTOR

The growth rate of total credit to the private sector increased from 4.0 percent per year in 2021 to 4.6 percent per year in 2022. As a percentage of GDP, credit to the private sector accounted for 44.3 percent, down from 45.8 percent a year earlier. Non-performing loans increased from 3.8 percent to 4.0 percent, which is the level recorded at the end of 2020. Credit without the loans granted under the Reactiva program grew by 11.3 percent per year (8.8 percent per year in 2021).



1/ The balance in dollars is valued at the exchange rate of December 2022. Does not Include loans made by banks' branches of the local banks abroad Source: BCRP.



The credit impulse came mainly from the consumer segments, mostly as a result of a recovery in employment and an increase in new credit. Because of the pandemic, the number of consumer loans fell from 9,590 thousand in 2019 to 8,138 thousand in 2021, recovering thereafter to 9,182 thousand in 2022. The number of loans is still 4.3 percent below the pre-pandemic level.

By credit segment, credit to the corporate segment reduced its variation rate from 3.6 percent in 2021 to -1.4 percent in 2022, due to lower growth in corporate credit and a decline in medium enterprise credit. On the other hand, loans to small and micro enterprises (SME) expanded by 7.7 percent. Loans to companies, excluding Reactiva, grew 8.4 percent per annum in 2022, less than in 2021 (11.5 percent).

Loans to households grew 15.9 percent over the year, led by the consumer segment, which grew 21.8 percent (3.1 percent in 2021). Within this segment, credit card loans were the fastest growing with an annual increase of 32.6 percent (-41.0 percent in 2021). Vehicle loans also showed strong momentum (15.9 percent growth versus 7.3 percent in the previous year).

It is worth noting that the expansion of consumer credit was accompanied by a deterioration in nonperforming loans, which rose from 2.2 percent in 2021 to 2.5 percent in 2022, in contrast to 2021, when nonperforming loans declined by 3.7 percentage points.

Table 68

TOTA	TOTAL CREDIT TO THE PRIVATE SECTOR 1/							
	E	Balance in million s	Growth rates (%)					
	2020	2021	2022	2021	2022			
Businesses	251,448	260,624	257,078	3.6	-1.4			
Corporate and large companies	122,126	131,922	133,477	8.0	1.2			
Medium-sized enterprises	70,252	70,271	60,650	0.0	-13.7			
Small businesses and microbusinesses	59,069	58,431	62,951	-1.1	7.7			
Individuals	130,731	136,960	158,671	4.8	15.9			
Consumer	75,822	78,164	95,181	3.1	21.8			
Car loans	2,356	2,529	2,930	7.3	15.9			
Credit cards	21,719	12,808	16,986	-41.0	32.6			
Rest	51,747	62,827	75,265	21.4	19.8			
Mortgage	54,909	58,796	63,489	7.1	8.0			
TOTAL	382,179	397,584	415,748	4.0	4.6			

^{1/} The balance in dollars is valued at the exchange rate of December 2022. Does not Include loans made by banks' branches of the local banks abroad. Source: BCRP.

In terms of currencies, credit to the private sector in domestic currency grew by 2.5 percent in 2022 and credit in dollars by 12.1 percent. Growth in the sol segment came from personal loans, especially consumer loans (up 21.8 percent), while growth in the dollar segment came from corporate and large business loans (up 17.1 percent). Thus, the dollarization of credit, valued at the constant exchange rate of December 2022, increased from 21.8 percent to 23.4 percent. The dollarization of loans to enterprises increased from 29.4 percent to 33.6 percent, while the dollarization of loans to individuals decreased from 7.5 percent to 6.9 percent.

Table 69

	E	Balance in million s	Growth rates (%)		
	2020	2021	2022	2021	2022
Businesses	175,757	184,127	170,701	4.8	-7.3
Corporate and large companies	66,221	73,186	64,676	10.5	-11.6
Medium-sized enterprises	53,120	54,310	44,803	2.2	-17.5
Small businesses and microbusinesses	56,415	56,631	61,223	0.4	8.1
Individuals	118,916	126,663	147,787	6.5	16.7
Consumer	71,179	73,860	89,929	3.8	21.8
Car loans	1,913	2,164	2,609	13.1	20.5
Credit cards	20,297	11,162	15,018	-45.0	34.6
Rest	48,969	60,534	72,302	23.6	19.4
Mortgage	47,737	52,803	57,858	10.6	9.6
TOTAL	294,673	310,790	318,489	5.5	2.5

Source: BCRP.

Table 70

	Balances in million US dollars			Growth rates (%)		
	2020	2021	2022	2021	2022	
Businesses	19,867	20,078	22,671	1.1	12.9	
Corporate and large companies	14,673	15,416	18,058	5.1	17.1	
Medium-sized enterprises	4,497	4,189	4,159	-6.8	-0.7	
Small businesses and microbusinesses	697	472	454	-32.2	-4.0	
Individuals	3,101	2,703	2,856	-12.8	5.7	
Consumer	1,219	1,130	1,379	-7.3	22.0	
Car loans	116	96	84	-17.7	-11.8	
Credit cards	373	432	516	15.7	19.5	
Rest	729	602	778	-17.4	29.2	
Mortgage	1,882	1,573	1,478	-16.4	-6.0	
TOTAL	22,968	22,781	25,527	-0.8	12.1	

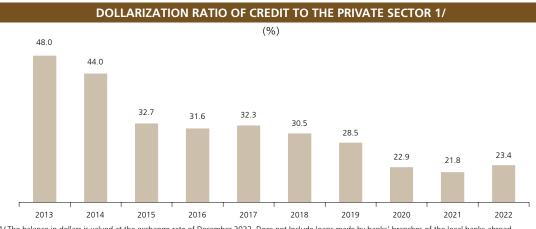
^{1/} Does not Include loans made by banks' branches of the local banks abroad. Source: BCRP.

Table 71

DOLLARIZATION RAT	DOLLARIZATION RATIO OF CREDIT TO THE PRIVATE SECTOR 1/						
(%)							
	2020	2021	2022				
Businesses	30.1	29.4	33.6				
Corporate and large companies	45.8	44.5	51.5				
Medium-sized enterprises	24.4	22.7	26.1				
Small businesses and microbusinesses	4.5	3.1	2.7				
Individuals	9.0	7.5	6.9				
Consumer	6.1	5.5	5.5				
Vehicular	18.8	14.4	11.0				
Credit cards	6.5	12.9	11.6				
Rest	5.4	3.7	3.9				
Mortgage	13.1	10.2	8.9				
TOTAL	22.9	21.8	23.4				

^{1/} The balance in dollars is valued at the exchange rate of December 2022. Does not Include loans made by banks' branches of the local banks abroad. Source: BCRP.

Graph 69



1/ The balance in dollars is valued at the exchange rate of December 2022. Does not Include loans made by banks' branches of the local banks abroad. Source: BCRP.

In 2022, the annual rate of change in credit in domestic currency was -11.6 percent for the corporate and large enterprise segment, -17.5 percent for medium enterprises, and 8.1 percent for MSEs. However, if the reclassification effect between enterprises is excluded, credit in the corporate and large enterprise segment would have declined by 11.4 percent, it would have declined by 22.0 percent in the medium enterprises, whereas in the segment of SMEs it would have grown by 12.1

percent. A company could move to a higher (lower) segment if it increases (decreases) its level of debt or its level of sales. In addition, it is observed that the reclassification effect was stronger in 2020, which would be associated with the granting of Reactiva loans.

Table 72

	Balances (Million S/)					Growth ra	tes (%)					
_	Dec.19	Dec.19 Dec.20 Dec.21 Dec.22 Dec.20/Dec.19 Dec.2		Dec.21	/Dec.20	/Dec.20 Dec.22/Dec.21						
					Without Reclassify.	With Reclassify	Without Reclassify.	With Reclassify	Without Reclassify.	With Reclassify		
Businesses	125,443	175,757	184,127	170,701	40.1	40.1	4.8	4.8	-7.3	-7.3		
Corporate and large companies	53,138	66,221	73,186	64,676	20.7	24.6	7.0	10.5	-11.4	-11.6		
Medium-sized enterprises	27,734	53,120	54,310	44,803	68.7	91.5	-3.3	2.2	-22.0	-17.5		
Small businesses and microbusinesses	44,571	56,415	56,631	61,223	45.5	26.6	9.7	0.4	12.1	8.1		

Source: Financial statement

The variation in loans to SMEs in local currency was mainly influenced by the variation in the balances of the Reactiva program, since in 2020 the increase was due to this liquidity injection program, while in 2022 the negative flows were associated with the amortization and and repayments of Reactiva loans. The latter was partially offset by new loans to this segment and by the balances of companies reclassified to this segment.

Table 73

LOANS TO	O MEDIUM-SIZED CO	MPANIES IN DON	MESTIC CURRENCY	f
		Flows (N	1illion S/)	
	2019/2018	2020/2019	2021/2020	2022/2021
Total	860	25,384	1,212	-9,121
Reactiva	0	25,652	-3,006	-11,203
New Credits 1/	4,728	5,182	5,776	5,367
Reclassification 2/	675	6,342	2,949	2,414
Punished 3/	-218	-78	-159	-562
Rest 4/	-4,325	-11,714	-4,348	-5,137
Total Balance	27,331	52,714	53,926	44,805

^{1/} Compare both months in question. New credits associated with Reactiva are excluded.

3.4 RESCHEDULED CREDITS

One of the measures taken to mitigate the effects of the COVID-19 pandemic in 2020 was the rescheduling of loans. In this regard, the balance of rescheduled loans as of December 2022 continued to decrease compared to the end of 2021. In addition, as a result of the implementation of Emergency Decrees DU N°026-2021 and N°011-2022, Reactiva loans for a total of S/11,984 million and S/948 million were rescheduled, respectively, as of December 2022.

By segment, it can be observed that the largest decrease in relation to 2021 occurred in mortgage loans and loans to medium businesses, while in relation to November 2022, the largest decreases occurred in loans to medium business and corporations.

^{2/} Represents the difference between the balances reclassified to medium-sized companies minus what was no longer in that segment.

^{3/} Variation in the balance of written-off loans (as a contribution to the flow). 4/ Includes amortizations, cancellations, among others.

Source: RCC.

Table 74

		BALANCE OF RESCHEDULED CREDITS									
				Balance in	million sole	s			FI	Flows	
	Dec.21	Jun.22	Jul.22	Aug.22	Sep.22	Oct.22	Nov.22	Dec.22	Dec.22/ Dec.21	Dec.22/ Nov.22	
Corporate	1,611	827	770	764	716	524	523	337	-1,274	-186	
Large Company	3,081	1,758	1,583	1,468	1,458	1,226	1,189	1,241	-1,840	52	
Medium-sized enterpr	rise 6,470	4,477	4,482	4,222	4,078	3,883	3,757	3,549	-2,921	-208	
Small business	4,948	3,142	2,993	2,714	2,561	2,394	2,233	2,079	-2,869	-153	
Micro business	557	309	296	270	253	239	218	190	-367	-28	
Consumer	4,167	2,568	2,188	2,023	1,962	1,912	1,828	1,709	-2,458	-119	
Mortgage	7,638	4,098	4,002	3,878	3,830	3,781	3,702	3,637	-4,001	-65	
Total	28,474	17,179	16,314	15,340	14,859	13,959	13,449	12,742	-15,731	-707	

Source: Financial statement.

On the other hand, by type of financial institution, the largest declines occurred in banks and municipal savings banks, both with respect to 2021 and November 2022.

Table 75

	BALANCE OF RESCHEDULED CREDITS									
			Balance in	million sole	s			Flows		
Dec.21	Jun.22	Jul.22	Aug.22	Sep.22	Oct.22	Nov.22	Dec.22	Dec.22/ Dec.21	Dec.22/ Nov.22	
Banking sector 22,493	13,404	12,638	12,007	11,732	11,024	10,653	10,105	-12,389	-548	
Financial enterprises 1,097	541	504	455	422	402	381	354	-743	-27	
Municipal saving banks 4,574	3,032	2,969	2,681	2,504	2,336	2,218	2,106	-2,468	-112	
Rural saving banks 310	202	202	198	202	198	198	178	-132	-20	
Total 28,474	17,179	16,314	15,340	14,859	13,959	13,449	12,742	-15,731	-707	

Source: Financial statement.

4. OVERALL FINANCING TO THE PRIVATE SECTOR

In addition to credit from deposit-creating corporations, global financing to the private sector includes financing through other financial institutions such as mutual funds, insurance companies and private pension funds, as well as direct foreign loans to corporations. Over the year, this overall financing grew 2.8 percent (3.8 percent in 2021).

The largest component of global financing is credit granted by deposit-creating enterprises, whose balance in December 2022 was S/ 415,748 million. The second largest component was direct financing obtained by enterprises from abroad, whose balance in December 2022 was S/ 107,176 million (US\$ 28,130 million at the current exchange rate), equivalent to 19.0 percent of total global financing.

The third component of global financing is direct financing obtained by companies through the domestic capital market (issuance of bonds and securities), which are purchased by institutional investors such as AFPs, mutual funds and local insurance companies. This financing recorded a decrease of 3.5 percent compared to the previous year, which is due to the lower dynamism of the stock market in 2022.

Table 76

	E	Balance in million s	oles	Growth rates (%)		
	2020	2021	2022	2021	2022	
. CREDIT OF DEPOSITORY						
CORPORATIONS	382,179	397,584	415,748	4.0	4.6	
Domestic currency	294,673	310,790	318,489	5.5	2.5	
Foreign currency (Million US\$)	22,968	22,781	25,527	-0.8	12.1	
Dolarization (%)	22.9	21.8	23.4			
I. CREDIT OF OTHER FINANCIAL						
CORPORATIONS 2/	45,419	42,949	41,464	-5.4	-3.5	
Domestic currency	27,000	26,594	25,961	-1.5	-2.4	
Foreign currency (Million US\$)	4,834	4,293	4,069	-11.2	-5.2	
Dolarization (%)	40.6	38.1	37.4			
Of which:						
AFP's loans	18,858	17,619	14,513	-6.6	-17.6	
Loans of mutual funds	3,844	2,511	2,187	-34.7	-12.9	
Loans of insurances	15,179	15,584	16,947	2.7	8.7	
II. EXTERNAL PRIVATE INDEBTNESS	101,522	108,473	107,176	6.8	-1.2	
(Million US\$)	26,646	28,471	28,130	6.8	-1.2	
Short-term (Million US\$)	4,591	4,334	3,986	-5.6	-8.0	
Medium and long-term (Million US\$)	22,055	24,137	24,144	9.4	0.0	
V. TOTAL	529,120	549,006	564,388	3.8	2.8	
Domestic currency	321,673	337,383	344,449	4.9	2.1	
Foreign currency (Million US\$)	54,448	55,544	57,727	2.0	3.9	
Dolarization (%)	39.2	38.5	39.0			

^{1/} The balance in dollars is valued at the exchange rate of December 2022.

5. FINANCIAL INDICATORS

In 2022, the financial system maintained a recovery in its profitability level, as a result of improved net interest income, mitigated by moderate increases in provisioning expenses. Interest income increased as a result of growth in all types of loans (corporate and household) and the higher percentage of customers who complied with their rescheduled debts.

Table 77

FINANCIAL INI	DICATORS ON (FINANCIAL INDICATORS ON COMMERCIAL BANKS 1/								
	(%)									
	2020	2021	2022	Average 2013-2022						
Ratio global capital	15.5	14.9	14.4	14.7						
Overdue loans / gross placements 2/	3.8	3.8	3.9	3.0						
High risk portfolio / gross placements 3/	5.5	5.6	5.7	4.4						
Allowance for loans / high-risk porfolio	122.3	103.8	102.3	111.6						
Return on equity (ROE)	4.0	13.3	17.3	17.2						
Return on assets (ROA)	0.4	1.4	2.0	1.8						

^{1/} Bank of China is included as of 2020, and Bci as of 2022.

^{2/} Includes loans and investment in fixed income from institutional investors.

Source: BCRP.

^{2/} Credits due and in judicial collection processes.

^{3/} The high-risk portfolio is equal to the non performing loans plus the refinanced and restructured portfolio.

Source: Superintendency of Banking, Insurance and AFPs (SBS).

The recovery in profitability was broad-based. Banks reported higher profits in 2022, although at a lower level than in the pre-pandemic period. Lending to consumers and micro and small enterprises resumed positive growth, driven by improved economic activity in general and in the most labor-intensive sectors, as all restrictions imposed by the COVID-19 pandemic were lifted.

Banks' solvency, as measured by the total capital ratio, has declined from high levels due to loan growth. As a result, the current level of the ratio is similar to the average of the last ten years, and banks remain highly solvent. Banks have also continued to take measures to strengthen their capital base in order to have a solid foundation for further loan growth in the coming years.

Non-performing loan indicators increased slightly in 2022, in a context of an increase in placements made during the year and write-offs. The increase in non-performing loans over the year was more pronounced in loans to medium-sized companies (the NPL ratio increased from 9.5 to 11.5 percent), especially in companies belonging to the rescheduled portfolio.

It should be noted that banks reduced their exposure to clients with rescheduled loans. These loans went from representing 6.5 percent of placements in December 2021 to representing 2.8 percent in December 2022. This reduction occurred in all types of loans, due to the recovery of the solvency of clients who requested payment facilities during the social confinement.

Table 78

BANKS: DELINQUE	NCY RATES BY T	YPE AND S	SIZE OF DEI	BTOR 1/
	(%)			
	2020	2021	2022	Average 2013-2022
Corporate loans	0.7	0.6	0.8	0.2
Loans to large companies	1.2	1.4	1.9	1.1
Loans to medium-sized companies	6.1	9.5	11.5	7.0
Loans to small companies	7.8	9.4	8.2	8.5
Loans to microbusinesses	3.6	4.4	4.9	3.7
Consumer loans	6.4	2.5	2.7	3.5
Mortgage loans	3.6	3.1	2.6	2.4
TOTAL	3.8	3.8	3.9	3.0

1/ Bank of China is included as of 2020, and Bci as of 2022. Source: Superintendency of Banking, Insurance and AFPs (SBS).

The recovery in the profitability of non-bank entities was more gradual than in the banking sector, due to the fact that their loan portfolios have a greater exposure to debtors more vulnerable to the health crisis. Finance companies and municipal savings banks generated profits during the year due to the recovery of their loans. On the other hand, rural banks and credit companies reported losses due to higher provisioning expenses, mainly as a result of higher loan refinancing operations.

In general, non-banks recorded a higher past due portfolio compared to the previous year, resulting in a lower coverage of their risky portfolio by their provisions. Nonetheless, non-banks continued to take measures to strengthen their capital, including capitalization of profits, subordinated loans, capital contributions from their main shareholders, and the Capital Strengthening Program (Emergency Decree No. 037-2021).

Table 79

	(%)			
	2020	2021	2022	Average 2013-2022
Overdue loans / gross placements 1/				
Financial Firms	10.8	5.4	5.5	5.9
Municipal saving banks	5.1	5.0	5.4	5.7
Rural saving banks 2/	8.0	8.0	12.3	8.1
Edpymes 3/	4.9	5.5	6.6	4.6
Provision for loans / high-risk portfolio 4/				
Financial Firms	125.8	112.3	119.7	118.4
Municipal saving banks	128.5	123.6	104.9	107.1
Rural saving banks 2/	157.8	78.7	65.8	90.0
Edpymes 3/	92.3	81.8	66.4	109.7
Ratio on equity (ROE)				
Financial Firms	-8.2	5.2	15.0	11.6
Municipal saving banks	2.1	3.1	8.8	10.5
Rural saving banks 2/	-9.7	-16.5	-10.5	-5.1
Edpymes 3/	5.0	4.2	-9.2	6.4

^{1/} Overdue loans and loans in judicial collection processes.

6. EXCHANGE RATE

In 2022, the Peruvian sol (PEN) appreciated 4.6 percent in nominal terms against the US dollar (from S/ 3.99 to S/ 3.81 per dollar), in an environment of greater risk aversion in international financial markets, greater political noise at the domestic level and the strengthening of the US dollar at the global level (8.2 percent). The sentiment of greater risk aversion towards emerging market assets was influenced by: (i) changes in expectations regarding adjustments in the Federal Reserve's key interest rate; (ii) the escalation of the conflict between Russia and Ukraine and tensions over energy supplies between Europe and Russia; (iii) inflation concerns at the global level; (iv) fears of a recession in the U.S. economy; and (v) risk from fears of restrictions in China and their impact on global growth.

Table 80

	EXCH <i>E</i>	ANGE RA	TE* AND	PRICE OF	соммор	ITIES 1/			
		Dec.19	Dec.20	Dec.21	Dec.22	% cha	nge Dec.22 res	respect to:	
						Dec.21	Dec.20	Dec.19	
Dollar Index	C.U. per US\$	96	90	96	104	8.2	15.1	7.4	
Eurozone	Euro*	1.121	1.222	1.137	1.071	-5.8	-12.4	-4.5	
Japan	Yen	108.6	103.3	115.1	131.1	13.9	27.0	20.7	
Brazil	Real	4.02	5.19	5.57	5.29	-5.1	1.8	31.3	
Chile	Peso	753	711	852	851	-0.1	19.7	13.0	
Colombia	Peso	3,287	3,428	4,065	4,851	19.3	41.5	47.6	
Mexico	Peso	18.93	19.91	20.53	19.50	-5.0	-2.1	3.0	
Peru	Sol	3.31	3.62	3.99	3.81	-4.6	5.2	14.9	
Copper	US\$/pound	280	352	446	381	-14.6	8.3	36.2	
Gold	US\$/troy ounce	1,517	1,898	1,829	1,824	-0.3	-3.9	20.2	
Oil	US\$/barrel	61.1	48.5	75.2	80.3	6.7	65.4	31.4	

^{1/} End of period.

Source: Reuters.

^{2/} CRAC Sipán is excluded in every year. The SBS authorized its voluntary dissolution in September 2021.

^{3/} GMG, Progreso, BBVA Consumer and Credivisión are excluded in every year. In 2021, the SBS authorized the voluntary dissolution of GMG and Progreso, Likewise, GMG and Edpyme Progreso ceased to be a supervised company as of May 2021 and August 2021, respectively. In 2022, SBS authorized the voluntary dissolution of BBVA Consumer and Credivisión, which ceased to be supervised companies from February and October, respectively. In 2021, TOTAL Servicios Financieros is included, and in 2022 Volvo Financial Services.

^{4/} The high-risk portfolio is equal to the non performing loans plus the refinanced and restructured portfolio.

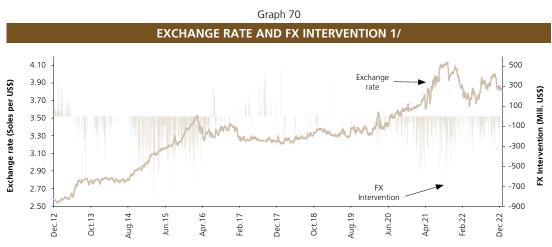
Source: Superintendency of Banking, Insurance and AFPs (SBS).

^{*} In all cases, a positive percentage change implies appreciation of the dollar, except for the euro.

The PEN stands out from other currencies in the region as one of the best performing currencies with lower annual volatility. Among the reasons that explain this situation are: i) lower external and fiscal vulnerabilities compared to other economies; ii) idiosyncratic factors; and iii) better macroeconomic prospects in 2023. On December 7, the sol recorded its largest single-day depreciation in 2022 (1.6 percent), mainly related to the President's announcement of the dissolution of Congress. However, the increase in intraday volatility was short-lived.

Flows in the foreign exchange market in 2022 were a net demand for dollars of US\$ 1,249 million, while the BCRP represented a net supply of dollars of US\$ 1,134 million. This net demand for dollars is broken down into: (i) net demand in the derivatives market of US\$ 2,531 million, mainly from the corporate sector, and (ii) net supply of dollars in the spot market of US\$ 1,281 million, mainly from mining companies. The AFPs net settled foreign securities for a total of US\$ 2,220 million to pay members for the new extraordinary withdrawals related to Law No. 31478.

Non-resident investors in 2022 demanded dollars in the spot and derivatives markets for US\$ 1,715 million and US\$ 395 million, respectively. In a context of uncertainty in the local market and the narrowing of the interest rate differential, investments in local government bonds decreased by US\$ 1,215 million. In the case of banks, the overall position decreased by US\$ 115 million in 2022 (in 2021 this position increased by US\$ 326 million).



1/ Includes Net purchases of US\$ in the spot market and placement of CDLD BCRP, CDR BCRP, and FX swaps.

Table 81

		Number of intervention days							
	Trading days	Spot Market	Placements of derivatives and indexed	Total (spot and/or		days with ervention	SD of the Exchange rate		
			instruments	placement)	Spot	Instruments	(Annual %. chg.)		
2018	245	4	27	30	2%	11%	3.4%		
2019	249	4	6	10	2%	2%	4.4%		
2020	254	13	97	100	5%	38%	7.4%		
2021	251	141	183	206	56%	73%	9.4%		
2022	251	21	126	128	8%	50%	8.5%		

Source: BCRP.

The BCRP's total intervention in the foreign exchange market in 2022 was significantly lower than the historical record set in 2021. This intervention is broken down into: (i) net dollar sales of US\$1,236 million, mainly in the first half of the year (US\$1,012 million), and (ii) placement of derivative instruments for a total of US\$ 14,101 million, US\$ 13,739 million of fixed and floating rate FX swaps and US\$ 362 million of BCRP CDRs. During the year, US\$ 13,500 million of FX swaps and US\$ 704 million of BCRP CDRs matured. As of December 31, the balance of FX swaps-sale and BCRP CDRs amounted to S/ 38,054 million (4.1 percent of GDP). It is worth noting that the balance of FX swaps-sale reached a new historical high on February 28 (S/ 41,094 million).

The number of intervention days in 2022 decreased compared to 2021 and is at a similar level as in 2016. Annual intervention in the spot market was 8 percent, compared to 56 percent in 2021. In the case of derivatives, it was 50 percent in 2022, also below 2021 (73 percent) but above 2020 (38 percent).

7. FINANCIAL SAVINGS AND CAPITAL MARKETS

Financial saving includes the total assets of firms and households in the financial system in the form of savings deposits, time deposits, securities, mutual fund shares, life insurance, and contributions to private pension funds. In 2022, the balance of this aggregate decreased by 2.5 percent (-10.7 percent in 2021), mainly due to the decrease in the longer-term component, which is savings through mutual funds and pension funds.

Table 82

	E	Balance in million s	Growth rates (%)		
	2020	2021	2022	2021	2022
Saving Deposits	136,864	152,321	141,541	11.3	-7.1
Term Deposits	106,143	85,346	112,277	-19.6	31.6
Mutual Fund Fees	45,094	29,174	25,878	-35.3	-11.3
Direct Securities holdings	4,607	5,220	7,102	13.3	36.1
Participation in Insurance Life Reserves	10,795	12,543	13,962	16.2	11.3
Participation in Private Pension Funds	163,329	131,918	104,630	-19.2	-20.7
Rest	2,952	3,000	3,491	1.6	16.4
TOTAL	469,784	419,521	408,881	-10.7	-2.5

^{1/} The balance in dollars is valued at the exchange rate of December 2022. Source: BCRP.

Table 83

FINANCIAL SAVINGS								
	(Balances at the end of p	period)						
	Domestic currency (mill S/)	Foreign currency (mill US\$)	Total 1/ (mill S/)					
2012	171,331	17,631	238,503					
2013	184,630	18,849	256,445					
2014	206,279	18,962	278,525					
2015	217,189	22,255	301,982					
2016	242,734	22,114	326,987					
2017	278,771	24,556	372,329					
2018	289,978	24,278	382,478					
2019	328,703	27,222	432,421					
2020	357,981	29,345	469,784					
2021	316,087	27,148	419,521					
2022	297,061	29,349	408,881					
Growth rates								
2021	-11.7	-7.5	-10.7					
2022	-6.0	8.1	-2.5					

1/ Balances in dollars are valued at the exchange rate of December 2022. Source: BCRP.

In terms of currency, the entire decrease occurred in the PEN segment (-6.0 percent), compared to an 8.1 percent increase in the dollar segment. The components that declined the most were private pension fund shares (-20.7 percent), mutual funds (-11.3 percent), and savings deposits (-7.1 percent). On the other hand, time deposits increased by 31.6 percent.

7.1 PRIMARY FIXED INCOME MARKET

At the end of 2022, the outstanding balance of fixed-income securities issued through public offerings in the local market was S/ 23,107 million, which represents a decrease of 7.4 percent compared to the balance at the end of 2021 (S/ 24,944 million). These figures include both bonds and short-term instruments in circulation placed by non-government issuers through public offerings. It therefore excludes government bonds regularly issued by the Treasury.

The amount of securities placed during the year was S/ 1,873 million, which is lower than that recorded in the previous year (S/ 2,074 million in 2021) and even lower than the amounts recorded in the years prior to COVID (S/ 5,971 million average annual amount issued between 2016 and 2019). A total of 57 fixed-rate issues were recorded, almost all of which were short-term and only three of which had maturities of more than one year (all three were dollar-denominated issues).

Table 84

FIXED-INCOME SECURITIES ISSUED BY PRIVATE COMPANIES 1/						
	Amounts			Growth rates (%)		
	2020	2021	2022	2021	2022	
Balances at the end of period						
(Million S/)	26,435	24,944	23,107	-5.6	-7.4	
Non-financial sector	15,606	14,650	13,501	-6.1	-7.8	
Financial sector 2/	10,829	10,294	9,606	-4.9	-6.7	
Composition by currency (%)	100.0	100.0	100.0			
Soles	84.3	84.7	84.3			
Fixed rate	79.0	80.5	79.5			
VAC	5.3	4.2	4.7			
US Dollars	15.7	15.3	15.7			
Balance as % GDP	3.7	2.8	2.5			

^{1/} Balances in dollars are valued at the exchange rate of December 2022.

Source: BCRP and Superintendency of the Securities Market (SMV).

By type of issuer, non-financial private companies issued the equivalent of S/ 173 million (S/ 386 million in 2021). Thus, the securities balance of these companies decreased by 7.8 percent compared to the previous year and amounted to S/ 13,501 million. For their part, the companies of the financial system placed securities for a value of S/ 1,700 million (in 2021 they placed securities for S/ 1,688 million), ending with a balance of outstanding securities of S/ 9,606 million. The largest single debt issuance was made by Centenario Renta Inmobiliaria S.A.C. in February for the equivalent of S/ 158 million (US\$ 42 million), closely followed by Mibanco with an issuance of S/150 million in September.

By currency, bonds issued in soles accounted for 84.3 percent of the outstanding balance (84.7 percent at end-2021) and bonds in soles accounted for 15.7 percent (15.3 percent at end-2021). Fixed-rate bonds in soles accounted for 79.5 percent of the balance (80.5 percent in 2021), while inflation-linked bonds (VAC) accounted for 4.7 percent (4.2 percent in 2021).

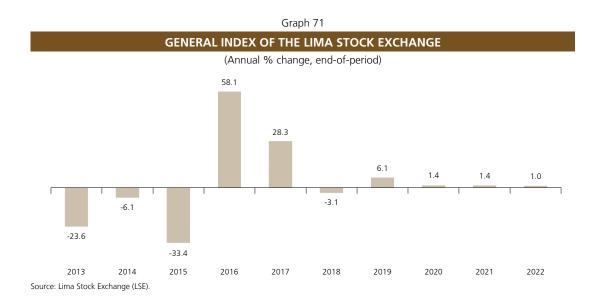
^{2/} Securities issued or originated by a financial organization, including Banco de la Nación, COFIDE, and MiVivienda.

The average maturity of the placement flow, weighted by the amount placed, was 1.0 years for securities in soles and 10.1 years for dollar securities. The longest maturity of the bonds placed during the year was 15 years for the placement of USD 42 million by Centenario Renta Inmobiliaria S.A.C.

7.2 STOCK MARKET

The Lima Stock Exchange (BVL) had mixed results during the year. The main index, the SP/BVL PERU GENERAL or General Index, posted a positive annual return of 1.0 percent, slightly lower than the previous year (1.4 percent). The SP/BVL LIMA 25 selective index, on the other hand, recorded a loss of 0.5 percent for the year, after rising 20.1 percent in 2021. Finally, the SP/BVL PERU SELECT index recorded an annual loss of 1.3 percent (after showing a positive return of 2.2 percent in 2021).

The factors that affected the stock market indices were both internal and external. The economic slowdown and continued political uncertainty were the main internal factors, while inflation and international interest rate increases were the main external factors.



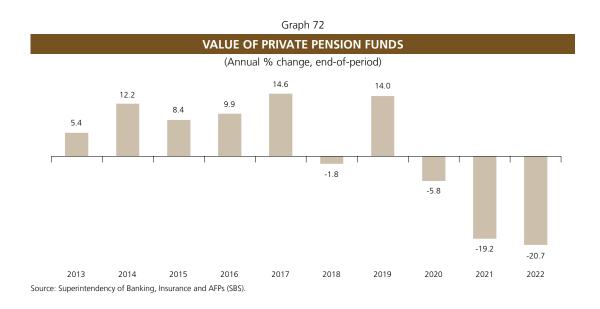
At the sector level, the best annual returns were achieved by the services and electricity sectors: 41.1 percent in both cases. In addition, the consumer sector index posted an annual gain of 7.5 percent. On the other hand, the industrial and construction indexes posted negative returns of 5.1 percent and 14.6 percent, respectively. In addition, the mining sector index posted a loss of 4.4 percent for the year.

Trading volumes declined significantly compared to the previous year. Equity trading fell by 40.2 percent year-on-year to S/10,506 million. Bond trading fell by 20.5 percent to a total of S/ 3,209 million. Market capitalization at the end of the year was S/ 540,354 million, 8.7 percent lower than at the end of 2021 (S/ 591,734 million).

The amount of dematerialized shares (those recorded electronically in CAVALI) was S/ 191,468 million at the end of 2022, representing 35.4 percent of the market capitalization (32.5 percent in 2021). The share of non-resident investors in total dematerialized shares decreased slightly, from 34.2 percent in 2021 to 34.1 percent in 2022.

7.3 PRIVATE PENSION SYSTEM

The value of private pension fund assets decreased by 20.7 percent in 2022, reaching a value of S/104,630 million in December (S/131,918 million in 2021). The number of members in the system increased by 6.8 percent to 8.8 million people. The ratio of contributing members to the total number of members increased from 38.7 percent in December 2021 to 41.3 percent in September 2022 (latest available data), which is close to the pre-pandemic situation (the ratio of contributing members was 44 percent in December 2019).



In 2022, the withdrawal of S/ 21,986 million was allowed through Law No. 31478, bringing the cumulative total of withdrawals since the beginning of the pandemic to S/87,928 million. Previously, in 2020, Emergency Decrees No. 34-2020 and No. 38-2020 had authorized withdrawals of S/ 2,966 million and S/ 2,094 million, respectively, while Law No. 31017 had authorized withdrawals of S/19,647 million and Law No. 31068 authorized withdrawals of S/9,016 million. In 2021, Law No. 31192 authorized withdrawals of S/32,219 million. These cumulative withdrawals represent 9.4 percent of GDP. These operations contributed to the reduction of AFPs' managed portfolio from S/173.3 billion in December 2019 to S/104.6 billion in December 2022 (a decrease of S/68.7 billion). As a result of the withdrawals, the AFPs share of foreign investments was reduced from 49.7 percent in 2020 to 36.9 percent in 2022, and the share of shares and equities increased from 17.9 percent to 26.3 percent over the same period.

In addition, net dollar sales for S/14.4 billion were made on the spot market, securities for S/12.1 billion were liquidated, and repo transactions for S/4.9 billion were carried out to finance the withdrawals in 2022

After recording a positive figure in 2021 (0.1 percent), the real profitability of private pension funds was negative 14.4 percent per year (for the type 2 fund). One of the factors that explain this fact is the fall in the prices of financial assets (stocks and bonds) due to the high global inflation rate.

The share of investment abroad fell sharply from 43.4 percent in 2021 to 36.9 percent in 2022. On the other hand, among domestic investments, the weight of fixed income instruments increased (from

27.9 percent to 32.1 percent), together with deposits with financial institutions which increased to a lesser extent (from 3.7 percent to 4.8 percent).

Table 85

COMPOSITION OF TH	E PRIVATE PENSION S	SYSTEM PORTFOLIC)					
	(% structure)							
	2020	2021	2022					
I. DOMESTIC INVESTMENTS	50.6	56.1	63.2					
Deposits	4.6	3.7	4.8					
In soles	4.4	3.3	4.3					
In US Dollars	0.2	0.5	0.5					
Bonds and Fixed Income	28.1	27.9	32.1					
Central Bank securities	0.1	-	-					
Sovereign bonds	16.9	15.6	19.2					
Values issued by the private sector	11.1	12.3	12.9					
Stocks and variable income	17.9	24.4	26.3					
Shares	12.5	17.8	19.8					
Investment funds	5.3	6.6	6.5					
II. FOREIGN INVESTMENTS	49.7	43.4	36.9					
III. OPERATIONS IN TRANSIT	-0.2	0.6	-0.1					
IV. TOTAL	100.0	100.0	100.0					
Million soles	163,329	131,918	104,630					
As % GDP	22.7	15.1	11.2					

Source: Superintendency of Banking, Insurance and AFPs (SBS).

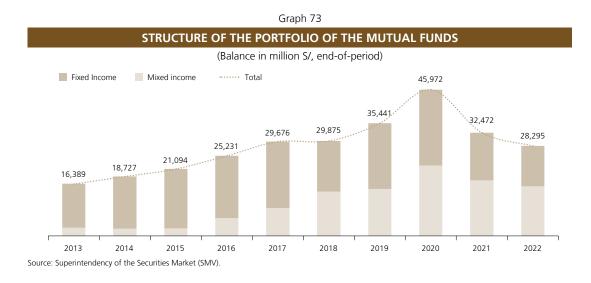
By type of fund, the type 2 fund, or <u>mixed fund</u>, (with a maximum of 45 percent in equities) accounted for 65.9 percent of the total fund value and had a negative real return of 14.4 percent per year. The type 3 fund, or capital appreciation fund (which has a maximum of 80 percent in equities) accounted for 13.9 percent and had a negative real return of 14.7 percent per year. The type 1 fund, or <u>capital preservation fund</u>, (which has a maximum of 10 percent in equities) accounted for 15.3 percent and had a negative real return of 12.8 percent. Finally, the zero fund, or <u>capital protection fund</u> (which invests only in fixed-income securities) accounted for 4.8 percent and had a negative real return of 3.4 percent. As in the previous year, the Capital Protection Fund was the only fund to grow.

The balance of voluntary contributions amounted to S/2,110 million (S/2,721 million in 2021), representing 2.0 percent of the total accumulated funds (2.1 percent in 2021). The majority of these contributions were for non-pension purposes (S/1,920 million).

7.4 MUTUAL INVESTMENT FUNDS

The total assets of mutual funds decreased by 12.8 percent compared to the previous year, ending with a balance of S/28,295 million (3.0 percent of GDP) at the end of 2022. The number of participants decreased by 7.1 percent to close at 341 thousand people at the end of the year (367 thousand in 2021). The number of operating mutual funds at the end of the year was 185 funds, of which 42 are sol-denominated funds and 143 are dollar-denominated funds.

In terms of assets under management, by currency, the relative share of Sol mutual funds decreased from 34.6 percent to 29.8 percent, while the percentage share of dollar mutual funds increased from 65.4 percent to 70.2 percent.



In contrast to pension funds, the share of investments abroad of mutual funds increased from 48.4 percent to 54.4 percent in 2022. Among domestic investments, the share of both deposits and fixed income instruments declined, from 33.8 to 30.4 percent in the case of the former and from 11.1 to 10.5 percent in the case of the latter. Investment in local domestic equity instruments declined from 3.3 percent to 2.2 percent.

Table 86

COMPOSITION	OF MUTUAL FUNDS'	INVESTMENT	
	(% structure)		
	2020	2021	2022
I. DOMESTIC INVESTMENTS	57.8	51.6	45.6
Deposits	36.3	33.8	30.4
In soles	20.9	18.0	18.8
In US Dollars	15.4	15.8	11.6
Bonds and Fixed Income	13.9	11.1	10.5
Central Bank securities	2.6	0.4	-
Sovereign bonds	0.8	0.3	0.3
Values issued by the private sector	10.4	10.4	10.1
Stocks and variable income	3.6	3.3	2.2
Others	4.1	3.4	2.5
II. FOREIGN INVESTMENTS	42.2	48.4	54.4
III. TOTAL	100.0	100.0	100.0
Mutual Fund Equity (Million S/)	45,972	32,472	28,295
As % GDP	6.4	3.7	3.0

Source: Superintendency of the Securities Market (SMV).

8. PAYMENT SYSTEMS

High and Low Value Payments

In 2022, the trend toward greater adoption of digital payments in the country continued, with the number of Digital Payments Indicator (DPI) transactions increasing by 81 percent. This trend is characterized by:

- i) A sustained increase in the share of low-value payments.
- ii) A focus on payment instruments that offer a better user experience –immediacy, 24/7 schedules and beneficiary identification (immediate transfers via the ECC) and low or zero cost (transfers via intra- and interbank wallets).
- iii) A boost in financial inclusion, with the percentage of the adult population with a bank account increasing from 35 percent to 49.7 percent between 2015 and 2021, according to ENAHO.

Table 87

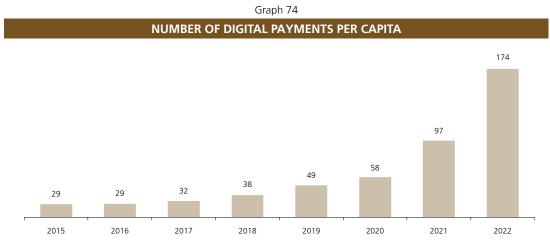
(Monthly a					MENTS er of opera	tions in the	nusands)	
(ivioriting a	average, value in millions of soles and numbe		2022		Average 2013-2022*			
	Value	Number	Value	Number	Value	Number	Value	Number
HIGH VALUE	292,051	0.07	322,376	0.08	381,683	0.09	307,586	0.07
RTGS System	292,051	0.07	322,376	0.08	381,683	0.09	307,586	0.07
- Customers	143,613	0.05	189,939	0.06	198,804	0.07	134,505	0.05
- Proprietary	148,438	0.02	132,437	0.02	182,879	0.02	173,081	0.02
LOW VALUE	218,348	103	283,724	176	304,659	317	170,608	98
Intrabank transfers	181,557	53	234,211	95	244,466	171	125,203	46
- Via digital wallets	616	9	2,190	33	5,642	101	2,131	36
- Via other channels	180,941	44	232,021	62	238,824	71	124,350	32
Interbank transfers	151	2	900	12	2,854	51	1,302	22
- Via digital wallets	151	2	900	12	2,854	51	1,302	22
CCE system	22,652	5	30,893	9	36,918	13	23,715	4
- Transfers of credit	15,654	4	19,843	4	22,848	4	12,726	2
- Immediate transfers	1,446	1	5,157	5	7,704	9	2,634	3
- Checks	5,552	0.1	5,894	0.1	6,366	0.1	9,408	0.4
Payment cards	6,046	38	8,701	54	11,254	77	6,207	37
- Debit cards	2,491	26	3,915	38	5,079	53	2,138	22
- Credit cards	3,555	12	4,786	17	6,174	24	4,069	14
Intrabank checks	7,322	0.7	8,264	0.5	8,325	0.5	14,542	1.8
Automatic debits	547	4	643	4	690	4	509	3
Bim (Payments and transfers)	74	0.6	111	0.7	152	0.6	71	0.5
Digital Payments Indicator	349,087	103	459,505	175	488,772	317	281,163	96

^{*} The average of operations with transfers via digital wallets is from 2019, in the case of immediate transfers and BIM the average was calculated from 2017.

**Includes transfers via LBTR ordered by customers, intrabank transfers, interbank transfers via digital wallets, transfers via CCE, payment cards, automatic debits and BIM operations.

Source: BCRP.

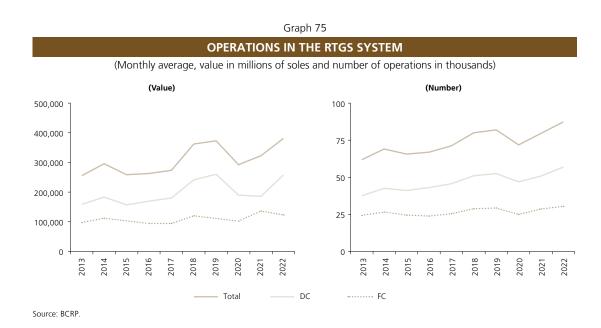
The greater digitization of payments is reflected in the rapid increase in the number of payments per capita.



Note: Considers the population between 18 and 70 years old. Includes customer transactions of participants in the RTGS Payment System and digital retail payments.

Source: BCRP.

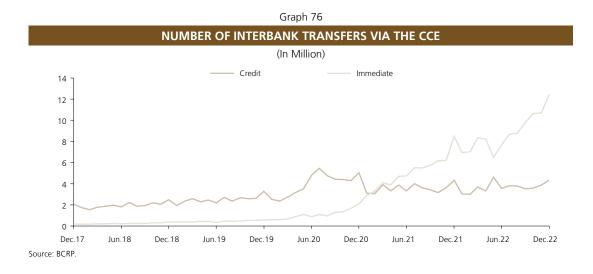
The RTGS system, which is the most important payment system in Peru because it processes the high-value transfers of companies in the financial system, saw its value and number of transactions increase by 18 percent and 10 percent, respectively, in 2022. The increase in the value of transactions is mainly explained by transactions between participants (loans and transfers) and, to a lesser extent, by transactions on behalf of their clients. By currency, the value of transactions in domestic currency increased by 39.3 percent, while in foreign currency it decreased by 8.8 percent (in US dollars) compared to the previous year.



The progress in the digitization of low-value payments reflects the consolidation of the innovations introduced in the market, accompanied by the regulation issued by the Central Bank. Table 87 shows the rapid growth of retail payments.

Of note is the rapid growth of wallet payments (intrabank and interbank), which increased their share from 25.8 percent in 2021 to 47.9 percent in 2022. In contrast, card payments decreased their share of the total number of retail payments from 31 percent in 2021 to 24.2 percent in 2022. Similarly, the number of transfers via ECC decreased from 5 percent to 4 percent over the same period.

In this context, the CCE manages check clearing services, credit transfers and immediate transfers between customers of the different entities in the financial system. In 2022, immediate transfers continued to grow, driven by their wide availability (24 hours a day, 7 days a week) and, in some cases, free of charge through digital channels (internet banking). Thus, immediate transfers went from 58 percent of the number of ECC transactions in 2021 to 70 percent in 2022. It is worth highlighting that 24/7 instant transfers partially replace credit transfers for low-value transactions.



In the case of cheques processed by the ECC, the downward trend in its operations was accentuated in 2022, decreasing by 5 percent compared to 2021 and representing only 1 percent of the total number of ECC operations (1.4 percent in 2021).

In the case of Bim, the number of operations decreased by 23 percent compared to 2021. Some of the obstacles to its development are the lack of access points for deposits, withdrawals and payments. Similarly, the cost of the trust and the limits on the number of operations are also obstacles to its adoption.

Regulation and Supervision

On October 7, 2022, the Central Bank issued the Regulation on Interoperability of Payment Services Provided by Payment Providers, Agreements and Systems (Circular No. 0024-2022-BCRP) to establish the conditions and possibilities for interoperability of payment services provided by regulated entities for this purpose.

The Regulation states that the implementation of interoperability will be done gradually and in phases. In the first phase, the payment services required to be interoperable must be made available to users by March 31, 2023 at the latest. The regulated entities required to interoperate are Yape (BCP, MiBanco, CMAC Cusco, CMAC Tacna, CMAC Sullana and CMAC Huancayo) and Plin (BBVA, Interbank, Scotiabank, BanBif, CMAC Sullana, CMAC Arequipa and CMAC Ica). In the second phase, the payment services required to be interoperable must be made available to users no later than June 30, 2023. The regulated entities required to interoperate are Yape and its participants, Plin and its participants, banks, financial institutions, cajas municipales, entities registered in the QR Registry, and others determined by the Central Bank.

On October 31, all regulated entities submitted the interoperability plan, which details the infrastructure selected for interconnection, indicates the main milestones to be achieved, and describes other technical aspects (developments, integrations, test windows, etc.) required to implement interoperability within the established deadlines (March and June 2023, respectively).

The vision of the BCRP is to have, in the medium term, a complete and interoperable digital payments ecosystem that promotes mass adoption and intensive use of payments in the country, where competition among payment service providers takes place through the provision of better services in a broad market composed of existing and new entrants.

The strategy involves the regulatory leadership of the BCRP within the framework of the development of business models by the participants that promote continuous innovation and the permanent improvement of the user experience, all with the active participation of all market participants and in close coordination with the SBS.

On November 11, the BCRP issued the Regulation on Payment Card Agreements (Circular No. 0027-2022-BCRP), which aims to strengthen the security, efficiency and transparency of payment card agreements. Its scope covers the payment card networks that manage them and the participants in such agreements (issuers and acquirers), as well as the payment facilitators that perform functions in the agreement.

The regulation establishes the obligation of a registry for information purposes, the publication of the fees charged in order to increase transparency and promote competition, as well as various information requirements (risk management, statistics on the evolution of the market, contracts, among others) that allow the monitoring and supervision of the development of payment card agreements.

In the fourth quarter of 2002, visits were made to the Cámara de Compensación Electrónica S.A. (CCE), which manages the Clearing and Settlement System for cheques and other clearing instruments, and to CAVALI S.A., which manages the Multi-bank Securities Settlement System (MSSS). During these visits, it was noted that the supervised systems continued to comply with the applicable regulations in 2022, improved their risk management and implemented business continuity measures. They have also implemented or are in the process of implementing the observations and opportunities for improvement identified. It was also verified that continuity and contingency tests were carried out with successful results.

In additon, the registration of new entities as QR code and digital wallet providers continued in 2022, in accordance with the QR Code Payment Service Regulation (Circular N°0003-2020-BCRP). In this regard, Caja Cuzco (Wayki) and APDE Bim (Bim wallet) were added as QR code and wallet providers, and Financiera Oh as a wallet provider. It is worth mentioning that Mercado requested to be removed from the registry because it no longer works with QR codes.

Table 88

BCRP REGISTRATION OF THE PAYMENT SERVICE WITH QR CODES					
Enrollment Type	Entity				
	Niubiz				
	Vendemás				
Provider of QR codes	YellowPepper				
	lzipay				
	TPP (Ligo)				
Digital Wallet Provider	Financiera Oh				
	Falabella (FPay)				
	BCP (Yape)				
QR Code and Digital Wallet Provider	Interbank (Tunki)				
	Caja Cusco (Wayki)				
	APDE Bim (Bim)				

Source: BCRP.