Financial Inclusion Report

October 2022

BANCO CENTRAL
DE LA REPÚBLICA ARGENTINA

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ISSN 2683-9210 | Online edition
Contents and edition | Financial Regulations Deputy General Management Office, Financial Inclusion Senior Management Office
Editorial design | Communications and Community Relations Senior Management Office

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About inclusive language in the Spanish version of this report
The Central Bank of Argentina is committed to encouraging the use of a non-discriminatory language that promotes the acceptance of all gender identities. It should be noted that all those who have contributed to this report acknowledge that language influences ideas, feelings, ways of thinking, as well as principles and core values.

Therefore, efforts have been made to avoid sexist and binary language in this report.

Foreword

The Charter of the Central Bank of Argentina (BCRA) establishes that "*the purpose of the Bank is to promote—within the framework of its powers and the policies set by the National Government—(...) economic development with social equality*." It states that the Board is responsible for the following duties, among others: (i) authorizing the opening of branches and other types of offices with a view to expanding the geographical reach of the system; serving the needs of the least developed areas; and promoting widespread access to financial services by users; (ii) regulating the lending policy and steering it through differential minimum reserve requirements or any other appropriate means; (iii) setting differentiated policies aimed at small- and medium-sized enterprises and regional economies; and (iv) carrying out research work and promoting financial education and activities related to its purpose as set out in its Charter. These objectives and competences are included in the concept of financial inclusion.

Financial inclusion stands for the principle that all individuals can have access to and use financial services provided in a sustainable and responsible manner. Within this framework, the BCRA has adopted a policy to achieve greater financial inclusion so that all the segments of society and micro-, small-, and medium-sized enterprises (MSMEs) may draw on financial services adequately.

The notion of "financial health" refers to the extent to which individuals, households, companies and communities can easily handle their current financial affairs and feel confident about their financial state in the future. The BCRA fosters the development of financial capability and habits that improve money management and decision making. Thus, the BCRA contributes towards a more inclusive and fairer society with better development opportunities for all productive units and individuals, especially for the most vulnerable sectors.

For the purpose of assessing financial inclusion, the BCRA monitors certain variables related to financial inclusion. These metrics are disaggregated by gender, age and location. This enables the BCRA to assess the progress and condition of financial inclusion before making policy decisions. The outcome and the measures adopted in this regard are released every six months in the Financial Inclusion Report (IIF). This report, in particular, analyzes credit lines channeled to MSMEs as well as bank and payment accounts holdings broken down by municipality.

The next issue of the IIF will be published in April 2023.

Autonomous City of Buenos Aires, October 28, 2022.

Contents

Executive Summary

- **The physical infrastructure of the financial system continued increasing in size during the first half of 2022 /** The financial system recorded 15.3 access points (PDAs) every 10,000 adults, up 6.7% against December 2021. In addition, 92.5% of the adult population lived in municipalities where PDAs were available. Four out of five people lived in municipalities with the broadest range of in-person financial services. Both physical and digital infrastructures provided significant coverage: in most provinces over 80% of the population lived in municipalities with PDAs and internet connection.

- **Account coverage virtually reached the entire adult population /** In the first half of 2022, 1.3 million natural persons (NPs) opened an account. This means that 98.5% of the adult population had access to at least one account. In the most populated municipalities, holders of both bank and payment accounts prevailed, while in the least populated municipalities, holders of bank accounts only came to the fore.

- **Electronic means of payment (MPEs) continued posting record levels in the first half of 2022 /** Each adult made, on average, 10.8 monthly transactions through electronic means, almost doubling the number of transactions carried out over the same period in 2020. Such an increase is explained by the performance of electronic transfers (mostly on mobile devices) and of debit cards (DCs). Each adult made 4.7 payments with DCs, this means of payment being predominantly used once again.

- **Depositors shifted from highly-liquid products to alternatives that offer higher returns /** In the second quarter of 2022, 1,300 time deposits (TDs) every 10,000 adults were made by NPs in pesos, which represents a 32% semi-annual increase. As for readily liquid products, the stock of money pools (FCDs) increased their share from 3.2% (quarterly average of 2020) to 5.2% (March 2022). Regarding short- and medium-term saving instruments, products denominated in units of purchasing power (UVAs) increased their share from 4.9% to 9.1% in the same period.

- **The percentage of adults with a credit product within the broad financial system (BFS) increased 2.4 p.p. during the first half of 2022 /** Public banks and non-financial credit providers (PNFCs) added new individuals to credit products. Particularly, PNFCs recorded a significant increase in the number of borrowers, but their average stock was considerably lower than those of financial institutions (FIs). PNFCs' borrowers mainly consisted of young, female individuals with no formal jobs and no financing from FIs.

- **The change in gender gap in the structure of financial institutions' authorities had a statistically significant impact on the gender gap in access to credit** / Between 2004 and 2021, women gained share both in executive positions in FIs and in the number of credit assistance received. However, gender parity has not been achieved yet. Greater participation of women in leadership positions has a favorable impact, particularly, on FIs whose clients do not get paid through those FIs. The age and seniority of those who hold leadership positions

also have a significant impact. The report also discusses the results dependence on certain characteristics of the users—such as whether users collect their wages in a bank account and non-performing ratios—, the type of FI involved, the status of the economic cycle, the development of the COVID-19 pandemic effects, and the importance that society assigns to moving towards a situation of greater parity between genders in terms of assuming responsibilities and enjoying rights.

- **Financing granted to MSMEs exhibited an upward trend, both in terms of number of companies and the stock of financing /** Between December 2019 and December 2021, the number of MSMEs—mostly micro and small companies—having a credit line within the BFS grew by 222,000. The share of financing provided to MSMEs in total loans granted to the non-financial private sector rose by 16 p.p. to over 50%.

Table of Indicators | Financial inclusion in Argentina

	Indicator	Latest data	2016	2017	2018	2019	2020	2021	2022
Infrastructure	PDAs	Jun-22 (1)	25,306	26,553	29,050	30,726	44,454	50,270	53,912
	PDAs every 10,000 adults	Jun-22 (1)	7.7	8.0	8.6	9.0	12.9	14.4	15.3
	Percentage of municipalities with at least one PDA	Jun-22 (1)	39.6%	40.7%	41.4%	41.9%	47.0%	52.3%	52.3%
	Percentage of adults living in a municipality with at least one PDA	Jun-22 (1)	91.0%	91.2%	91.2%	91.3%	92.1%	92.5%	92.5%
Accounts	Percentage of the adult population with at least one account	Jun-22	-	-	-	82.7%	92.9%	95.2%	98.5%
	Percentage of the adult population with at least one single banking code (CBU)	Jun-22	-	77.9%	80.4%	81.5%	90.7%	91.3%	95.2%
	Percentage of the adult population with at least one CBU (women)	Jun-22	-	-	80.7%	85.2%	90.9%	91.8%	95.5%
	Percentage of the adult population with at least one CBU (men)	Jun-22	-	-	80.1%	77.6%	90.5%	90.8%	94.8%
	Percentage of the adult population with at least one single virtual code (CVU)	Jun-22	-	-	-	6.8%	24.1%	46.7%	50.5%
	Percentage of the adult population with at least one CVU (women)	Jun-22	-	-	-	5.3%	23.2%	47.4%	50.8%
	Percentage of the adult population with at least one CVU (men)	Jun-22	-	-	-	8.4%	25.1%	45.9%	50.1%
Transactions	Number of payments on debit cards per adult	Jun-22 (2)	1.7	1.9	2.2	2.6	3.0	4.1	4.7
	Number of payments on credit cards per adult	Jun-22 (2)	2.1	2.2	2.3	2.4	2.1	2.4	2.4
	Number of transfers from CBUs per adult	Jun-22 (2)	0.2	0.2	0.3	0.4	0.8	1.3	2.0
	Number of transfers from CVUs per adult	Jun-22 (2)	-	-	-	-	0.1	0.6	0.9
	Number of cash withdrawals through ATMs per adult	Jun-22 (2)	2.3	2.6	2.7	2.9	2.7	2.7	2.6
Savings	Number of time deposits every 10,000 adults (in ARS/UVAs)	Jun-22	759	771	925	841	908	985	1,300
	Number of time deposits every 100 account holders (ARS/UVA/USD)	Jun-22	-	-	-	11.0	10.6	11.3	14.2
Credit	Percentage of adults with financing from FIs	Jun-22	36.0%	37.3%	37.9%	37.0%	35.4%	35.2%	35.6%
	Percentage of women with financing from FIs	Jun-22	34.0%	35.0%	35.8%	35.3%	33.6%	33.4%	34.1%
	Percentage of men with financing from FIs	Jun-22	39.3%	39.7%	40.0%	38.8%	37.3%	37.0%	37.2%
	Percentage of adults with financing in the BFS	Jun-22	49.0%	49.9%	50.5%	49.7%	47.8%	51.1%	53.3%
	Percentage of women with financing in the BFS	Jun-22	45.0%	46.6%	47.3%	46.6%	45.0%	49.0%	51.4%
	Percentage of men with financing in the BFS	Jun-22	53.2%	53.3%	53.7%	52.7%	50.6%	53.2%	55.0%

Note:
(1) Including FIs' PDAs (branches, mobile branches, automated teller machines (ATMs), self-service terminals (TASs) and supplementary agencies of financial services (ACSFs)) and non-FIs' ATMs.
(2) Monthly average for each year.

Local Context

Economic activity, employment and income continued giving way to more favorable economic conditions for financial inclusion in the first half of 2022. However, not all the relevant variables exhibited the same performance. Gross domestic product (GDP), employment and private consumption continued expanding in the period,[1] whereas real wages remained relatively stable.[2] Benchmark interest rates broadly showed an upward trend in the first half, while the incentives that contribute to the process of financial inclusion prevailed.

Increased economic activity improves indicators of use of retail MPEs, credit access and saving. In turn, the development of real wages in the first half set higher limits to the mean stock of financing and to the average amount of transactions carried out using MPEs. Prudential regulations and customary practices set limits to the installment-to-income ratio of loans. Therefore, the stability of income in the first half of 2022 is not expected to increase installments and, therefore, the stock of financing. This scenario is constructed on the basis of the term and interest rates of the loans. Finally, an increase in interest rates contributes to strengthening savings in domestic currency. However, this may exert an adverse effect on credit demand if regulatory incentives to increase credit for consumption or investment are discontinued.

In this regard, the BCRA raised the monetary policy interest rate in the period under analysis to safeguard the value of investments in domestic currency.[3] At the same time, the BCRA resorted to its tools for financial regulation to boost production and MSMEs' and households' access to credit. This measure sought to counteract the decision already adopted on the raise in the monetary policy interest rate. The Credit Line for Productive Investment (LFIP)—credit for business purposes—was extended until September 2022, under preferential financial conditions for MSMEs.[4] Also, the BCRA reduced minimum cash requirements for FIs that granted credit to MSMEs under the LFIP.[5] As for credit to natural persons (NPs), the BCRA continued setting interest rate ceilings on credit card financing granted by banks.[6] It also sustained incentives for consumer credit in installments by reducing minimum cash requirements under the "*Ahora 12*"

[1] The seasonally-adjusted monthly economic activity estimator (EMAE) averaged 148.5 in the first half of 2022, similarly to comparable periods of economic expansion (2013, 2015, 2017) before the COVID-19 pandemic (National Accounts. Monthly Economic Activity Estimator, National Institute of Statistics and Censuses (INDEC)). In turn, GDP growth averaged a quarterly rate of 6.5% year-on-year (y.o.y.) in the first half of 2022. (National Accounts, Economic Activity Progress Report, INDEC). Thirteen million people were employed in the 31 top urban agglomerations in the second quarter of 2022, the highest record ever (Labor Market. Socioeconomic Rates and Indicators (Permanent Household Survey (EPH), INDEC). Private consumption grew in the first two quarters of the year and, at constant prices, its share in GDP was larger than that observed in comparable quarters in which the COVID-19 pandemic had the biggest impact.

[2] This development can be seen using a real salary indicator based on the salary index (INDEC) and the consumer price index (CPI) (INDEC). The indicator shows certain fluctuation over the eighteen-month period before June 2022, without following a marked trend.

[3] By the end of June 2022, the annual percentage rate (APR) on 28-day Liquidity Bills (LELIQs) was 52%, up 14 percentage points (p.p.) since the beginning of the year (see Monetary Policy Report, June 2022).

[4] Communication A 7475. As of March 2022, this line had reached 219,000 companies (BCRA). In September, it was extended once again until March 2023 by Communication A 7612.

[5] Communication A 7459 and Communication A 7491.

[6] The interest rate ceiling is applicable to each card account with a financed balance under ARS200,000.

Program.[7] Additionally, the BCRA continued encouraging financial institutions to expand credit for more users by reducing the minimum cash requirements in exchange.[8]

By means of these differentiated policies aimed at certain productive units and NPs, the BCRA seeks to detach their conditions of access to credit with respect to the general conditions. NPs belonging to these segments have less access to bank credit, and their ability to access financing depends significantly on the interest rate. The indicators of credit demand estimated by FIs reveal that households' demand for personal loans and other types of consumer credit was sustained and even followed a slight rise. The increased credit demand by households would largely be explained by a growth in consumption.[9]

The number of households with access to internet (both fixed and mobile access) kept on the rise in the first half of 2022.[10] Access to these services enable clients to access online banking, mobile banking and electronic wallets. These three channels foster, in turn, digital financial inclusion. In the past few years, the BCRA has been working on the expansion of the Payments by Transfer (PCT) scheme, a new MPE that uses the instant transfer infrastructure for payments at stores (both in person or online). The BCRA has recently decided that people may synchronize their bank or payment accounts to digital wallets, regardless of the FIs or payment service providers (PSPs) involved. This measure is intended to streamline this type of transaction. People may use a digital wallet to make PCTs or instant transfers using funds deposited in a synchronized account, without funding the wallet in advance.[11] The expanded PCT scheme provides for security features and fraud prevention measures. FIs and PSPs must implement the necessary mechanisms to prevent suspicious and fraudulent transactions.[12] Finally, all FIs and PSPs offering digital wallet services for making PCTs through a quick response (QR) code must register with the "Registry of Interoperable Digital Wallets."[13]

[7] Communication A 7448 sets out that 40% of financed purchases under the "*Ahora 12"* Program counts to reduce minimum cash requirements in pesos as from February 1, 2022. The interest rate ceiling climbed from 53% in December 2021 to 60.25% in June 2022.
[8] Communication A 7536.
[9] Survey on Credit Conditions (first and second quarter of 2022, BCRA). Some of the reasons lying behind an increased credit demand in the light of the survey are the following: (1) higher income and/or more job opportunities, (2) a larger number of clients operating inside their banks, (3) better interest rates, (4) increased household consumption, (5) increased housing investment.
[10] In the first half of 2022, the average number of residential connections to fixed internet grew by 1.9% y.o.y., whereas the average number of residential connections to mobile internet rose by 9.8% y.o.y. (Services, Internet Access, INDEC).
[11] Communication A 7514.
[12] Communication A 7463.
[13] Communication A 7462,

1. Financial Infrastructure

The physical and digital infrastructures of the financial system play a supplementary role for everybody to access financial services, regardless of their digital profiles.[14] Even though the COVID-19 pandemic caused the pace of financial digitalization to speed up, the increasing trend towards the use of digital financial products and services had already started. Indeed, lockdowns made natural persons (NPs) and productive units swiftly adopt digital services in their everyday life.[15]

The digital channels proved to be more advantageous than brick-and-mortar ones, enabling people to save time in their everyday transactions and offering full time availability. As a result, the number of ATM transactions and the number of branches have fallen down in the past few years, even before 2020.[16]

However, access to in-person financial services, for example through branches, continues to be of utmost importance for certain transactions and user groups, particularly, for people with fewer digital skills. The fast-moving process of digitalization may bring about, or even expose vulnerable sectors of the population to, the risk of exclusion. For this reason, in-person services play a key role in helping anyone encountering difficulty in making digital transactions.[17]

Physical Infrastructure. PDAs are composed of person-to-person points of access (branches and supplementary agency of financial services -ACSFs-) and self-service electronic devices (ATMs and self-service terminals -TASs-). Points of access (PDAs) offer users different types of services. Therefore, both the number and variety of available PDAs have a bearing on coverage quality.

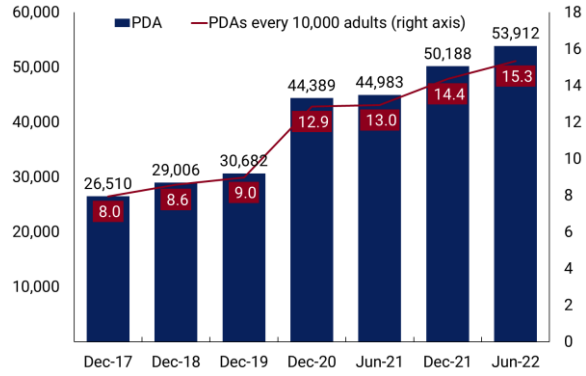
As of June 2022, the financial system included 15.3 PDAs every 10,000 adults, up 6.7% from December 2021. The number of PDAs mainly increased due to a growth of person-to-person channels, which rose by 15.6% against 0.5% recorded by self-service electronic devices. Among person-to-person PDAs, branches—which offer the widest array of products and services—exhibited no significant changes in their number or coverage of municipalities.[18] In turn, the number of ACSFs—which mostly provide bill payment services, and cash withdrawals and deposits—continued on the rise.[19] However, these new PDAs did not expand the coverage of municipalities. This indicator remained virtually stable since December 2021.

[14] Digital profile means individuals' abilities and skills to use technology, and their possibility of having access to technological devices (computers, smartphones, etc.) and internet.
[15] The spread of COVID-19 and lockdowns led to an increase in the number of financial apps downloaded globally by about 30%, i.e. more than 270 million downloads at the peak of the pandemic, Report on Lessons Learnt and Effective Approaches to Protect Consumers and Support Financial Inclusion in the Context of COVID-19, G20/Organisation for Economic Co-operation and Development (OECD) (2021). The sample comprises 71 countries for Android and 56 countries for iOS, covering all regions in the world (Fintech in the Time of COVID-19: Technological Adoption During Crises).
[16] Ibid.
[17] Payment aspects of financial inclusion in the fintech era, Bank for International Settlements (BIS), 2020.
[18] There is a worldwide trend towards a reduction in the number of branches derived from the growth in digital financial services and a cost-cutting strategy carried out by FIs, among other factors. 2020 FAS Trends and Developments, International Monetary Fund IMF) and 2021 FAS Trends and Developments, IMF.
[19] Communication A 7566 set out that FIs may only delegate to ACSFs the following transactions: deposits and cash withdrawals; payment and collection; and payment of social security benefits. Such change becomes effective in November 2022.

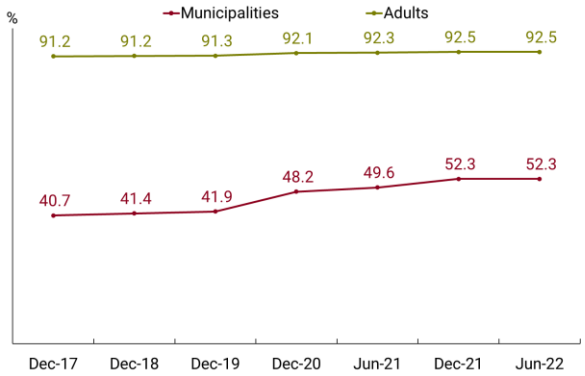
The number of self-service electronic devices slightly increased in the first half of 2022 driven by the installation of new ATMs, while the availability of TASs exhibited no significant changes. In particular, there was an increase in ATMs fitted with biometric readers, which allow for user identification using fingerprints.[20] However, there was a slowdown in the growth of self-service devices, from 1.0% in 2021 to 0.5% in 2022 along the same period. In turn, the increased number of transactions made through electronic means of payment (see section 3.1) revealed that certain transactions that had previously been made in person turned out to be carried out digitally. For this reason, brick-and-mortar infrastructure for rendering in-person services became less important in relative terms.

Chart 1 | PDAs

Number of PDAs



Coverage of municipalities and adults



Note | Graph on the right: percentage of municipalities with at least one PDA and percentage of the adult population living in municipalities with PDAs.
Source | BCRA, networks and INDEC.

The northeastern region (NEA) and Patagonia had the highest percentage of municipalities with at least one PDA—68% and 60%, respectively. At the same time, the provinces belonging to those regions had a different density of PDAs, measured as the number of PDAs every 10,000 adults. Population coverage extends across the country (22 out of the 24 first-order jurisdictions, more than 80% of adults living in municipalities with PDAs). However, the existence of different levels of PDA density reveals differences in the quality of access to the physical infrastructure of financial services among provinces.

Previous IIFs[21] referred to the fact that municipalities with greater population usually have a broader range of PDAs—offering different services—which directly affects coverage quality. The staff's support delivered at the branch of a bank lowers the barriers to the access to financial products and services, especially for vulnerable population, such as the elderly or people with limited digital skills. In this sense, public banks and institutions acting as fiscal agents of provincial governments play an important role as they render services to more vulnerable population in smaller municipalities.[22]

[20] Communication A 7208 established the following implementation schedule: 60% of ATMs had to be fitted with biometric readers by June 2022; and 100% by December 2022.
[21] IIF, second half of 2020.
[22] IIF, first half of 2020.

Table 1 | PDAs and connectivity by province

Region and province		Physical infrastructure			Digital infrastructure			
		PDAs every 10,000 adults	% of mun. with PDAs	% of adults living in mun. with PDA coverage	Internet connections per adult	% of mun. with connection	% of adults in mun. with connection	Download speed (Mbps)
Center	Buenos Aires	13.1	51.3%	97.9%	1.36	86.5%	98.3%	60
	CABA	28.3	100.0%	100.0%		100.0%	100.0%	83
	Córdoba	17.0	53.2%	92.4%	1.29	82.5%	93.6%	46
	Entre Ríos	15.7	52.1%	88.9%	1.15	88.2%	90.4%	33
	Santa Fe	17.2	57.0%	93.3%	1.21	94.3%	95.5%	36
Cuyo	La Rioja	14.3	46.6%	93.1%	1.28	80.8%	84.2%	40
	Mendoza	17.3	45.4%	80.9%	1.05	81.6%	83.3%	22
	San Juan	13.6	39.0%	83.1%	1.03	70.7%	89.5%	11
	San Luis	22.5	47.1%	93.2%	0.98	91.8%	94.0%	21
NEA	Chaco	13.3	84.6%	87.4%	1.07	91.2%	87.6%	42
	Corrientes	13.2	67.5%	84.8%	1.14	94.8%	86.5%	36
	Formosa	10.6	67.7%	83.2%	1.03	90.3%	85.3%	29
	Misiones	12.8	56.8%	74.7%	1.09	73.4%	73.6%	39
NOA	Catamarca	14.0	24.0%	81.9%	1.06	47.4%	87.0%	46
	Jujuy	14.5	29.3%	89.5%	1.04	60.7%	91.3%	27
	Salta	11.0	57.7%	88.9%	1.05	86.9%	91.7%	34
	S. del Estero	10.2	28.5%	70.1%	0.94	77.0%	75.3%	14
	Tucumán	11.3	80.6%	82.4%	1.12	88.8%	82.8%	45
Patagonia	Chubut	14.7	60.9%	95.6%	1.35	89.9%	96.5%	9
	La Pampa	23.2	87.6%	94.8%	1.17	93.3%	95.0%	14
	Neuquén	19.6	80.0%	94.0%	1.63	88.3%	94.5%	40
	Río Negro	17.3	32.9%	89.3%	0.97	75.2%	91.9%	27
	Santa Cruz	17.5	74.1%	97.4%	0.60	96.3%	97.9%	9
	T. del Fuego	19.8	50.0%	98.8%	1.27	66.7%	98.9%	11
National total		**15.3**	**52.3%**	**92.5%**	**1.24**	**82.8%**	**93.5%**	**32**

Note | Mean download speed of fixed internet (Dec-21), number of internet connections by province (Mar-22), municipalities with connection (Aug-22) and PDAs (Jun-22) / "Number of internet connections" groups CABA and Buenos Aires / Connection-related data include fixed and mobile connection / The difference between the percentage of adults living in municipalities with PDAs and connection, and the total adult population encompasses people living in municipalities without PDAs or connection, as well as scattered rural population.
Source | National Communications Authority (ENACOM), INDEC, BCRA and networks.

As of June 2022, 17.1% of municipalities had a combination of PDAs with the widest range of in-person financial services: at least one branch, one ACSF, one ATM and one TAS. These municipalities accounted for 83.3% of the adult population, which means that four out of five people lived in a municipality with the broadest range of in-person financial services. Although the combination featuring the four main types of PDAs is optimal, all other combinations that include at least one branch do not entail a reduction in the offer of services. Therefore, 28.5% of municipalities provided a full range of in-person financial services and accounted for 88.4% of the adult population.

In turn, 15.1% of municipalities had just one type of PDA, either an ACSF or an ATM. Those municipalities offer critical financial services—such as cash withdrawal and deposit—as well as those related to social security. They had smaller populations and accounted for just 1.6% of adults.

Table 2 | PDA combination. Percentage of municipalities and adults by region

Data as of June 2022, stated in %

PDA combination	Center		Cuyo		NEA		NOA		Patagonia		National total	
	Munic.	Adults	Munic.	Adults	Munic.	Adults	Munic.	Adults	Munic.	Adults	Munic.	Adults
ACSF + BRNCH + ATM + TAS	24.4	91.7	11.5	70.4	12.5	58.0	8.2	66.8	12.0	78.3	17.1	83.3
BRNCH + ATM + TAS	0.4	0.1	0.5	0.1	-	-	0.3	1.3	-	-	0.3	0.2
ACSF + BRNCH + ATM	8.8	2.5	6.1	2.9	22.2	17.8	4.6	4.5	17.3	11.9	10.0	4.8
ACSF + BRNCH + TAS	0.1	0.0	-	-	-	-	-	-	-	-	0.1	0.0
BRNCH + ATM	0.9	0.1	0.5	0.0	1.9	0.2	0.9	0.2	1.3	0.1	1.0	0.1
(1) Full services	**34.5**	**94.4**	**18.6**	**73.5**	**36.6**	**76.0**	**13.9**	**72.8**	**30.5**	**90.3**	**28.5**	**88.4**
ACSF + ATM + TAS	0.2	0.0	-	-	0.3	0.3	-	-	-	-	0.1	0.0
ACSF + ATM	5.6	1.1	8.2	7.6	9.8	2.7	10.9	6.2	10.3	2.1	7.9	2.4
(2) In person serv. and electr. dev.	**5.8**	**1.1**	**8.2**	**7.6**	**10.0**	**3.0**	**10.9**	**6.2**	**10.3**	**2.1**	**8.0**	**2.4**
Only ACSFs	9.5	0.6	12.8	2.7	4.6	0.9	6.2	1.3	2.8	0.5	7.9	0.9
Only ATMs	3.0	0.2	5.1	0.6	15.2	2.2	9.2	2.4	15.8	0.9	7.2	0.7
(3) One type of PDA only	**12.6**	**0.8**	**17.9**	**3.3**	**19.8**	**3.1**	**15.4**	**3.7**	**18.5**	**1.5**	**15.1**	**1.6**
(4) Other combinations	**0.8**	**0.1**	**-**	**-**	**-**	**-**	**0.3**	**0.1**	**0.5**	**0.0**	**0.5**	**0.1**
(5) With PDA	**53.7**	**96.4**	**44.6**	**84.4**	**66.4**	**82.2**	**40.5**	**82.8**	**59.8**	**93.9**	**52.1**	**92.5**
(6) With no PDA	**46.3**	**3.6**	**55.4**	**15.6**	**33.6**	**17.8**	**59.5**	**17.2**	**40.3**	**6.1**	**47.9**	**7.5**

Note | The percentage of adults with no PDAs encompasses those living in municipalities with no PDA coverage and scattered rural population.

Source | BCRA, networks and INDEC.

In regional terms, ACSF + branch + ATM + TAS is the most frequent combination in municipalities of the Center region, whereas the other four regions more often display less varied PDA combinations. However, the widest combination is that which covers the largest population in each region. Cuyo, NEA, the northwestern region (NOA) and Patagonia exhibited a higher percentage of municipalities covered by just one type of PDA (ACSF or ATM) compared to the Center region. In these four regions, there was a more limited range of in-person financial services available to their populations.

Digital infrastructure. The demand of digital financial services accelerated amid lockdowns in the COVID-19 pandemic and made financial institutions (FIs) develop electronic channels that would meet users' needs by improving user experience and offering new functionalities. The main FIs, both public and private, updated their online banking platforms and mobile apps—mobile banking and digital wallets—for clients to make electronic transfers, pay for products and services, channel savings and make investments, among other transactions. The possibility to make these transactions digitally reduces the need for users to go to a PDA.

However, certain conditions are required for making digital transactions, for example, ownership of electronic devices, internet connection and digital knowledge. These factors may turn into barriers to having access to and using digital financial services.[23]

As of August 2022, 82.8% of municipalities (accounting for 93.5% of the adult population) reported having at least one fixed or mobile internet connection. However, this does not necessarily mean that all the people living there had connection. Fifty-five percent of municipalities reported having

[23] For example, Gershenson et. al (2021) found that the variable used to measure internet access has positive effects on measures of financial inclusion (see Fintech and Financial Inclusion in Latin America and the Caribbean).

both types of connection. In turn, 90% of the total population, which lives in the municipalities mentioned above, is covered by both fixed and mobile connection.[24] As of December 2021, 64.2% of urban households had access to a computer; 90.4% had access to internet; 88 out of 100 people used a mobile phone; and 87 out of 100 used the internet.[25] These figures indicate that the ownership of devices with internet connection was widespread.

Although connection is widespread across the country, there are some differences among provinces. As it happened with brick-and-mortar infrastructure, the Center and Patagonia regions exhibited higher-level indicators of municipalities with internet connection (fixed, mobile or both), of adults living in municipalities having connection, and higher connection/adult population rates. NOA, NEA and Cuyo had less favorable indicators of connection, which restrained the access to digital financial services that could supplement and make up for a relatively smaller brick-and-mortar infrastructure.

In addition to connection, there are other factors having an impact on the access to and use of digital environments, and, therefore, limiting the use of digital financial services. If the internet service is limited, the connection may be insufficient for people to make online or mobile banking transactions.[26] The province of Tierra del Fuego illustrates this point: 99% of the adult population lived in municipalities with fixed and mobile internet connection, with 1.27 connections per adult (above the national mean). Nevertheless, the download speed was almost three times as low as the national average.[27]

Also, investments and costs required for making financial services available vary depending on whether they are offered on a brick-and-mortar, or digital infrastructure. As for the physical infrastructure, investment and maintenance costs are covered by FIs, while the digital one entails costs for both FIs and users. For users, access to digital financial services requires an initial investment in equipment and a monthly fee. Therefore, the price of communication services may be a barrier to the use of these channels.

Finally, connection and physical infrastructure indicators in provinces such as Santiago del Estero and Chubut were below the national mean. The coverage of access to and use of physical and digital infrastructures may be affected by geographic (e.g. surface), demographic (distribution of the population) or economic aspects. There is still a long way to go to improve access to in-person and digital financial services across the country, particularly in disadvantaged provinces.

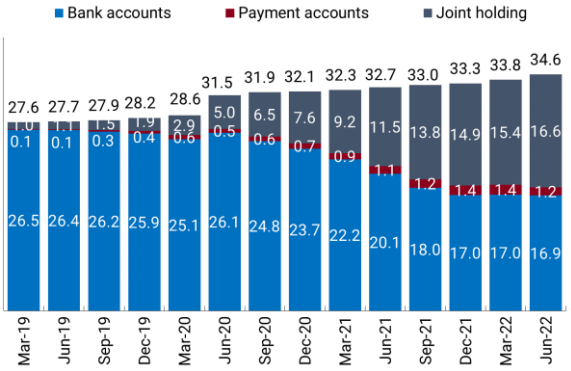
[24] The remaining 10% lives in municipalities with no connection; in municipalities which report one type of connection only; or else represents scattered rural population.
[25] Access and Use of Information and Communication Technologies. EPH, fourth quarter of 2021.
[26] Factors such as type of connection (ADSL, cable modem, dial up, optical fiber, satellite, landline phone, 3G, 4G, etc.), download speed, stability, and type of contract (prepaid, postpaid or mixed) have a bearing on the quality of the service.
[27] The United States' Federal Communications Commission recommends a minimum download speed of 1 Mbps for general browsing and email.

2. Account Holding

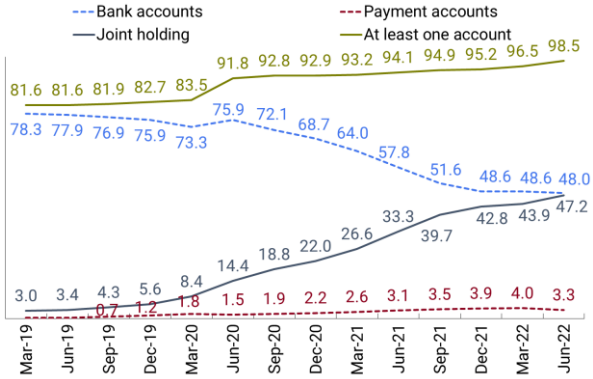
In the second quarter of 2022, 34.6 million natural persons (NPs) had at least one account. This means that 98.5% of the adult population had an account to make payments and transfers, and to save and/or invest. It represents an increase of 1.3 million in the number of NP account holders compared to December 2021 and of 1.9 million compared to June 2021, which represents a quarterly rise of 4% and an increase of 5.8% y.o.y.

Chart 2 | Bank and payment account holding

Million persons



Percentage of adult population



Note | Bank accounts: people who only hold this type of account i.e.: they hold no payment account; payment accounts: people who only hold payment accounts; joint holding: people who hold both bank and payment accounts; at least one account: people with at least one bank account and/or payment account.
Source | BCRA, based on Compensadora Electrónica S.A. (COELSA) and INDEC.

At an international level, countries still have challenges in determining the number of people with at least one deposit account. Such task was even harder more than ten years ago, when financial inclusion was at a germinal stage. The absence of demand-side data made the World Bank collect information through Global Findex in 2011. In spite of the limitations of the data so gathered[28] the survey gave an insight into the number of accounts held and other financial inclusion indicators.

As data on this subject are scarce, Global Findex is used as a benchmark because it reaches a significant number of countries, allowing us to compare financial inclusion variables at an international level; the rest of the context is meant to be similar. Argentina is in an advantageous position to accurately identify the population holding bank and payment accounts by drawing on the statistics available at the BCRA.

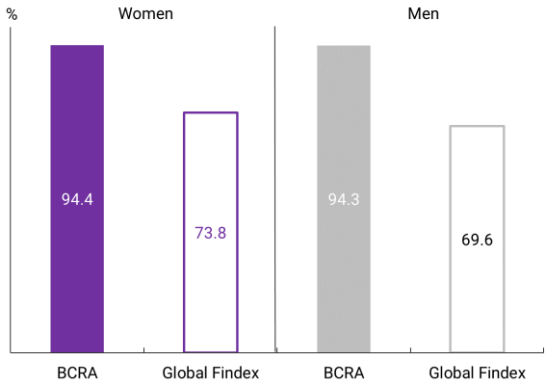
All in all, the results of Global Findex 2021 survey[29] state that 72% of adults in Argentina held an account in 2021. This figure is more than 20 p.p. lower than the BCRA's figure (see Chart 2 on the right[30]) but the gap narrowed from the survey conducted in 2017, when the figure reported by

[28] Some of the limitations of the survey include the number of respondents (about 1,000 per country), the data collection method (phone-based surveys in Argentina) and the possibility that respondents might not give true information regarding their financial products.
[29] Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar. 2022. The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19. Washington, DC: World Bank. The "account.t.d" variable was considered. It includes both accounts at financial institutions and payment service providers (see definition provided in Country-level data).
[30] 2021 average = 95.2%, COELSA.

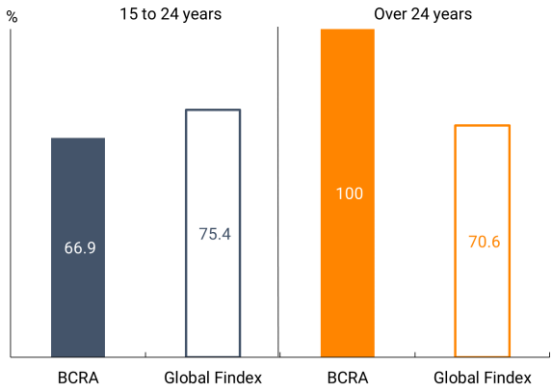
Global Findex was 51% against 80.4% reported by the BCRA.[31] Despite being high, the gap between account holding and customers' awareness of their holding decreased by 7 p.p. in the past few years.

Chart 3 | Account holding: BCRA vs. Global Findex data

By gender



By age group[32]



Note | BCRA's data as of December 2021 and Global Findex 2021.
Source | BCRA, based on COELSA, and World Bank.

The answers broken down by gender and age showed figures that differ by over 23 p.p. from the global indicator. This was the case of accounts held by men—24.8 p.p. gap—and by people over 24 years—29.4 p.p. gap. Taking into account that data came from different sources, such gap might be attributed to customers' unawareness of holding an account, confusion with another financial product (DC), or their preference not to reveal the information surveyed. Interestingly enough, people in the 15-24 age group actually held fewer accounts than the number reported. Such a gap reversal might be explained by the number of accounts held in environments other than those surveyed or debit card extensions (e.g. cards given by parents to their daughters or sons).

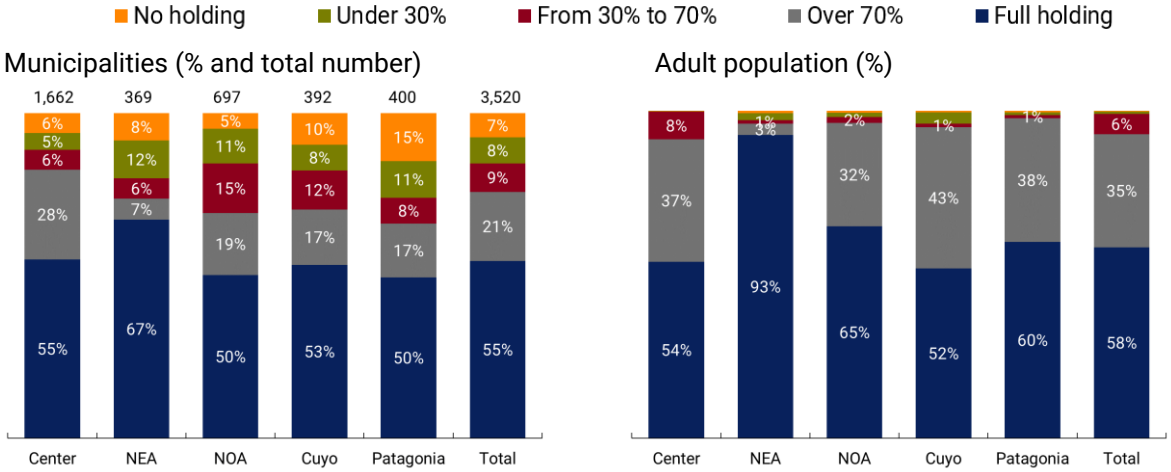
Analysis at municipality level. As of June 2022, 55% of municipalities had full coverage of accounts, i.e. all adults had at least one account (19 million people). On the other end, just 8% of municipalities had coverage under 30%, and 7% of municipalities had zero coverage (both groups represent a total of 330,000 people).[33]

The NEA region had the largest share of municipalities with full coverage of accounts, ranging from 12 p.p. to 17 p.p. above the other regions. The adult population of such municipalities represented 93% of NEA's total. The largest share corresponded to the adult population holding only bank accounts (57%), followed by those holding both bank and payment accounts (41%).

[31] Data as of March 2018, COELSA.
[32] The sum of holdings in the "over 24 years" group is higher than 100 because the population was estimated based on the national census of 2010.
[33] See Note on Methodology.

The indicator of municipalities with full coverage in the Center region was relatively low but 70% and more of the adult population in some of its municipalities had at least one account. At the same time, the percentage of municipalities where adults had no accounts is low.

Chart 4 | Municipalities distribution according to the account coverage degree of their population
Data as of June 2022



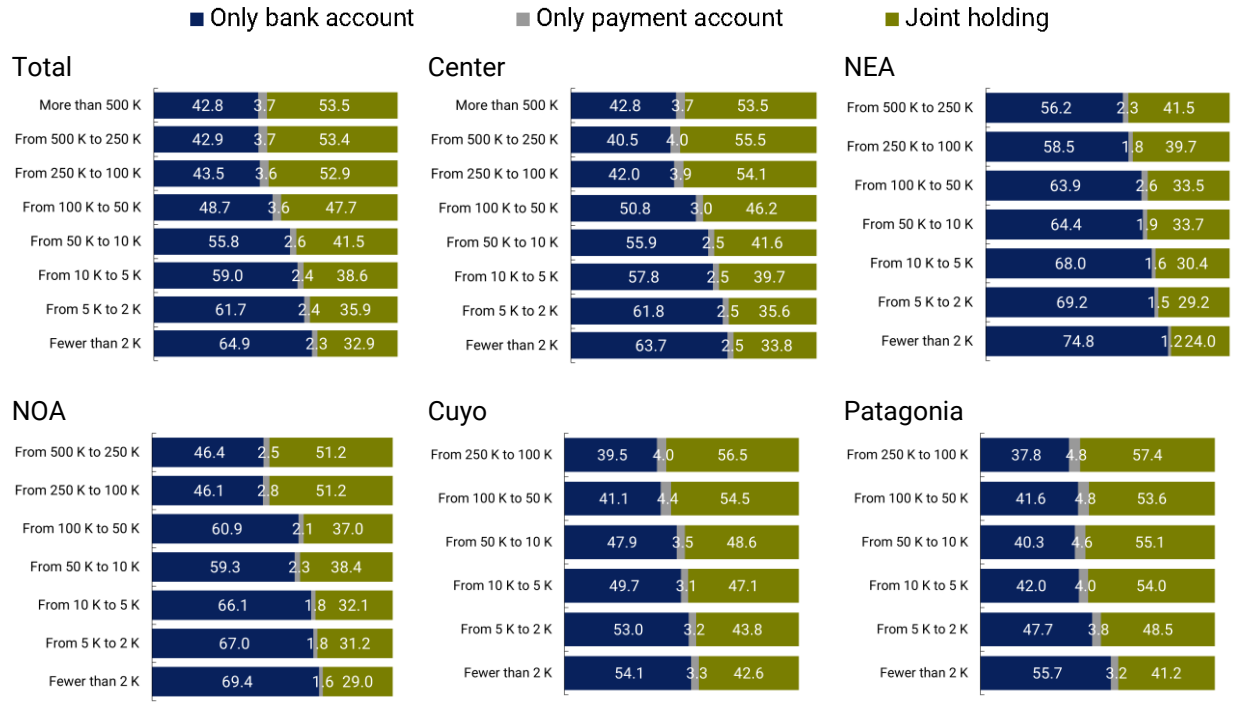
Note | Holding means the percentage of adults with at least one (bank or payment) account.
Source | BCRA, COELSA and INDEC.

The segmentation of municipalities in terms of the adult population revealed that the number of adults holding both bank and payment accounts prevailed in areas with a larger population. This happened across all regions, except for NEA, where people holding only a bank account prevailed. The most populated municipalities exhibited higher development indicators, which might be associated with higher income and education levels,[34] whereas social programs and plans in the least populated municipalities have an impact on the bankarization process.

Actually, as the number of adult inhabitants decreased, the share of people holding only bank accounts increased. Even though this occurred across all regions, the prevalence of people holding only bank accounts begins in different segments in terms of the adult population. In the Center, NOA and NEA regions, the change begins in municipalities with a significant number of adults (more than 50 thousand), whereas in Cuyo and Patagonia the predominance was recorded in municipalities with fewer than 5 thousand adults. This shows the increasing penetration of payment accounts in municipalities with different segments in terms of the adult population, though with varying intensity depending on the region involved.

[34] See Section 1, Financial Infrastructure, Financial Inclusion Report. Second half of 2021.

Chart 5 | Share of the adult population holding accounts based on the combination of accounts and number of adults living in municipalities
Data as of June 2022 and expressed in %



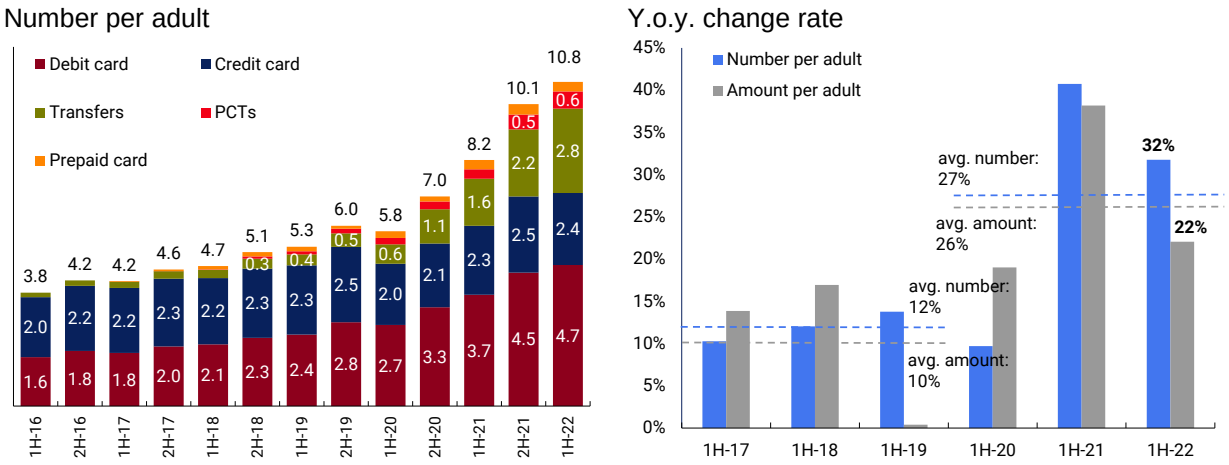
Source: BCRA, COELSA and INDEC.

3. Electronic Means of Payment and Savings and Investment Methods

3.1. Electronic Means of Payment

The use of MPEs continued on the rise in the first half of 2022. The number of transactions and the amounts traded per adult[35] continued rising above the figures that had been recorded before the COVID-19 pandemic. Each individual made on average 10.8 monthly payments using MPEs, setting a new record—twice as many as the figure for the same period of 2019. This is mainly explained by higher numbers of electronic transfers and transactions on debit cards (DCs).

Chart 6 | Transactions through MPEs



Note | Monthly average of transactions in each period. H: half. Graph on the right: the lines represent the average of the first half of 2017-2022.
Source | BCRA, INDEC and networks.

Such performance confirms that digital channels were chosen for everyday transactions to a greater extent. This was also explained by the increased number of respondents from Argentina who reported having made one digital payment[36] in 2021 (59%) against the results of 2017 (32%) as surveyed by Global Findex 2021.[37] The growing use of smartphones and internet (88 and 87 out of 100 people, respectively)[38] and the high coverage of accounts brought about initial favorable conditions for consumers to make use of MPEs to a higher extent.

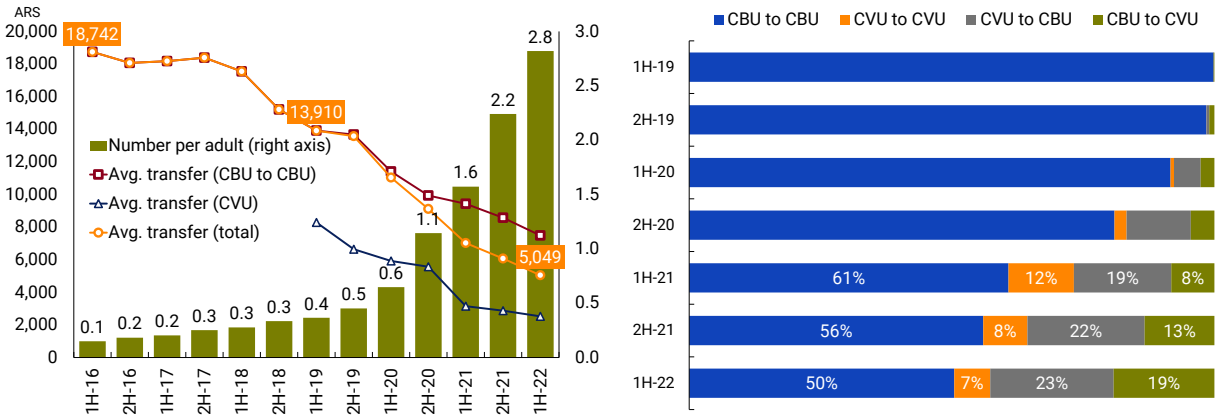
As for merchants, a combination of new collection channels, the use of advanced technology, along with shorter periods for collecting sales and lower costs furthered the adoption of MPEs.[39] This way, merchants who already collected their sales through MPEs could now provide

[35] Amounts are expressed at constant prices of January 2019 (CPI, INDEC, January 2019 = 100).
[36] "Digital payment" includes the use of mobile money, a debit or credit card, or a smartphone for paying from an account; or the use of the internet for payment of bills, e-commerce or in-person purchases, in the past year. It includes payments from an account held at a FI or at a PSP.
[37] The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19, 2022, Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, World Bank.
[38] Access and Use of Information and Communication Technologies. EPH, fourth quarter of 2021.
[39] Fees for merchants on credit card payments fell from 2.5% in 2017 to 1.8% as from 2021. As for DCs, fees went down from 1.2% to 0.8% from then onwards. By mid-2021, the period for depositing funds in the merchant's account for purchases on DCs shrank to one business day. Source: Trade and Industry Federation for the City of Buenos Aires (FECOBA).

customers with new options for paying and improve the conditions of the existing ones. Those who had not drawn on MPEs before could offer electronic payment options at a low cost and in a manner consistent with their infrastructure.[40]

Electronic transfers.[41] Transfers from both bank and payment accounts continued setting historical records. In the first half of 2022, each adult made, on average, almost 3 transfers per month, virtually twice as many as the transfers made in the first half of 2021 (1.6). This growth was mostly explained by the performance of transfers made on mobile devices, both from bank accounts (using mobile banking) and payment accounts.[42] Transfers made on mobile devices contributed 45.5 p.p. to the total change of 79.5%, and those made on other kinds of devices contributed 34 p.p. In turn, the amount transacted per adult also rose against the first half of 2021, though at a slower pace compared to the increased number of transactions. The number of transactions has grown at a faster pace than the amounts transacted since 2018.

Chart 7 | Average transfers and share according to the origin and destination account



Note | Graph on the left: average transfers per transaction at constant prices of January 2019 (IPC January 2019 = 100). "Number per adult" includes all electronic transfers. Graph on the right: number of transactions. CBU to CBU: bank transfers. CVU: transfers involving a payment account as a payer and/or payee account. H: half.
Source | BCRA and INDEC.

Such performance was reflected on a decrease in the average amount of total transfers in real terms, in interbank transfers (CBU to CBU) and in transfers involving a payment account. This shows that the arrival of CVU transfers was not the only factor that made the total average value decline. This could be explained by NPs' increased preference for making everyday payments by

[40] The MPE market is usually viewed as a two-sided or bilateral market (OECD, 2009, Two-Sided Markets). There are two groups of users in these markets (consumers and merchants) and they are connected through a platform (e.g., a payment scheme). One distinctive feature is the existence of indirect externalities between both groups. This is so much so that the use of MPEs becomes more valuable for consumers (merchants) if a greater number of merchants (consumers) accept (use) electronic payments (and the other way around). In Argentina, the number of people with (bank or payment) accounts increased in the past few years, as well as the number of merchants that accepted MPEs using newly-adopted methods (mPOS device, QR code). In both cases, the increase gave insight into the more than proportional expansion in the number of transactions made with MPEs compared to the number of users involved (number of accounts and POS terminals).
[41] In this report, electronic transfers are those referred to as "push" transactions in the Report on Retail Payments (second half of 2021). Therefore, PCTs are not considered here, but in the following subsection.
[42] Transfers from a payment account are assumed to be made on a mobile phone. Based on the information released in the Report on Retail Payments and the Standardized tables of statistical series (debser file) of the BCRA, 92% of transfers from a payment account (using a CVU) are estimated to have been made on a mobile device (second half of 2021).

transfer, which usually entail lower values. As mentioned before, the increased use of smartphones and the internet were key factors in the growth of transactions for lower amounts. Also, instant transfers are the most convenient MPE in terms of fees, accreditation deadline and security.

In the first half of 2022, transfers between bank and payment accounts continued gaining share, which flags the importance of interoperability among different providers. The number of "cross-transfers" tripled (1.2 monthly transactions per adult) compared to the same period last year, sharing a high of 42% in the total.

Table 3 | Electronic transfers according to the origin and destination account

Origin account-target account		Number per adult				Amount per adult			
		1H-21	2H-21	1H-22	Contribution to y.o.y. Δ (%)	1H-21	2H-21	1H-22	Contribution to y.o.y. Δ (%)
(1)	CBU to CVU	0.1	0.3	0.5	**26.2**	319	613	888	**5.3**
(2)	CVU to CVU	0.2	0.2	0.2	**-0.1**	212	218	211	**-0.02**
(3)	CVU to CBU	0.3	0.5	0.7	**23.6**	1,336	2,002	2,351	**9.4**
(4)	CBU to CBU	1.0	1.3	1.4	**29.8**	8,963	10,723	10,550	**14.7**
(4.a)	OB	0.6	0.8	0.8		7,213	8,519	8,165	
(4.b)	MB	0.3	0.4	0.6		1,166	1,636	1,942	
(4.c)	ATM	0.1	0.1	0.0		585	568	444	
(1+2+3+4)	**TOTAL**	**1.6**	**2.2**	**2.8**	**79.5**	**10,830**	**13,556**	**14,000**	**29.3**
(2+3+4.b)	**Via mobile dev.**	**0.8**	**1.1**	**1.5**	**45.5**	**2,714**	**3,856**	**4,504**	**16.5**

Note | H: half. The figures represent monthly averages for each six-month period, and amounts are stated at constant prices of January 2019 (CPI January 2019 = 100). The share in the total change is calculated as the contribution of each type of transfer (1 to 4) to the change in total transfers.
Source | BCRA and INDEC.

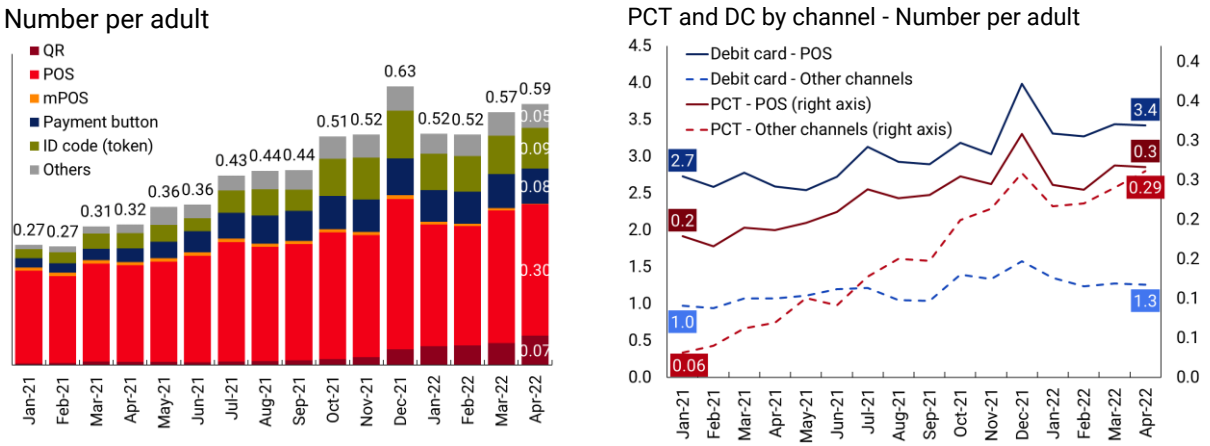
Interbank transfers (CBU to CBU) also reached a high in the series (1.4 transactions per adult per month), nearly 50% up against the same period last year. Mobile banking continued to stand out, with 3-digit y.o.y. change rates in the past five six-month periods. In the first half of 2022, 3 out of 7 bank transfers were made through mobile banking; and they amounted to 2 out of 7 a year earlier. Although the number of these transfers also gained share in the total (18% in the first half of 2022 vs. 13% in the first half of 2021), they increased more moderately in terms of amounts. This might mean that transactions through mobile devices involving higher amounts did not change as much, and that people preferred and/or felt more confident making transfers through online banking.

As a whole, bank transfers through mobile banking and transfers from a payment account reached 52% of total electronic transfers in the first half of 2022. This meant a 4 p.p. rise from the figure reported in the first half of 2021. As mentioned in the latest IIF,[43] the enhanced availability of mobile applications offered by FIs and PSPs might explain a better performance of transfers made through these channels.

[43] Financial Inclusion Report. Second half of 2021.

Payments by Transfer (PCTs).[44] In the first half of 2022, every person made on average 0.6 PCTs—up 83% against the first half of 2021. The amounts transferred per adult increased by 24% against the same period 2021.

Chart 8 | PCT transactions



Note | Latest data available on PCTs broken down by initiation method: April 2022. "Other channels" include all transactions made through channels other than a POS device.
Source | BCRA and INDEC.

Like in 2021, a significant number of transactions (52%) was made through a POS device in the first four months of 2022.[45] Despite a 35% rise from the first four months of 2021, PCTs made through a POS device lost ground to those carried out through more innovative methods, such as an interoperable QR code. PCTs made through a QR code increased nine-fold from the first four months of 2021, representing just 9% of total transactions in the first four months.

In April, clients' PCTs by QR code were mostly made from bank accounts (88%), while merchants mostly credited the funds so transferred to payment accounts (65%).

Payments with DCs or PCTs are similar for users in terms of the funds movement. In both cases, they involve an instant debit to a bank or payment account, as the case may be. For a merchant, the benefits of PCTs over traditional payment schemes with a DC include instant crediting of funds for a fee not exceeding 8 per thousand (which could be over 6% outside this scheme).

In turn, most PCTs are made through a POS device.[46] It is useful to compare the development of payments on DCs within traditional payment schemes to that of PCTs, broken down by the method of initiation (POS devices or other channels) to determine whether there is a substitution effect or whether there is room for growth for both products. As for POS-initiated PCTs, the trend and change rates of the past 15 months were rather similar to those of traditional payments on DCs through a

[44] PCTs are instant transfers used to pay for goods and/or services as agreed with the bank or PSP involved. The bank or PSP provides tools for merchants to receive PCTs, which are governed by commercial rules different from those applicable to instant transfers (Report on Retail Payments, BCRA).
[45] Latest data available for the series broken down by PCT initiation method: April 2022.
[46] PCTs may require clients to get a card linked to an account (in practice, DCs) or the standardized payment interface (including payments by QR code). The PCT instrument and the different initiation methods may be found in Section 3.2. of the Consolidated Text on National Payment System - Transfers - Supplementary Regulations (particularly, paragraphs 3.2.2. and 3.2.7.).

POS device (their levels were significantly different as each instrument has been in place for a different period of time). This might indicate that both payment tools supplement each other.

In contrast, PCTs using more innovative channels show a better performance compared to those payments made on DCs through schemes other than POS devices (remotely, through a mPOS device and QR codes). As both types of payments involve QR codes, this new trend might show merchants' preference for PCTs to a larger extent, deriving benefit from cutting-edge technologies that bring about more favorable terms of cost and collection times. Globally speaking, payments based on instant transfers schemes such as PCTs gained momentum in the COVID-19 pandemic, but transactions remain low when compared to credit cards and DCs.[47]

Cards. In the first half of 2022, DCs continued to be the most used MPE among the adult population. From a total of 10.8 payments per month, 4.7 were made on DCs, including (fixed or mobile) POS devices, QR codes and remote payments, up 27% against the same six-month period of the previous year. However, the changes in amounts per adult were more modest, like in most MPEs.

This way, the average amount of each DC transaction in the first half decreased once again after the rises observed in 2020 as a result of the COVID-19 pandemic. The downward trend of the average amount of transactions in the past 6 years along with an increase in their number show the progressive penetration of DCs in everyday transactions, which involve relatively smaller amounts. This is evidenced by a higher percentage of the population who reported in the Global Findex survey having used their DC (37% in 2021 vs 22% in 2017).[48] The payment of supermarket sales followed a similar trend: the amount paid on DCs climbed 9% against the same period a year earlier—share of 28.7%[49] compared to 27.1% in the same six-month period of 2021.

In the first half of 2022, for the first time since the outbreak of the COVID-19 pandemic, the monthly average payments on DCs through a POS device grew above transactions made through other channels (remote payments, mPOS devices and QR codes), both in the number of transactions per adult (29% vs 22%) and, more significantly, in the amounts per adult (20% vs 1%). This change in trend may be due to the fact that everyday life returned to normal, in-person payments regaining share, though not to pre-pandemic levels. The in-person component (POS devices) seemed to stabilize at around 7 out 10 payments on DCs per adult, whereas the figure observed before the health crisis was 90%. A slight increase was also observed in the stock of active POS devices in the past 12 months (6%), for a total of 501,985 units with at least one transaction in June 2022.

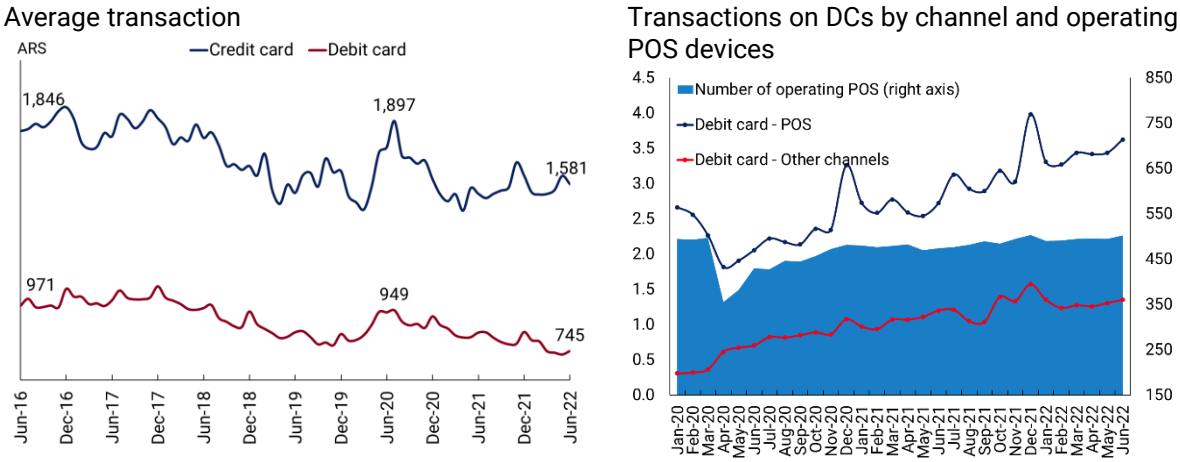
In turn, payments on credit cards exhibited a modest development compared to major MPEs in the first half of 2022. Each individual made, on average, 2.4 transactions per month, credit cards being the third MPE used behind DCs and transfers. The improvement achieved in the past year,

[47] Developments in retail fast payments and implications for RTGS systems. Committee on Payments and Market Infrastructures. December 2021.
[48] Fifty-six percent of the population reported having a DC in 2021 compared to 47% in 2017, based on Global Findex, 2017 and 2021, World Bank.
[49] Survey at Retail and Wholesale Supermarkets. Total Sales at Current and Constant Prices, By Group of Items and Jurisdiction.

after the decline witnessed in 2020 in the context of the pandemic, increased slightly in the first half of 2022 (4% y.o.y.). Amounts per adult followed a similar trend.

As it happened with the mean amount of DC payments, the amount of each payment on credit cards also fell in the past few years. The reason lying behind this decline might be different from that of DCs. Credit cards may not only be used for payment but also for financing purchases. Therefore, the development of this instrument might be connected with the economic cycle to a larger extent (see section on Credit to Natural Persons).

Chart 9 | Debit and credit card transactions, and stock of operating POS devices



Note | Graph on the left: average amount at constant prices of January 2019 (CPI INDEC, January 2019 = 100). Graph on the right: DC transactions (POS devices – other channels) per adult. "Operating POS devices" involve those who made at least one transaction in the month and are stated in thousands. DCs: debit cards.
Source | BCRA and INDEC.

Considering these two purposes, credit cards entail higher costs for both users and merchants compared to DCs. Anyhow, it is profitable to use and face the credit card costs when people need to purchase high-cost goods for consumption under financial conditions commensurate with their credit capacity. In contrast, DCs appear to be used for everyday purchases for relatively smaller amounts, which means that both products complement each other. This might account for the continued gap among both average receipts. Moreover, virtually all adults have a DC considering that almost the entire adult population holds a bank account. However, a significantly lower percentage has a credit card.

The higher number of payments made by each adult using a DC compared to credit cards—observed in Argentina from 2019—is also evidenced in other economies. It might be an indication of increased digitalization of the payment system.[50] DCs generally channel more retail transactions than those requiring financing, such as those made on credit cards.

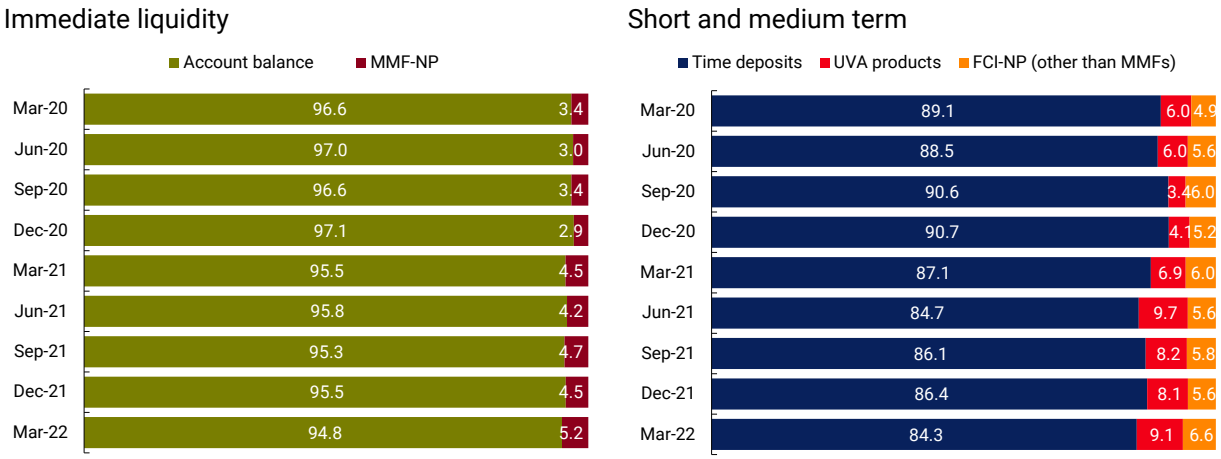
[50] The following database compares transactions with MPEs per inhabitant at country level: Payments and financial market infrastructures, BIS.

3.2. Savings and Investment Methods

The previous IIF[51] discussed different forms for natural persons (NPs) to save and invest in instruments offered by FIs and PSPs. NPs may opt for allocating money to different savings and investment products, according to their liquidity, terms and risk/return ratio goals.[52]

As for immediate liquid products, account balances explained almost the entire category. As regards short and medium-term products, most of the stock corresponded to TDs (average term of 30-45 consecutive days). This means that NPs basically save and invest in short-term products, thus giving priority to liquidity over the other goals.

Chart 10 | Share in stock of NPs' savings and investments products
Data expressed in %



Note | Account balances and time deposits comprise deposits in domestic and foreign currency / MMF-NP (Money Market Funds in which natural persons invest): value of the equity of the estimated MMF subscribed by NPs / FCI-NP (other than MMFs) (mutual funds subscribed by NPs other than MMFs): value of the equity of the estimated FCI other than MMFs subscribed by NPs / Time deposits: including those not denominated in UVAs.
Source | BCRA and Argentine Chamber of Mutual Funds (*Cámara Argentina de Fondos Comunes de Inversión*, CAFCI).

However, in the past quarters, there was an increase in alternative products that offer simultaneously liquidity and term parameters comparable with those of the products under analysis along with higher nominal returns. MMFs are used as an alternative to manage liquidity in an account, and UVA-denominated products represent an alternative to time deposits, whose return is expressed as a nominal rate. MMFs accounted for about 3.2% of stocks of immediate liquid products in the quarterly average in 2020 (Chart 10, left), and rose to 4.5% on average in 2021, reaching a maximum of 5.2% in March 2022. A similar trend is observed in UVA-denominated products, which went up from a quarterly average of 4.9% of short and medium-term products in 2020 to 9.1% in March 2022.

These savings products are denominated in UVAs and seek to keep the purchasing power of money.[53] These products include: (i) Time deposit without an early termination option (TD-NoET);

[51] Financial Inclusion Report. Second half of 2021.
[52] In this section, amounts are expressed at constant prices of January 2019 (CPI, INDEC, January 2019 = 100).
[53] It is adjusted based on the reference stabilization coefficient (CER), which follows the CPI evolution.

(ii) Time deposit with an early termination option (TD-ET); and (iii) savings account (SA). The minimum savings term is 90 consecutive days, except for the product mentioned in (ii) above, which offers an early termination option once 31 days have elapsed; the minimum amount required in all cases is rather low. These two features, along with the possibility of keeping the purchasing power of money, are essential for NPs to make decisions about savings or investment.

Table 4 | Main features of UVA-adjusted savings products

Attributes	Time deposit with early termination option (TD-ET)	Time deposit without early termination option (TD-NoET)	Savings account (SA)
(1) Target population	NP	NP and LP	NP
(2) Minimum term	90 days		
(3) Early termination option	Yes, after 30 days	No	No
(4) Unit of account	UVA		
(5) Deposit and settlement	Pesos		
(6) Minimum investment	Very low		
(7) Return	UVA change + 1% NAR (min.)	UVA change + freely-agreed rate	UVA change + freely-agreed rate
(8) Channels to make TDs	Electronic + teller window		
(9) Launch date	Jan-20	Sep-16	Sep-16

Note | Regulations that created these products: TD-NoET: Comm. A 6069; TD-ET: Comm. A 6871; SA: Comm. A 6494.
Source | BCRA.

a. Money Market Funds. MMFs subscribed by NPs increased in terms of the following: equity, the number of offering FIs and PSPs, and the number of funds available in the market. FIs offering MMFs to NP accountholders stood for 83.7% of deposit accounts in pesos in the financial system, whereas PSPs represented 84.2% of payment accounts.[54] This means that most NPs holding an account in the financial system or at a PSP have access to MMFs. However, MMFs represented a small share in NP's liquidity management options—5.2% of stocks of immediate liquidity products.

MMFs are low-risk, immediate liquidity investment products, which are adequate for anyone wishing to invest in the short term, even if these conditions entail lower returns.[55] These attributes foster the use of MMFs to obtain a nominal yield on liquidity in the short term, which serves for affording households' current expenses. In 2021, MMFs yielded 35.8% on average, and rose to 18.4% in the first half of 2022.[56]

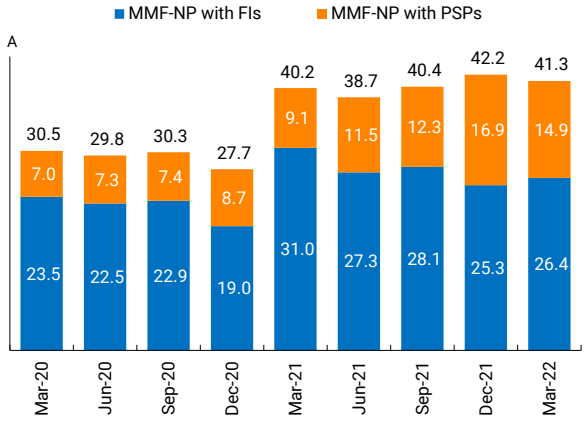
Between March 2020 and March 2022, the equity value of NPs' MMFs grew by 35% in real terms.[57] Although MMFs managed through FIs represented a significant share in the period (~70%),[58] NPs' FCDs managed through PSPs stood out as their equity value doubled. It should be noted that PSPs, unlike FIs, are not required to offer other savings and investment options, such as traditional and UVA-adjusted time deposits. Broadly speaking, PSP-account holders are young, live in the most populated municipalities, exhibiting better indicators of development,

[54] Information obtained from FIs' websites in July 2022. Twenty-three FIs offered MMFs, 19 of which are private banks and 4 are public banks.
[55] CAFCI - Glossary.
[56] Monthly Summary on Mutual Funds, CAFCI. Dec-2021 and Jun-2022.
[57] In this section, balances are expressed at constant prices of January 2019 (CPI INDEC, January 2019 = 100).
[58] These balances are estimates, as many funds are not exclusively related to agent institutions.

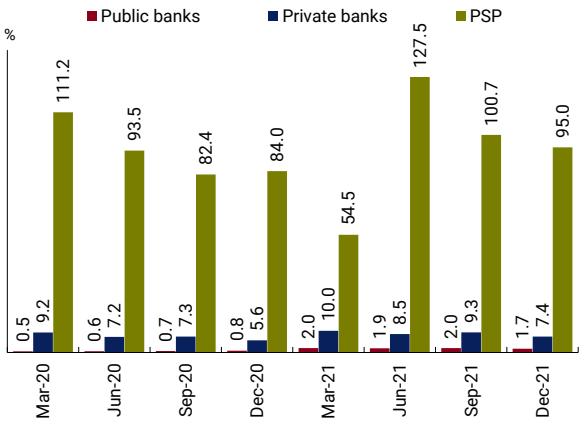
infrastructure, transactionality, and financial skills. As observed in the low average stocks typical of this type of investments, the dynamic referred to above is expected to be driven in part by the actions taken by people of that segment, i.e., using this investment tool as a complement to financial services provided by FIs.[59]

Chart 11 | Liquidity management and saving through FCDs

Equity value of NPs' MMFs



Relationship between equity value of NPs' MMFs and NPs' account balance per institutional group



Note | Chart on the left: data stated in billions of pesos, MMF-NP at FIs and PSPs: Equity value of estimated MMFs subscribed by NPs at FIs or PSPs. Stocks are expressed in constant pesos of January 2019 (CPI January 2019 = 100).
Source | BCRA and CAFCI.

Furthermore, MMFs are gaining share as an option to manage liquidity over account balances, though at different levels depending on the environment where the MMF is subscribed. As for FIs, this is happening both in public and private banks, with significant differences in levels. This might be explained by various factors, such as the account holder's profile, the life of each product in each FI and the possibility of subscribing MMFs through electronic channels, among other factors.

It should be noted that the greater use of digital financial services during the COVID-19 pandemic contributed to including new products in electronic environments and to expanding the use of those that had already been available, such as MMFs. As for PSPs, the possibility of subscribing FCDs in digital environments and the characteristics that streamline subscription and redemption processes had a significant impact on liquidity management, as the NPs' balance in payment accounts is, on average, similar to the balance allocated by NPs to MMFs.

b. UVA-adjusted savings products. As of March 2022, the total balance of these products accounted for 9.8% of the total stock of time deposits made by NPs, and 8.6% of the NPs' account balances.[60] NPs used these products as a short- and medium-term option to a larger extent in the past two years to safeguard the purchasing power of savings:

[59] See Chart 2 in section 2 of this report: just 3.3% of the adult population exclusively held an account at a PSP.
[60] The total stock of time deposits made by NPs includes time deposits in pesos and those adjusted by UVAs without an early termination option.

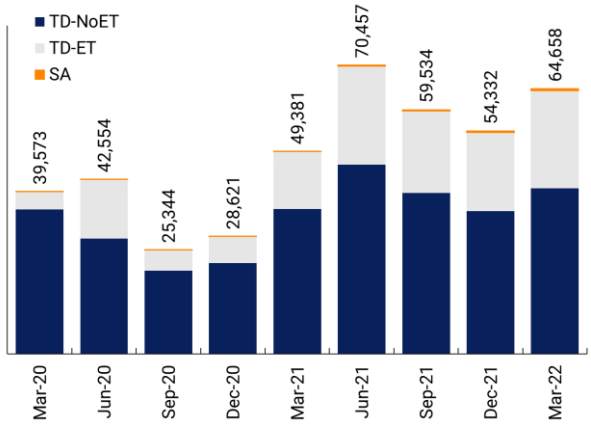
- The total stock of UVA-adjusted products grew over 60% in real terms between March 2020 and March 2022. TD-ETs significantly increased from a very low level and accounted for 36% of the new stock of UVA-adjusted products. Products without an early termination option rose by 16%.

- The ratio of NPs' stock of UVA-adjusted products to account balances[61] doubled, going up from 4.5% in March 2020 to 8.6% in March 2022. In turn, the ratio of NPs' UVA-adjusted products to stock of time deposits increased over 50%. It should be underscored that NPs' account balances and stock of TDs significantly rose in the period.

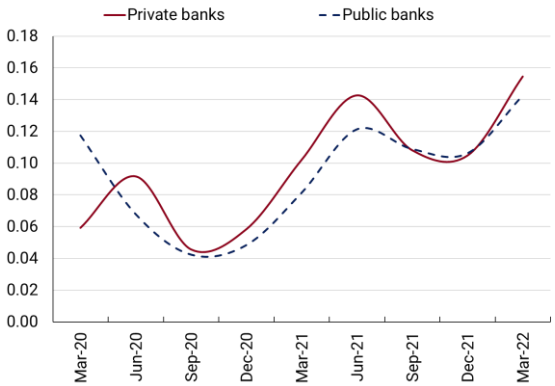
- TD-ETs started to gain share over other short-term saving products: (i) for every ARS 100 of stock in TD-NoETs, TD-ETs recorded ARS 55, reaching the minimum value of ARS 25 in September 2020; and (ii) for every ARS100 of stock in time deposits not adjusted by UVAs, TD-ETs recorded ARS 4; this ratio was ARS 2.25 a year earlier.

Chart 12 | UVA-adjusted saving products held by NPs

Balances in millions of pesos as of January 2019



Ratio of stock of UVA-adjusted products balances to time deposit balances



Note | The disaggregation of statistics on savings does not provide NPs' stock of TD-NoETs separately. Considering the product's characteristics, NPs' share in this product is expected to be significant.[62]
Source | BCRA and CAFCI.

Moreover, UVA-adjusted products slowly started to gain share from a low level over traditional time deposits. This phenomenon, which is observed in both public and private banks, is connected with the early termination option, the possibility of making time deposits through electronic channels, and the preservation of savings' purchasing power.

However, the use of savings and investment products is positively related to customers' income and educational levels.[63] People with lower income and educational levels usually have fewer digital skills.

[61] Including bank and payment accounts.
[62] Based on a survey across the websites of the top 10 FIs in terms of stock of deposits, 70% of FIs offer UVA-adjusted time deposits without an early termination option to companies.
[63] Chart 64. Survey to Measure Financial Capabilities in Argentina.

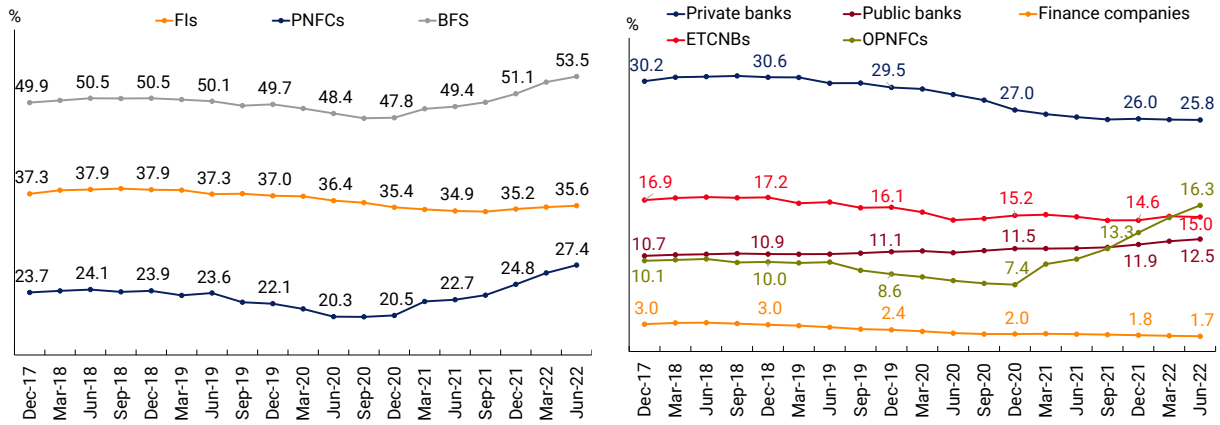
Apart from the efforts to improve social inclusion, reduce informality and increase real wages—which are fundamental for households to make savings decisions—the rising digitalization of financial services paves the way for an expanded use of savings and investment products, though without pursuing universality. This is particularly so in the case of smartphones, which are used across all age groups. In this context, certain characteristics streamline savings and investments, such as low amounts, early termination options (whether at a cost or not), and the possibility of scheduling reinvestment upon maturity. This way, savings and investment products may also increase the outreach to the population and include people who have often found the savings process troublesome.

4. Credit to Natural Persons

Amid a context of continued economic recovery where electronic means of payment (MPEs) and payment service providers (PSPs) have gained share for everyday transactions, credit to natural persons (NPs) clearly followed a positive trend. In this regard, the emergence of new players leveraging on technology to offer financial services is also leading to expanded financial inclusion in terms of financing.[64] [65]

The percentage of the adult population with a credit product within the broad financial system (BFS) increased 2.4 p.p. during the first half of 2022. This is mainly due to the fact that new clients make use of credit products offered by non-financial credit providers (PNFCs). Thus, 53.5% of adults in Argentina had at least one credit product—largely above both pre-pandemic figures and the highest value in the series.

Chart 13 | Share of NPs with financing



Source | BCRA.

Credit providers. Both financial institutions (FIs) and PNFCs showed an increase in the number of adults to whom they provide credit. As for FIs, public banks drove the rise, showing a slight, steady upward trend in the past four years. As regards private banks, the percentage of adults with a credit product kept on going down, though at a slower pace compared to previous quarters.

In the case of other non-financial credit providers (OPNFCs), they succeeded in providing credit support to new users, showing a strong upward trend. As mentioned in the previous IIF,[66] the regulatory change made by the BCRA caused new PNFCs to report credit products on the Debtors' Database of the Financial System (CENDEU) as from December 2020, which in turn led to a surge

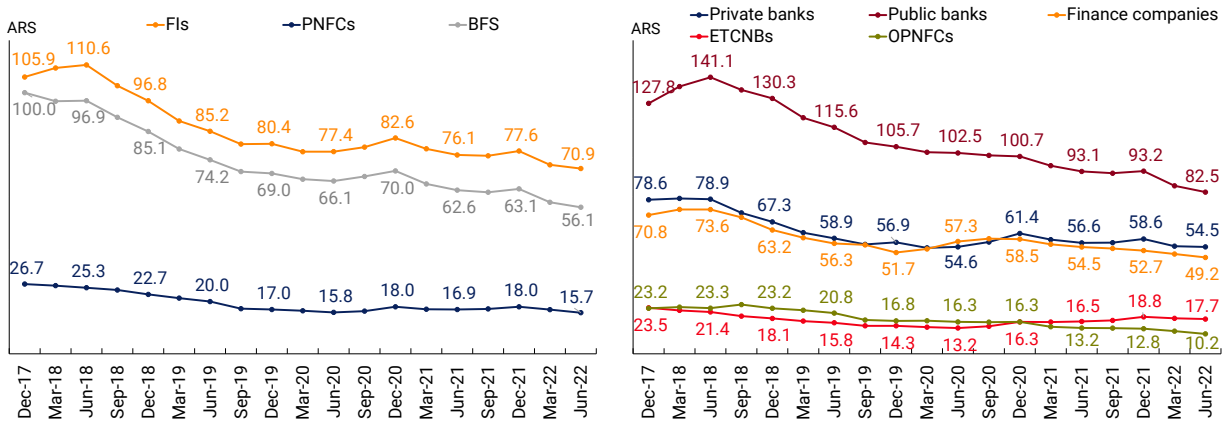
[64] For example, fintechs exploit data retrieved from their e-commerce platforms, such as the number and amount of sales, users' reputation, and the characteristic features of the industry in which users operate. On the basis of this information, fintechs rate their clients before offering them a credit product (see, e.g., Frost, J. et. al. BigTech and the changing structure of financial intermediation. BIS Working Papers No 779).

[65] Amounts are expressed at constant prices of January 2019 (CPI, INDEC, January 2019 = 100).

[66] IIF, second half of 2021.

in the number of borrowers.[67] Then, the number of people with a credit product continued to rise steadily every month. This might mean that the inclusion of more people with a credit product is not related to the regulatory change that set out the reporting requirement. This made the share of borrowers within the BFS in the adult population increase, which means that at least a portion of new borrowers did not have a credit product from FIs at the moment. OPNFCs thus became, after private banks, the second institutional group with the highest percentage of borrowers.

Chart 14 | Average stock per debtor



Note | Stock in thousand constant pesos (CPI base Jan-19 = 100).
Source | BCRA.

Concerning stocks, the total amount financed by the BFS fell by 6% in real terms in the first half of 2022, and by 9% between June 2022 and December 2020.[68] Despite the rise in the number of borrowers, the debt stock was lower. As regards the average amount per debtor, all institutional groups experienced a decrease in stocks in the first half of the year.

In particular, the average stock per OPNFCs' debtor dropped by 21% in real terms between December 2021 and June 2022, and by 38% from December 2020. This group included a significant number of new users with lower average stocks. In the ensemble of FIs, public banks exhibited the largest reduction of average stock in the first six months of 2022 (-11%). The decrease in the average stock per debtor of OPNFCs and public banks somehow counteracts the positive effects of the inclusion of new borrowers. These institutional groups have fewer barriers to financing, and therefore usually serve disadvantaged or informal segments. Lower stocks might indicate a shorter-term debt, in line with the development of personal loans.[69]

[67] Communication A 7146 (dated October 22, 2020) established that companies must be registered whenever they had granted credit products above ARS10 million. Mutual associations and cooperatives must register as long as they have granted financing for at least ARS20 million, insomuch as they have borrowed money from financial institutions.
[68] Amounts are expressed at constant prices of January 2019 (CPI, INDEC, CPI January 2019 = 100).
[69] See Type of credit assistance.

Support from the BCRA. In March 2021, the BCRA launched a stimulus policy on various aspects of financial inclusion.[70] One of the goals of this policy was to foster lending by FIs to NPs and MSMEs having no financing as of December 2020.[71]

The incentives of that policy consisted in the following: (i) *for this group of NPs and MSMEs*: a lower interest rate than that offered on average by credit providers; and (ii) *for FIs*: reduced minimum cash requirements for the stock of credit granted under these conditions.[72] Under this policy, the profile of potential borrowers may be broken down as follows:

i. NPs and MSMEs with no credit products from any credit provider (FIs or non-financial institutions).
ii. NPs with credit products from PNFCs only.

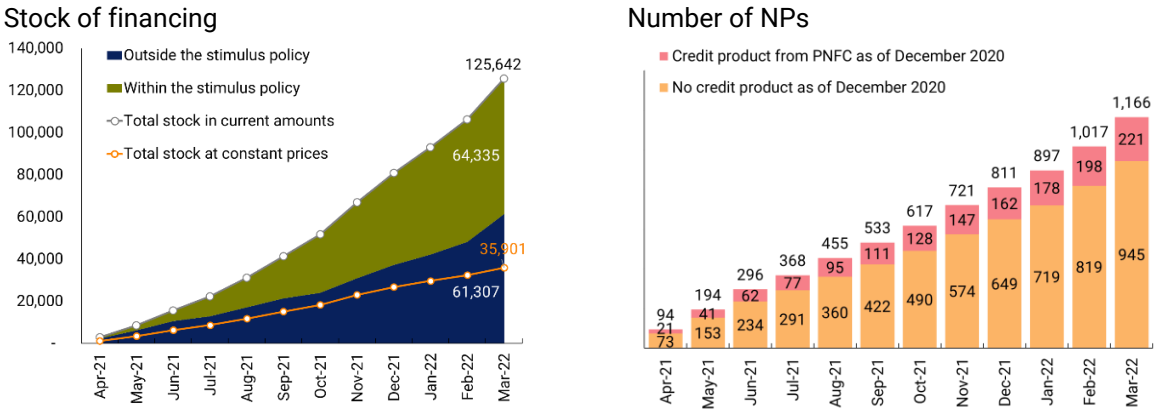
The number of adult NPs without financing provided by FIs as of December 2020 amounted to 22.2 million—64.5% of the adult population. Given that information is subject to certain limitations, it is hard to tell whether people with a credit product received it under the policy or not. Therefore, the analysis below is based on all new NP borrowers[73] having obtained a credit from a FI, regardless of the agreed interest rate. In addition, it will seek to pinpoint some impacts that the policy may have.

a. Stock of financing and participating FIs. As of March 2022, the stock of financing granted by FIs under this policy was ARS 64,335 million.[74] The participation of FIs in this policy grew in the period—23 FIs in March 2022—which comprised a significant number of deposit accounts in domestic currency in the financial system (90%).

As from October 2021, the share of financing granted by FIs under the stimulus policy stood at around 50% of total financing granted by participating FIs to new NP borrowers. In other words, half the financing from these FIs to NPs without a credit product from FIs in December 2020 was granted under the stimulus policy. Private banks participated in this policy to a larger extent than public banks, which have historically held credit portfolios focused on low-income segments.

[70] For further details, see "Exhibit 1 / Regulatory Incentives to Improve Financial Inclusion in Argentina".
[71] Communication "A" 7254, paragraph 1.1.
[72] The maximum annual interest rate depends on the FI providing credit. Annual percentage rates (APRs) on loans granted in October 2022 ranged from 77%—maximum APR for FIs in groups A and B, and subsidiaries of global systemically important banks (G-SIBs)—to 93.5%—for the remaining FIs.
[73] The term "new NP borrowers" refers to NPs who did not have a credit product from a FI as of December 2020 and had, in any of the months under study, a credit product from a FI falling under the scope of the stimulus policy.
[74] Reporting Regime on Minimum Cash Requirements (RI-EM).

Chart 15 | Financing of new NP borrowers



Note | Graph on the left: stock in millions of pesos. "Total stock at constant prices" considers prices of January 2019 (CPI January 2019 = 100). Graph on the right: in thousands. "Under the stimulus policy" refers to stock granted by FIs to clients with no credit product from a FI as of December 2020.
Source | BCRA.

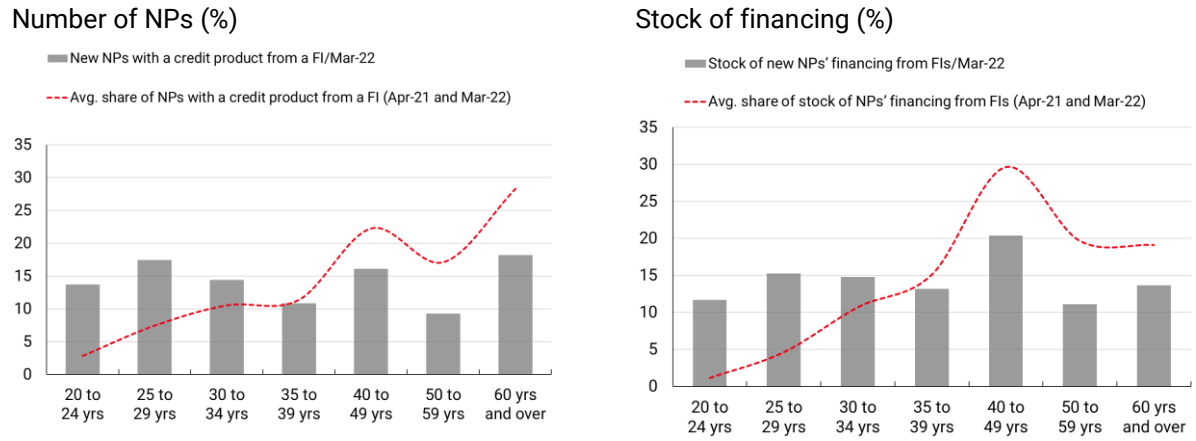
b. New NPs with a credit product from a FI. Until March 2022, participating FIs granted financing to nearly 1.2 million NPs[75] that did not have a credit product from a FI as of December 2020. Eighty-one percent of them did not have any credit product from any credit provider, while the remaining 19% had credit products from a PNFC. The share of new NP borrowers (broken down by age and gender) in total NP borrowers with a credit product in the financial system evidences some effects that the policy may entail.

b.1. Age group. Slightly over 55% of new NP borrowers belonged to the 20-39 age group. That figure greatly differs from the average percentage of NPs of that age group (32.5%) with respect to the total number of NPs with financing from FIs in March 2022. The stock of financing paints a similar picture. In turn, a high portion (86%) of these new NP borrowers in this age group had no credit products from any credit provider.

The age-oriented distribution of NPs with a credit product started to move away from the distribution of total NPs with a credit product from a FI over time, with younger age groups gaining share. However, the proportion of the 20-39 age group with a credit product from a FI improved 0.9 p.p. from April 2021 to March 2022, but it was not enough to reach the level of older age groups.

[75] That figure includes new NP borrowers with a credit product from a FI compared to December 2020 in each of the months analyzed. This figure differs from those mentioned at the beginning of the section, where metrics refer to net changes, i.e., both new NP borrowers and NPs who no longer had a credit product.

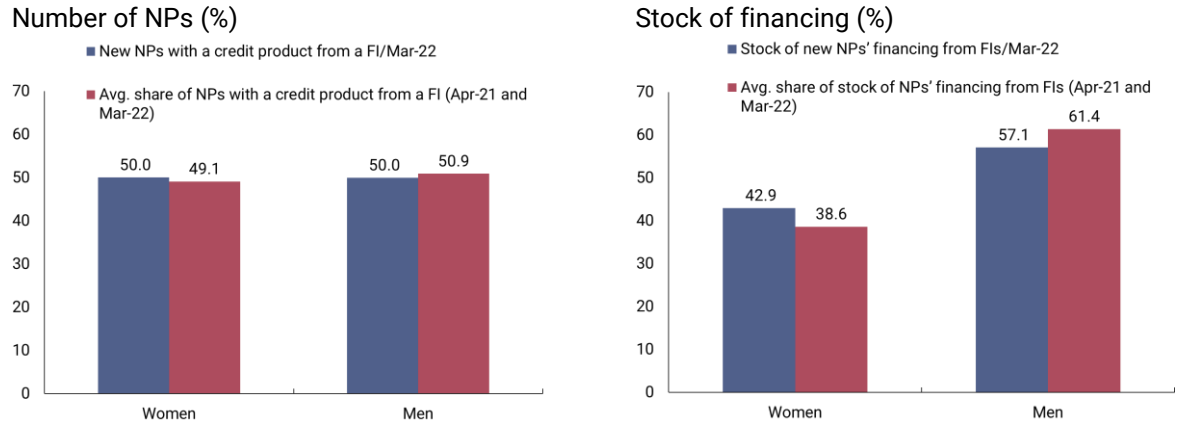
Chart 16 | New NPs with a credit product from a FI. Distribution by age group



Note | The bars and the dotted line add up to 100%.
Source | BCRA.

b.2. Gender Half of the new NP borrowers with credit products were women and the remaining ones were men as of March 2022. In the case of women, this proportion is slightly above the gender share in total NPs with a credit product from a FI. As for the stock of financing, women's share in new credit products was also above women's share in the stock of financing within the financial system.[76]

Chart 17 | New NPs with a credit product from a FI. Gender distribution.



Note | The bars of a similar color add up to 100%.
Source | BCRA.

As it happened with younger people, a very high portion (82%) of new female borrowers had no credit products from any credit provider. Between April 2021 and March 2022, the share of women with a credit product from a FI in the adult population climbed 0.5 p.p.

To sum up, there was a high level of FIs' participation in the incentives policy—their financing so granted sharing 50% in total financing to eligible NPs under this policy. It could also be stated

[76] See Table 2, IIF, second half of 2021.

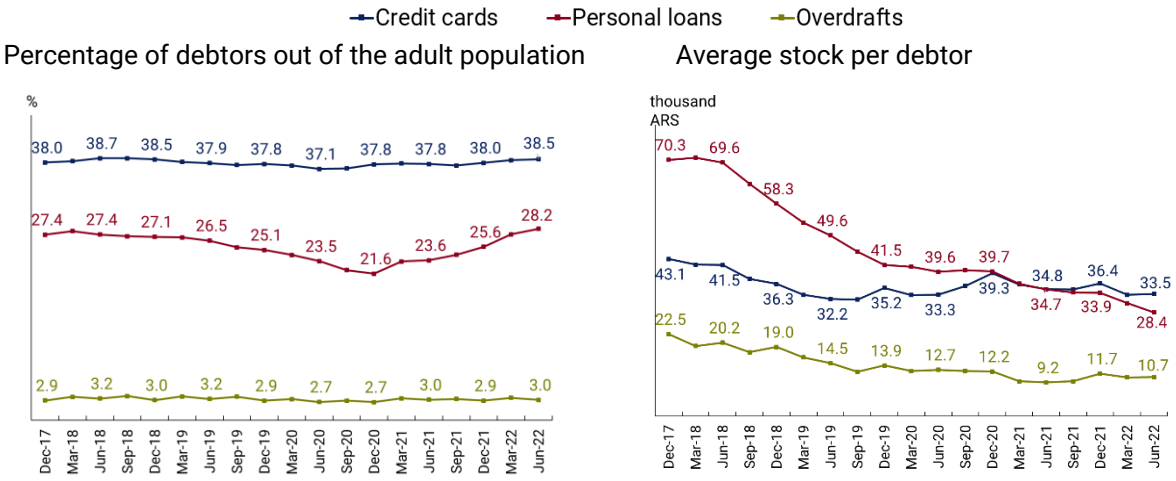
that the incentives policy caused FIs to grant more financing to younger and female NPs, with a greater impact on the former.

Type of credit assistance. The share of adults having access to financing on a credit card increased 0.5 p.p. in the first half of 2022 after remaining relatively stable. This development is in line with the recovery of credit cards used as a method of payment (see section 3.1). This rise took the indicator closer to the high of the series recorded in June 2018. However, the average stock per debtor in real terms fell 8%.

The percentage of adults with at least one personal loan grew by 2.6 p.p. in the first half of 2022, hitting a record high in the series. This increase was driven by the inclusion of new users of credit products from OPNFCs. Within the OPNFC group, the providers that intensively use technology for granting personal loans gained share.

These digital OPNFCs offer users different financial services that supplement one another and explore new forms of financing (e.g., purchases in installments, payment of goods combining different methods[77]), with a positive impact on the number of people with financing. Despite the increased number of people with personal loans, the average stock fell considerably and hit a low—16% in the first half of 2022 (above the 15% reduction observed between December 2020 and December 2021).

Chart 18 | Funding from the BFS by type of assistance



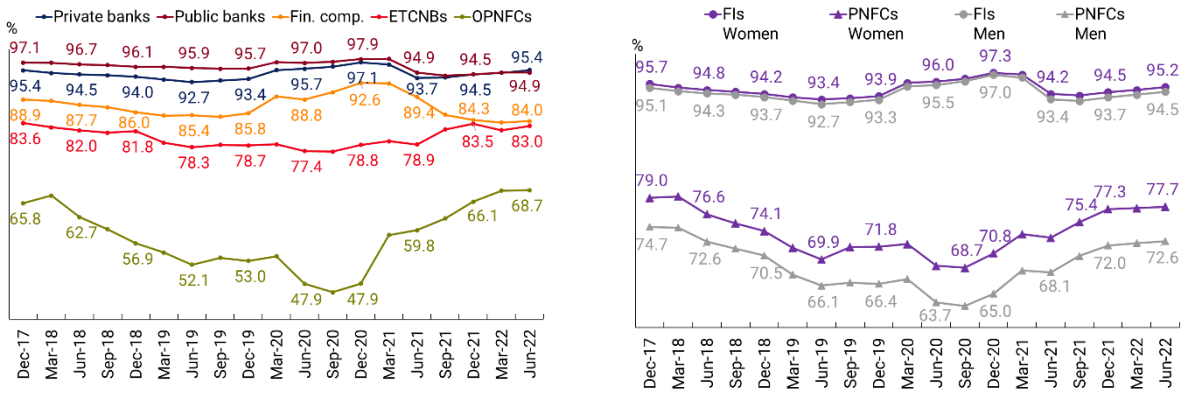
Note | Stock in thousand constant pesos (CPI base Jan-19 = 100).
Source | BCRA.

Situation of debtors. In June 2021, the scheme whereby debtors' classification criteria were relaxed in the context of the COVID-19 pandemic came to an end.[78] From then on, the percentage of FIs' performing borrowers was slightly above pre-pandemic levels (93.6% in Dec-19 vs. 94.8%

[77] In the first case, the provider or the FI offers users a credit product for an amount equal to the purchase made. In the second case, a portion of the purchase of goods may be paid out of funds deposited in an account held at a payment service provider that provides payment accounts (PSPCP), and the rest by using other payment methods, such as a debit or credit card.
[78] Communication A 7245 reinstated debtors' classification based on the delinquency parameters existing prior to the COVID-19 pandemic.

in Jun-22). At institutional level, the performance ratio of private banks improved, while that of public banks worsened, thus making the ratio of performing debtors of both groups reverse.

Chart 19 | Percentage of performing debtors



Source | BCRA.

The percentage of performing debtors of PNFCs clearly improved in December 2020, which was mainly driven by the inclusion from OPNFCs' of new borrowers with better repayment ability. However, the non-performing ratio of PNFCs' debtors remained at a considerably higher level than FIs'.

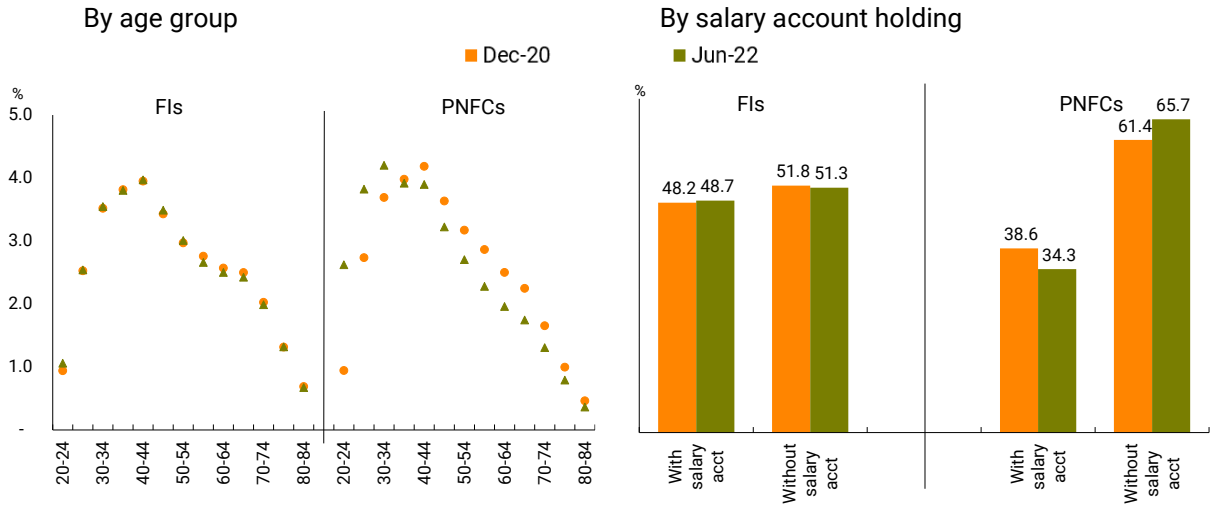
Women continued exhibiting better repayment behavior than men. This was so both for all FIs and PNFCs, especially in the latter. Argentine women's better repayment behavior is in line with a sustained global trend. A report prepared by Financial Alliance for Women covering 26 banks across 24 countries showed that the women's non-performing ratio was lower compared to men.[79] Particularly, men had 5.7% of delinquent consumer loans, while women's ratio only reached 4.2%. Chile's Report on Gender in the Financial System reveals that women systematically show delinquency indicators below those of men, along with more sound financial integrity variables.[80]

Debtors' profile. From December 2020 to June 2022, 2.3 million new users received financing in the BFS, mostly from OPNFCs.[81] In order to determine whether these new debtors belonged to a specific group, certain characteristics were compared in two points in time: December 2020 (first month of mandatory reporting to the CENDEU) and June 2022 (latest data available).

As for FIs, their debtors' profile (age, gender, and salary account holding) did not change significantly. Some interesting data was found in the case of PNFCs. The share of borrowers aged 20-24 almost tripled (0.9% in December 2020 vs. 2.6% in June 2022), whereas the 25-29 age group climbed from 2.7% to 3.8% (40% change). On the other side, the share of borrowers aged 50 and more decreased by 20% on average. This might reveal that new borrowers were predominantly young adults.

[79] The Economics of Banking on Women: 2019 Edition, Financial Alliance for Women, 2019.
[80] Financial integrity variables comprise financial burden (percentage of monthly income used to pay financial obligations) and leverage (number of monthly incomes a debtor would need to pay out their financial obligations). Report on Gender in the Financial system, Financial Market Commission, 2022.
[81] It should be noted that, as from December 2020, PNFCs are subject to mandatory registration before the BCRA and must consequently report any financing granted to the CENDEU. This led to an increase in the number of reporting OPNFCs—from 207 in November 2020 to 232 in June 2022.

Chart 20 | Borrowers by age group and salary account holding



Note | The percentages indicate the share of each category (age group and salary account holding) for all borrowers of FIs and PNFCs at each point in time.
Source | BCRA.

Besides, differences were also found in relation to the gender of borrowers. As of December 2020, 49% of PNFCs' borrowers were men, and 51%, women. As of June 2022, 47% of borrowers were men, and 53%, women. It can be inferred that PNFCs lured more women than men as clients.

The share of PNFCs' borrowers who held a salary account (an indicator of a formal job) fell 11%, which means that new borrowers might broadly be people without a formal job. This change reinforced the trend observed in previous IIFs:[82] PNFCs' borrowers had fewer formal jobs than FIs' borrowers, and their income probably derived from a self-employed job.

Based on this information, PNFCs' new borrowers were mainly young, women, with no formal jobs and having no financing from FIs. These new borrowers had good repayment ability compared to the historical behavior of PNFCs' borrowers, though with average debt stocks clearly lower than those prior to December 2020.

New borrowers' behavior with no prior financing by PNFCs provides the CENDEU with new credit information. This has a positive impact on new borrowers, as they start to build their own credit history, which might in turn streamline access to new credit products in the future under better conditions. Also, greater availability of credit information contributes to the stability of the financial system and to the lending market.[83]

[82] IIF, first half of 2020, and IIF, first half of 2021.
[83] Credit providers use the information compiled by the CENDEU to screen people applying for a credit product and to monitor the risk of their existing credit portfolio to which they are exposed. In turn, credit information enables regulators to identify risks faced by FIs and large creditors, and to discharge their oversight duties. World Bank.

Exhibit 1 / Executive Positions and Access to Financial Institutions' Financing: Analysis of the Role of Gender Gaps

With a view to making an in-depth analysis of previous Financial Inclusion Reports,[84] this exhibit will delve into the relationship between executive positions held by women in financial institutions (FIs)[85] and the credit granted by banks and finance companies according to their clients' gender. A higher share of women in FIs' decision-making bodies may be mirrored in an increase of women's credit access. Thus, this hypothesis will formally be analyzed by controlling for other variables that may also have a bearing on the financing gap for gender reasons.

By studying the incentives to achieve gender parity and to assess the conditions that affect it, we have chosen to work with female/male gaps. This is consistent with the recommendations given to FIs in order to seek for gender parity/gender equality management.[86]

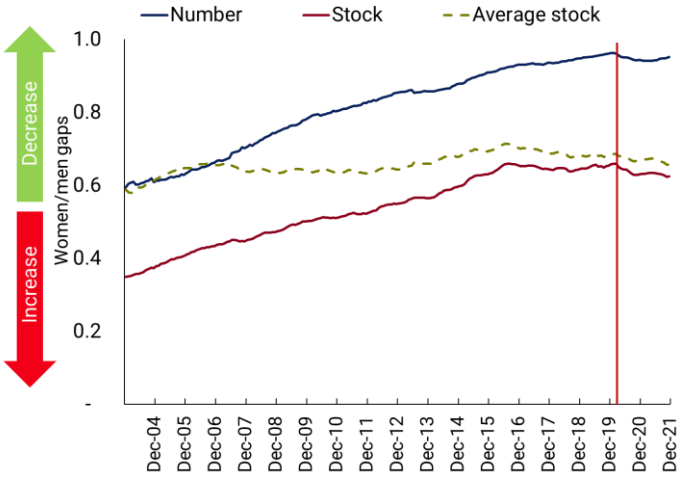
Gender parity refers to the equal participation of women and men in different areas, such as decision-making positions at workplaces or credit access, ensuring the right to equal opportunities and non-discrimination for gender reasons.

We used a scale aimed at measuring the extent to which women are about to achieve gender equality with men. (Relative) gaps are calculated by dividing—in each variable—the value pertinent to women by the one corresponding to men. Thus, if the male dominance is absolute, the value is 0 (zero). All values lower than 1 (one) indicate an unfavorable relative situation for women. In the case of equal conditions or gender parity, the value equals 1. When it is higher than 1, women's variable value is higher than men's.

Chart A.1.1. shows that women's relative situation in terms of credit access is worse than that of men given the gap values were lower than 1 in the 2004-2021 period. The situation is seemingly less uneven when analyzing the relative number of women and men with financing from FIs.[87] However, it worsens significantly when considering the total stock financed and, consequently, an intermediate situation is observed in the average stocks per person.

[84] Financial Inclusion Report, Exhibit 2 / Gender Gaps. Board Positions in Financial Institutions and Credit Access, first half of 2021.
[85] The authorities who hold executive positions in FIs such as board members and managers will be considered in this report.
[86] See Communication A 7100 issued on September 3, 2020, on a series of good practices to improve gender parity and equality in the "Guidelines on Corporate Governance in Financial Institutions".
[87] As the same woman or man can have financing from more than one FI, they will count as many times as the number of FIs from which they have obtained credits. It is worth noting that the report shows the number of times a woman/man matches a FI granting a credit. It makes no reference to the number of women or men with financing. The data is submitted, for consistency, in the same way as in the econometric analysis, which is later carried out for FIs. We calculate average stocks following a similar process.

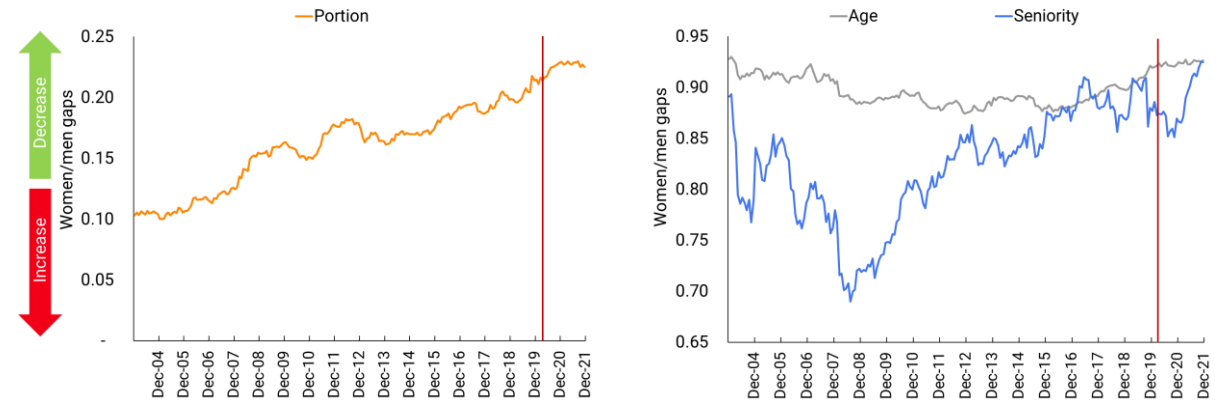
Chart A.1.1 | Gender gaps: Financings[88]



Source | BCRA.

Even though Chart A.1.2 shows a favorable historic downward trend towards bridging the gender gap in FIs' leadership positions, disparity is still significant in the period under analysis. In all cases, gap values are lower than 1. Gaps are wider with regard to the portion of available positions, but narrower for age gaps and seniority gaps in the FI. Women hold a smaller portion of executive positions in FIs. The women holding such positions are younger and have less seniority in the FI than their male peers.

Chart A.1.2 | Gender gaps: Authorities



Source | BCRA.

We used panel data econometrics per FI and month to broaden the analysis, using "in-between" random effect models[89] with a view to answering two types of potentially related, though different, questions properly:

[88]The red line shows the month in which the COVID-19 pandemic broke out in Argentina.
[89] Bartels, Brandon L. (2008). Beyond "Fixed Versus Random Effects": A Framework for Improving Substantive and Statistical Analysis of Panel, Time-Series Cross-Sectional, and Multilevel Data, George Washington University; Bell, Andrew and Jones, Kelvyn. (2012). Explaining Fixed Effects: Random Effects modeling of Time-Series Cross-Sectional and Panel Data, University of Bristol and Mundlak, Yair. (1978). Pooling of time-series and cross-section data, *Econometrica*, 46(1): 69-85.

(1) What happens with the gender gap on the number[90] of women having financing from an "A" FI if the gender gap on the share[91] of women authorities changes from one period to another in the FI? ("in" effect)
(2) What happens with the gender gap on the number[92] of women having financing from an "A" FI and from a "B" FI given they both differ on the same date with regard to the gender gap on the share[93] of women authorities compared to men? ("between" effect)

The analysis is only concerned with FIs reporting at least 500 women debtors and 500 men debtors. The months during which there were fewer than 100 women or men debtors have been excluded. We proceeded in this way to avoid working with observations/FIs that were found at the beginning or at the end of their operations or that were too small to avoid thereby biasing the results due to observations with extreme values.

Gender gaps on credit access are also the result of current and structural factors. For that reason, the analysis includes several explanatory variables: i) some variables regarding the prevailing social context, such as the increasing importance of achieving greater gender parity as considered by society in terms of rights and obligations[94] and the development of the COVID-19 pandemic[95]; ii) the current economic context, considering the potential impact of the economic cycle[96]; iii) specific features of FIs, such as the type of FI, assets, gains/losses, and existence of salary accounts; and iv) differences among FIs and segments of the population, such as the gaps exhibited in non-performing portfolios.

Econometric analysis. In Table A.1.1, the dependent variables are concerned with three different types of gaps related to the: 1) number of people with financing,[97] 2) financed stocks, and 3) average financed stocks. For each dependent variable, we show two different models, which share most explanatory variables, except for those referring to women authority gaps. Models named with letter "A" only take into account the gap on the portion of women's participation vis-à-vis men's, and those named with letter "B" include the gaps on age and relative seniority. When using "in-between" models, the table shows the estimated coefficients for each of the two effects, so as to provide an answer to the two questions posted before in terms of econometrics.

In addition, the "* Salary account" legend indicates the interaction between the variables on authority gaps and on the fact that the FI opens salary accounts for their customers. Thus, the lines with no "* Salary account" legend refer to the estimated values of FIs with no users' salary accounts. The values on the "* Salary account" lines must be added to quantify the results of FIs which open such accounts for their customers.

[90] Stock and average stock.
[91] Age and seniority.
[92] Stock and average stock.
[93] Age and seniority.
[94] Data from "Google trends" search, particularly the reported results on the term "feminism" for Argentina in the period under analysis.
[95] Data from the Argentine Ministry of Health, particularly on hospitalizations for COVID-19 reasons, downloaded from the site.
[96] Data from the INDEC, particularly from the 2004=100 seasonally-adjusted series, EMAE.
[97] See note 86.

A simple way of quantifying their impact is to do the following exercise—which we apply on an explanatory variable in particular, though it can be used for the rest of variables with certain changes. In the first place, we assume that all FI's authorities are men. So the gender gap on the portion of authorities equals 0. Second, we assume that the number of women with credit access equals the number of men in such FI, so the gender gap on the number of people with credit access for such FI equals 1. What would happen if the gender gap on the composition of authorities staff—i.e., same number of women and men— were bridged? *Ceteris paribus*, the gender gap indicator on the portion of authorities would first turn from 0 to 1. The increase must then be weighted by the estimated value for the parameter corresponding to the portion of authorities gap variable in the "in" dimension (0.1819 for FIs with no salary accounts[98]). The result obtained gives fresh insight in the gender gap on credit access (initially amounting to 1). The new value would be 1 + (0.1819 * 1) = 1.1819. This means that the gender gap on credit access would now favor women in this FI with about 54.17% of women vis-à-vis 45.83% of men.[99] In turn, the impact of the change in authorities' composition falls to 1 + (0.1819 – 0.1710) * 1 = 1.0109 for a FI with a salary account. Thus, the share of women in the FI's portfolio increases to 50.27% while that of men falls to 49.73%[100, 101].

As estimated coefficients show for the variable "Salary account offered"—which post 5 out of 6 statistically possible cases different from 0 and positive ones—, the fact that FIs offer salary accounts reduces the gaps on credit access. As for the variables on "Authorities",[102] the differential impacts on FIs that do offer salary accounts and those that do not stand for changes in the slopes of the pertinent explanatory variables[103] but not in the ordinate in origin.[104]

[98] See first line of column (1 A) in Table A.1.1.
[99] 54.17% / 45.83% ≈ 1.1819.
[100] 50.27% / 49.73% ≈ 1.0109.
[101] As mentioned before, *ceteris paribus*, we have only analyzed the impact of this sole variable in the example. It should be noted that FIs that do offer salary accounts evidence a gap reduction of 0.0642 compared to those which do not offer such service. This figure is the estimated coefficient for the "Salary account offered" variable in the model shown in the column (1 A).
[102] Portion, age and seniority gaps.
[103] For instance, the analysis of the two first coefficients of the column (1 A) for the "Gap on the portion of authorities" variable in the "in" effect for the "Quantity" dimension—0.1819 and -0.1710—shows that the impact for FIs that do not offer salary accounts is 0.1819; the "differential" impact for FIs that do offer them is -0.1710, and the "total" impact for the latter is (0.1819 - 0.1710) = 0.0109.
[104] Constant + coefficient for "Salary account offered".

Table A.1.1 | Determinants of credit access gaps: random effects "in-between"

Variable			Number		Stock		Average stock	
			(1 A)	(1 B)	(2 A)	(2 B)	(3 A)	(3 B)
Portion gap Authorities	In		0.1819	0.1589	0.2057	0.1566	0.0226	0.0067
		* Salary account	-0.1710	-0.1593	-0.2449	-0.2163	-0.0440	-0.0420
	Between		-0.4256	-0.5182	0.2403	0.1997	0.4503	0.4198
		* Salary account	-0.2073	-0.0843	-0.3725	-0.2132	-0.2075	-0.1232
Age gap Authorities	In			0.0386		0.0745		-0.0002
		* Salary account		-0.0313		-0.0584		0.0105
	Between			0.3372		0.1591		-0.0709
		* Salary account		0.1035		0.1788		0.1257
Seniority gap Authorities	In			-0.0203		-0.0124		0.0023
		* Salary account		0.0285		0.0208		0.0075
	Between			-0.1656		-0.0987		0.0451
		* Salary account		-0.1128		-0.1667		-0.1031
Salary account offered			0.0642	0.0492	0.0758	0.0382	0.0171	-0.0182
Public bank			-0.0855	-0.0629	0.0879	0.1037	0.0899	0.0897
Foreign FI			-0.3633	-0.3498	-0.2962	-0.2905	0.0628	0.0599
Finance company			0.2510	0.2555	0.0719	0.0732	-0.0910	-0.0845
FI's asset (a)	In		-3.E-08	-3.E-08	-1.E-08	-1.E-08	5.E-09	5.E-09
	Between		2.E-09	-1.E-07	-2.E-07	-3.E-07	-2.E-07	-2.E-07
FI's gains/losses (a)	In		7.E-07	7.E-07	6.E-08	8.E-08	-2.E-07	-2.E-07
	Between		-6.E-06	-3.E-06	2.E-06	5.E-06	3.E-06	3.E-06
Inconsistency gap	In	Number of debtors	-0.0546	-0.0493			-0.0076	0.0007
	Between		-1.0691	-1.0554			0.2497	0.2313
	In	Outstanding balance			-0.0005	-0.0005	-0.0003	-0.0003
	Between				-0.0225	-0.0187	-0.0112	-0.0119
EMAE			0.0047	0.0047	0.0053	0.0054	0.0014	0.0014
COVID-19 (a)			3.E-06	3.E-06	2.E-06	2.E-06	1.E-07	2.E-07
Feminism			0.0026	0.0025	0.0027	0.0027	0.0007	0.0007
Constant			1.2623	1.1266	-0.0398	-0.0902	0.2933	0.3344
# Observations			10,387	10,387	10,387	10,387	10,387	10,387
# FIs			65	65	65	65	65	65
R2			0.2934	0.3149	0.2452	0.2638	0.1678	0.1922
R2_In			0.2347	0.2393	0.2955	0.3074	0.0680	0.0790
R2_Between			0.3454	0.3763	0.2349	0.2606	0.1804	0.2176
rho			0.7820	0.7751	0.8130	0.8126	0.6122	0.5764

Estimated sign and statistical significance		1%	5%	10%
	+			
	-			

Source | BCRA.

Major outcomes. The results observed suggest that:

- The gender composition and their respective gender gap in the structure of financial institutions' authorities has a statistically significant impact on gender gaps in credit access.
- We have broadened the number of explanatory variables (institutional, economic, and cultural) to reach age features and relative seniority and controlled them. This enabled us to infer that not only women's share in terms of leadership positions should be taken into account. The characteristic features of authorities holding leading positions is all the same essential.
- It is both important to induce/monitor the evolution of the structure of executive positions in each FI and to compare the average structures observed among different FIs.
- Before classifying credit assignment by gender, it is essential to determine whether clients have salary accounts, and to have access to information in this regard.[105] However, for some FIs with no access to information, the gender composition in the authorities staff is more important than to FIs which do have access.
- The type of FI—i.e., whether it is public or private, domestic or foreign, bank or finance company—is a defining feature, with a favorable impact on finance companies' numbers and

[105] They are twice as important as they refer to people with a formal job, on the one hand, and offer relevant information on their incomes and expenses, on the other.

stocks, but unfavorable on their average stocks. Foreign FIs, on the contrary, post a negative impact on their amounts and stocks but positive results on their average stocks. In turn, public banks exhibit positive results for average stocks.

- The own dimension of the evolution of Assets of each FI's is negative for numbers and stocks, and the comparative dimension among different FIs is negative for average stocks. As for the FI's Gains/Losses variable, the evolution of each FI is positive for numbers but negative for average stocks.
- The evolution of the economic cycle is significant as it shows a positive impact, which is directly proportional to the current Argentine economic cycle. The variable on the temporal evolution of the COVID-19 pandemic posted the same performance.
- As regards the gender gap on inconsistency, the estimated coefficients exhibit expected results on numbers and stocks, though unexpected for the average stocks dependent variable for the comparative dimension among different FIs respect to the inconsistency gap in terms of the number of debtors. However, this is offset[106] by a negative—and expected—sign in the results for the own dimension of each FI over time concerning the inconsistency in debtors' stocks.
- Special attention should be paid to the fact that the "cultural" dimension, operated through the "GT: feminism in Argentina" variable, posts a statistically significant and positive impact in all cases.

A more detailed analysis was carried out by the BCRA Financial Inclusion Senior Management Office, included in a document named as this section, but not presented here for length reasons. Such analysis led to these further conclusions:

- The gaps on relative share of women in leadership positions were particularly wide for board positions, and for credit and finance managers.
- Seniority gaps for women vis-à-vis those for men favored the latter. However, these gaps decrease in managerial positions in general, and in support management offices[107] in particular, with gaps showing values above 1 for certain periods.
- The expected impacts are heterogeneous among the different types of authorities. They are diverse both in terms of statistical significance and expected impact or extent. This feature is not restricted to an exclusive dependent variable, a particular set of explanatory variables, or an analysis set in particular.
- After studying all FIs' debtors—with the aim of going through feasible differential impacts oriented towards the inclusion of low-resource populations to the financial system—the analysis was restricted to a sole FI's exclusive debtors. The estimates mainly led to similar qualitative results even though, in terms of adjustments, they were lower for this subgroup of people. This showed that it is more difficult to explain volatility for gender gap on credit access for the latter group.

[106] In terms of sign.

[107] They comprise all other management offices informed through the report on Institutional Information on Financial and Foreign Exchange Institutions, including Administration, Treasury, Audit, Systems, Security, Human Resources and Legal Affairs Management Offices, but excluding the General Management Office. The management offices in branches and those under the name "Others" have also been excluded from the analysis due to time consistency reasons.

Exhibit 2 / Financing to Micro-, Small-, and Medium-Sized Productive Units

Micro, small and medium-sized companies (MSMEs) are a key asset in a global productive scheme as they are the major players for the growth of the economies. These productive units prevail for creating private employment and they are usually the gateway to the labor market for the vulnerable population.[108]

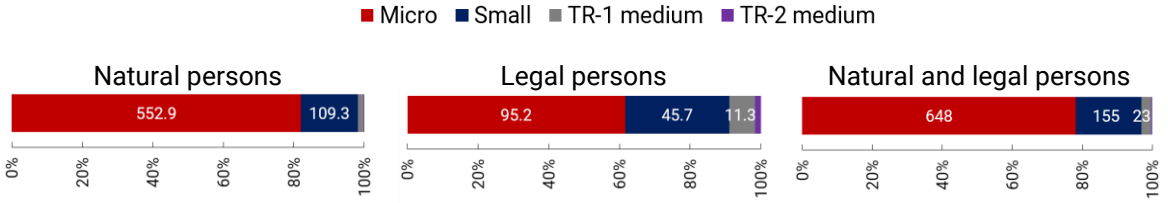
Lack of access to financing is an important barrier against the expansion process for MSMEs. This barrier is explained by the interaction of factors related to the supply and demand of financing, such as lack of guarantees, submission of documentation,[109] no data to assess companies' solvency, high levels of informality and uncertainty about the macroeconomic context,[110] among others. In this sense, this exhibit analyzes effective access to financing by this group of companies in the broad financial system (BFS)[111] with a view to presenting their state of affairs by type of person, size, economic sector and geography.[112]

As of December 2021, there were 1.6 million companies with a MSME certificate.[113] This group of companies is made up of legal persons (LPs) and natural persons (NPs) with different corporate structures and freelance work structures.[114] Among them, 520,000 companies had employees, i.e., 32.5% of recorded MSMEs are employment creators.[115]

Structure of MSMEs with financing. Out of MSMEs with financing, 829,000 of them (52% of the total) had financing with the BFS as of December 2021, 76% being natural persons and 24% legal ones.[116] On the one hand, the prevalence of NPs as economic activity organizers accounts for 96% of MSMEs with financing with the BFS that are centralized in micro- and small-sized companies. On the other hand, taking for granted that all LPs have at least one employee, the share of LPs with financing with the BFS accounts for 38% of employing MSMEs.

[108] Amounts are expressed at constant prices to January 2019 (CPI, INDEC, January 2019 = 100).
[109] Promoting Digital and Innovative SME Financing, GPFI, G20, 2020.
[110] Financial Inclusion of Small- and Medium-Sized Enterprises in Argentina, Sergio Woyecheszen, CEPAL, 2018.
[111] See Note on Methodology for the process carried out to classify each productive unit by size and sector. The analyses include both the financing of companies organized as legal persons as well as natural persons carrying out production and/or commercial activities, though being neither a corporation nor a legal person.
[112] The province allocated to each productive unit is determined by the address recorded at the Federal Administration of Public Revenue (AFIP).
[113] Secretariat of Small- and Medium-Sized Enterprises and Entrepreneurs (SEPYME), Argentina.gob.ar.
[114] MSME Certificate. Those micro-, small- or medium-sized enterprises that control or are controlled and/or linked to other companies, or domestic or foreign economic groups not meeting the requirements will not be entitled to enroll.
[115] Companies with fewer than 500 employees. Social Security Bulletin, AFIP, Dec-21.
[116] Data from CENDEU (BCRA). This document considers MSMEs to be micro-, small-, tranche 1 medium-, and tranche 2 medium-sized enterprises according to the guidelines set out by the Ministry of Productive Development. The result of NP companies' analyses may be affected because it is impossible to distinguish between financing for productive purposes and credit lines for consumption.

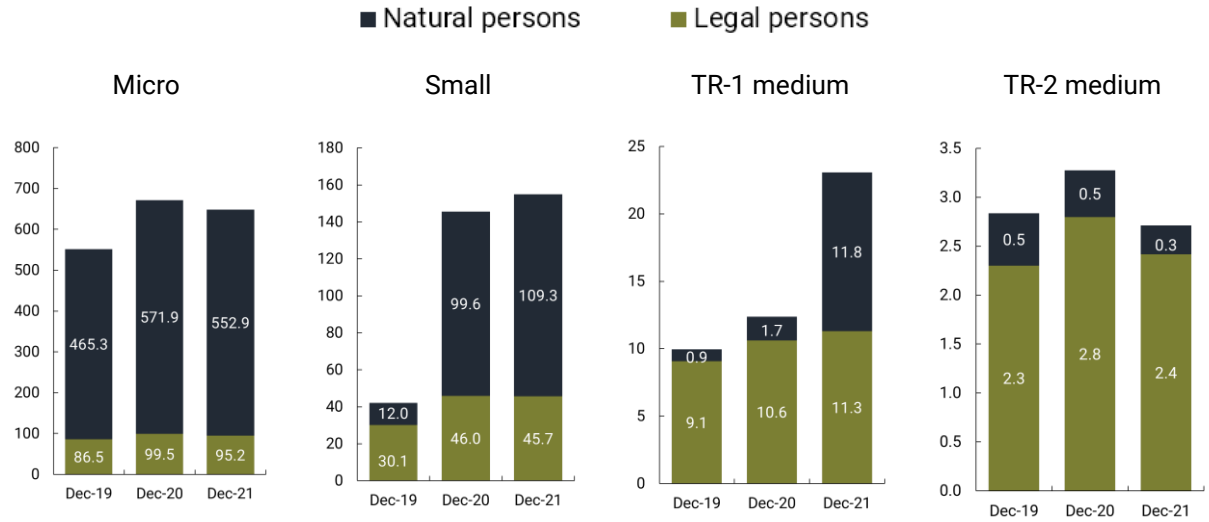
Chart A.2.1. | Share of the number of companies with financing from the BFS by size and type of person
Data as of December 2021, stated in thousand



Note | "TR" means tranche.
Source | BCRA.

Access to financing posts an improvement in the number of companies with financing within the BFS. Between December 2019 and December 2021, MSMEs with financing within the BFS grew by 222,000 units—mostly micro (116,415) and small (94,130) companies. Even though micro companies contributed the most in absolute terms, small and TR-1 medium (mainly NP) companies posted really significant growth rates, respectively four times and two times the number of companies with financing before the COVID-19 pandemic. It should be noted that the invoicing range to be rated as a small or TR-1 medium company involves employing companies.

Chart A.2.2. | Evolution of the number of companies with financing from the BFS by size and type of person
Data stated in thousands



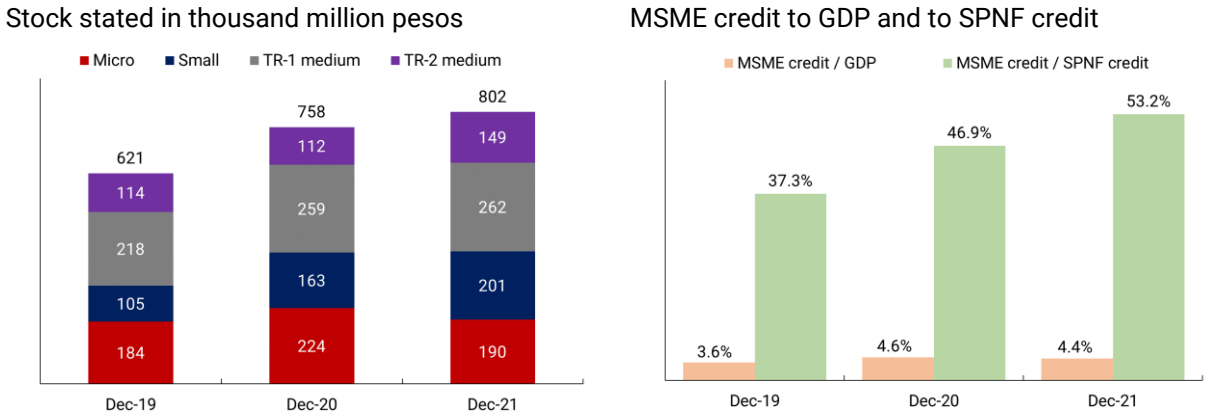
Note | Among NP small companies, the service and store sectors account for 95% of the increase. These productive units could have been granted financing as a consequence of the negative impact that the COVID-19 pandemic had on in-person activities or, provided that they had financing, they could have fulfilled the course requirements for the MSME certificate in order to enter any of the programs to boost economic activities (for instance, Pre-Viaje). Also, among TR1-NP medium companies, the service sector explains almost all the rise. Such rise may have been motivated by the COVID-19 pandemic, but it took place far from its outbreak, which indicates that other factors may have influenced the growth of these productive units.
Source | BCRA.

Credit lines aimed at MSMEs during the COVID-19 pandemic to mitigate its impact had a bearing on this situation. The financing conditions for those credit lines were unusual both with regard to the terms of financing and the economic activity context. Nevertheless, it meant an opportunity for those productive units to start a relationship with FIs as credit providers.

Financing level of MSMEs. As of December 2021, MSMEs had a financing stock of ARS2.4 billion within the BFS at current values, which was 53.2% of the financing stock to the non-financial private sector (SPNF) and 4.4% of gross domestic product (GDP).[117] The share of financing to MSME in the total portfolio of SPNF financings exhibited an upward trend as of December 2019, whereas its ratio to GDP did not post a clear tendency. Moreover, as for economic activity organization, most MSME financing stock is held by LPs, with a share of around 78% over the last three years.

The theoretical approach consisted in the comparison between the stock of financing granted to MSMEs of different size and economic sectors, and the annual invoicing amount established in Secretariat of Small and Medium Company and Entrepreneurs (SEPYME) regulations for the classification of such companies. This exercise was chosen provided there was no data on companies' invoicing and with a view to understanding the importance of the stock of financing compared to their income. We took the mean amount of each group as a benchmark amount of their income based on the regulations' minimum and maximum amounts for each company size and economic sector.

Chart A.2.3. | MSME financing within the BFS disaggregated by company size



Note | "MSME credit" and "SPNF credit" include financing on domestic and foreign currency.
Source | BCRA.

First, the stock of financing posted a low share of income from MSMEs of all size. Contrariwise, there is a high number of MSMEs with financing within the BFS, which represents 52% of MSMEs with certificates. In other words, the BFS grants financing to a significant number of MSMEs but for amounts that are virtually lower than their income.

[117] BCRA - Loans and Deposits from SPNF. It considers financings from the SPNF and FIs.

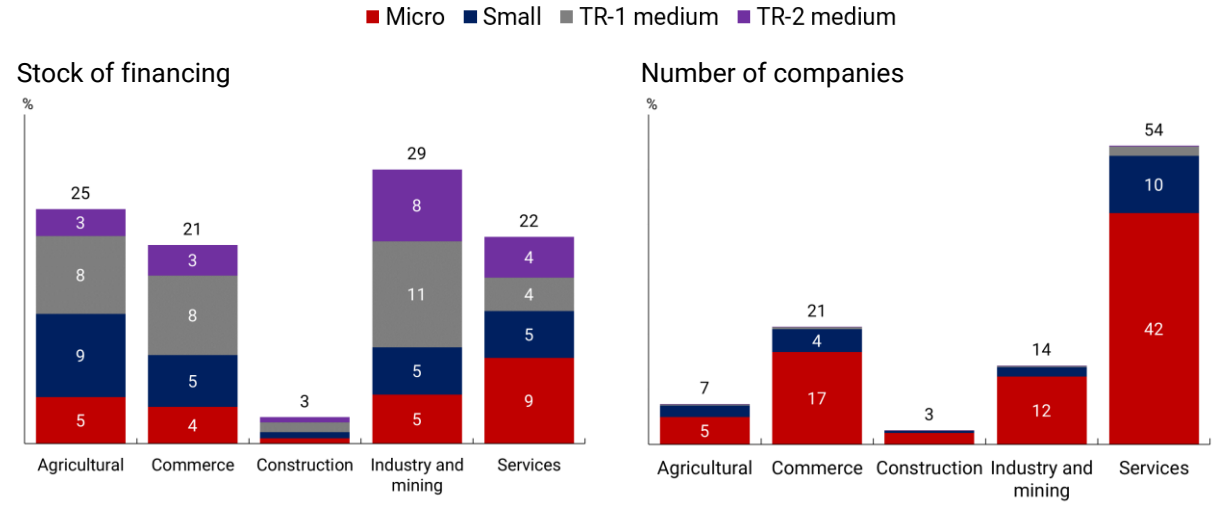
Table A.2.1. | Stock of financing compared to annual invoicing as shown in theory
In %

Size	Period	Agricultural	Commerce	Construction	Industry and mining	Services	MSMEs
Micro	Dec-19	20.5	2.6	4.7	11.3	8.7	**6**
	Dec-20	17.4	2.3	4.7	8.8	8.9	**9**
	Dec-21	18.9	2.4	6.4	5.4	9.6	**12**
Small	Dec-19	18.5	4.1	8.3	6.6	9.4	**3**
	Dec-20	15.2	1.5	4.1	3.5	2.5	**7**
	Dec-21	16.8	1.9	5.6	4.8	3.0	**12**
TR-1 medium	Dec-19	24.6	4.8	9.9	12.7	8.8	**7**
	Dec-20	23.4	4.4	7.2	10.1	5.3	**11**
	Dec-21	23.0	4.1	6.8	8.3	1.6	**16**
TR-2 medium	Dec-19	13.3	5.5	5.7	12.6	3.3	**4**
	Dec-20	10.8	3.9	6.7	8.7	5.1	**5**
	Dec-21	14.2	4.9	6.8	11.3	13.6	**9**

Source | BCRA.

However, the analysis that includes the economic sector shows differences between the stock of financing and the theoretical creation of companies' income. These differences replicate across all companies, regardless of their size. The agricultural sector and, to a lesser extent, the industry and mining sector recorded the highest ratios, which would be explained by the need to use high amounts of capital to face the business cycle, such as the purchase of machinery and supplies. These sectors centralized more than 50% of the stock of financing in the period under analysis, and recorded the highest average stocks. On the other side, the construction sector posted a significantly lower share than the remaining sectors. As for the stock of financing, the share of micro-enterprises stood out in the service sector unlike other economic sectors where the highest share corresponded to TR1-medium enterprises.[118]

Chart A.2.4. | Share of MSMEs with financing by economic sector and size
Data as of December 2021



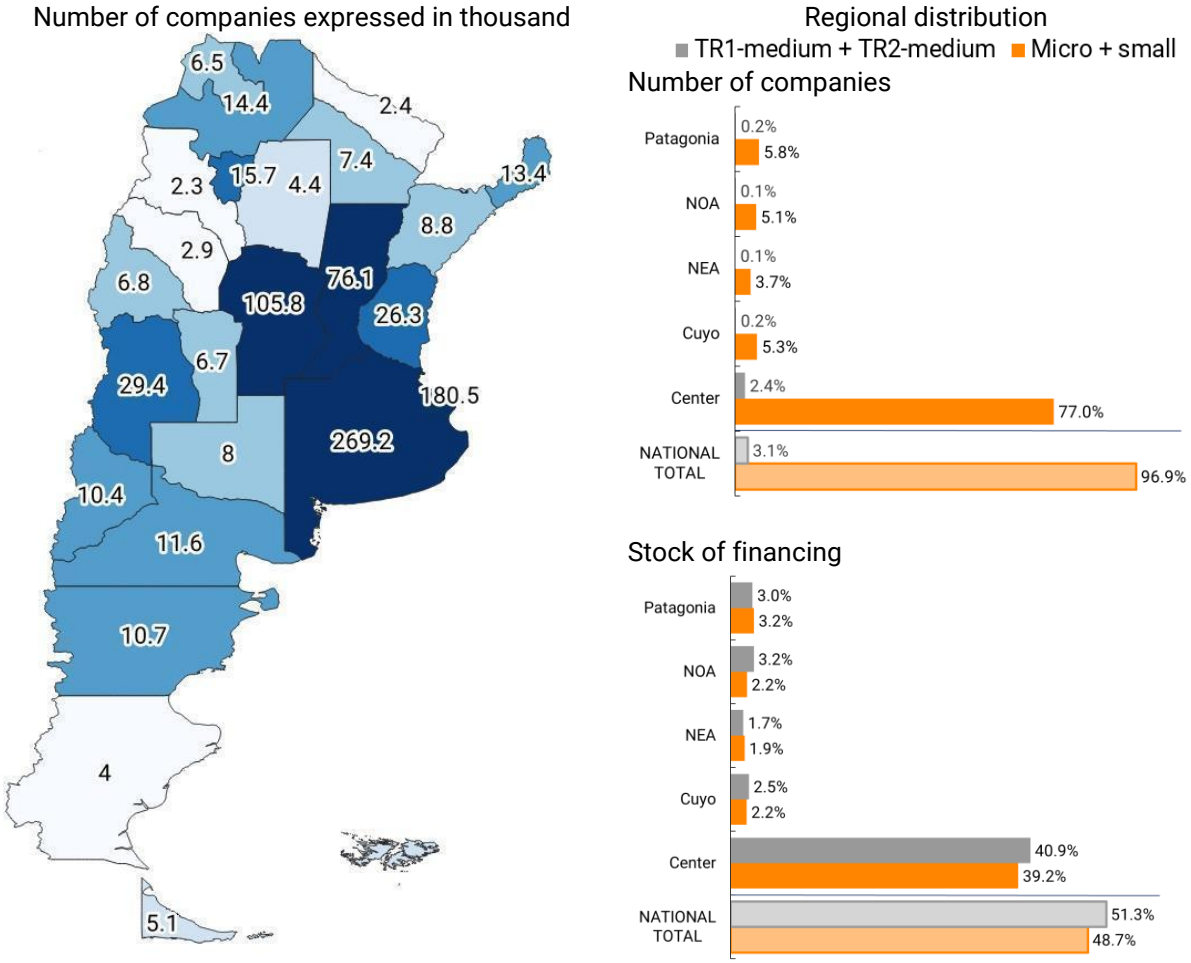
Source | BCRA.

[118] Panorama of Companies in Argentina, Chart 4, 2019.

This situation may limit the growth of this group of companies, particularly the smallest ones, given that their reliance on credit is essential to cope with their business cycle and to execute their investment projects in order to increase their productive capacity. Likewise, it attaches importance to other sources of financing such as their own resources and suppliers.[119]

Regional distribution. The geographical distribution of MSMEs with financing and, consequently, of their stock by region exhibits the distribution of the population and that of their economic activity.[120] The province of Buenos Aires and CABA centralized 54% of the number of MSMEs and 51.8% of the total stock of financing as of December 2021. This prevailed in the Center region over the other ones, accounting for 8 out of 10 MSMEs with financing and ARS8 out of ARS10 of the stock of financing.

Chart A.2.5. | Geographical distribution of MSMEs and their stock of financing
Data as of December 2021



Source | BCRA.

[119] Enterprise Survey. Banco Mundial, 2018.
[120] Panorama of Companies in Argentina, Chart 6, 2019.

In the same vein, the analysis of the size of productive units shows that smaller companies (micro and small) and bigger ones (medium) prevail in the Center region, both in number of companies and in stock of financing. In turn, the number of smaller companies exceeds that of medium-sized companies in each region. The stock of financing posts a varied performance since medium-sized companies surpass smaller companies in the Center, Cuyo and NOA regions, whereas in NEA and Patagonia smaller companies surpass medium-sized ones.

Note on Methodology

Data on Population

This Financial Inclusion Report presents indicators that are disaggregated by demographic and geographic variables. These indicators were calculated on population projection data handled by the INDEC of Argentina. Given that the INDEC does not release a series that simultaneously contains all the disaggregations used in this Financial Inclusion Report (gender, age group, and geographical location for each province, district and municipality), different series were used according to the definition of each indicator.

In the case of national and provincial indicators, the series known as "Population by Sex and 5-Year Age Groups across the Country and Provinces. Years 2010-2040" was used. District-level indicators were based on the series known as "Population Estimated as of July 1 of each Calendar Year by Sex". Finally, as the INDEC does not publish a projection on the number of inhabitants of each municipality over time, it was necessary to build the series for the indicator based on the results of the 2010 National Census (CN2010).

In this Financial Inclusion Report, an "adult" is any person aged 15 and over, following the standard used by the World Bank for its financial inclusion indicators.

Regionalization

This Financial Inclusion Report follows the regionalization criterion proposed by the Ministry of Economy and Public Finance (today Ministry of Economy) that sets out five regions, namely:
- NOA region: Salta, Jujuy, Tucumán, Catamarca and Santiago del Estero.
- NEA region: Formosa, Chaco, Misiones and Corrientes.
- New Cuyo: Mendoza, San Juan, San Luis and La Rioja.
- Patagonia: La Pampa, Neuquén, Río Negro, Chubut, Santa Cruz and Tierra del Fuego.
- Center and Buenos Aires: Córdoba, Santa Fe, Entre Ríos, Buenos Aires and the Autonomous City of Buenos Aires.

In this Report, "New Cuyo" is referred to as Cuyo, and "Center and Buenos Aires" as Center.

Analysis of Bank Accounts by Municipality

With a view to analyzing the distribution of adults' account holdings throughout Argentina, we gave each bank holder a municipality code according to the municipality's name, zip code, and province as recorded in the AFIP database. This way, the database used an eight-digit code for municipalities and a ten-digit code for the population. This gave way to differences between the results obtained in the accounts section and those achieved at municipality level in the Financial Inclusion Report. The 15 boroughs of CABA make just one agglomeration, whereas six municipalities are arranged into two. Thus, this analysis totals 3,520 municipalities instead of 3,538 on which the rest of the analysis is based.

In order to estimate the number of adults in each municipality, we have made our own projection of the adult population per municipality, according to the Data on Population section in this Note

on Methodology. This may give way to a deviation from the estimates of account holdings as the population projection by municipality was carried out on the basis of the 2010 National Census. As a result, estimated growth rates vary from real growth rates.

Payment Accounts with Payment Service Providers
As for PSPs operating in COELSA, some of them are recorded in the Registry of Payment Service Providers at the BCRA unlike other providers that have not been registered. In this report, only payment accounts of providers registered as PSPs are counted.

Support from the BCRA
To study the minimum cash requirement exemption in terms of natural persons—as stated in Communication "A" 7254, paragraph 1.1—the following procedure was followed:
- Monthly groups of debtors are determined by the number of NPs with no financing from FIs in December 2020, and with financing from FIs in the period under analysis (from April 2021 to March 2022).
- The following were excluded from the study: CUITs/ CUILs belonging to people aged 100 or older, records with no date of birth registered in the AFIP database and, for the further assessment by age group, individuals younger than 15.
- In addition, NPs with zero interest rate credit lines and LFIP were excluded.

Debtors' Payment Performance
Financial institutions and PNFCs classify debtors according to debt payment capacity. The BCRA's regulation provides that debtors should be grouped into levels (called "situations") in decreasing order of quality. Situation 1 is the level in which debtors are solvent enough to meet their financial commitments properly (even when reporting payment delays), and Situations 5 and 6 stand for bad debtors.

For computing the rate of performing debtors, the number of debtors (using their taxpayer identification numbers (CUITs) / employee identification number (CUILs)) under Situations 1 and 2 (i.e., those who can honor all their financial commitments) are grouped. However, all the other debtors are considered as non-performing. The indicator counts each person as many times as the number of institutions to which an amount is currently owed, whether financial or non-financial. In accordance with the BCRA's regulation, each debtor is ascribed a situation per creditor to which an amount is owed.

MSMEs' Credit
We adopted the MSME criteria proposed by the Ministry of Industry and Productive Development, according to which a MSME is a micro-, small-, or medium-sized enterprise whose economic activity is grouped in any of the following sectors in Argentina: service, commercial, industrial, agricultural, construction or mining sector. The MSME size is determined on the basis of the economic activity and the amount of total annual sales involved. FIs are to report to the debtors' database of the financial system (CENDEU) the information required in the field "code_sme" where so set out by the BCRA's regulations. The field comprises 2 digits: one for the size and the

other for the economic sector. We used the “code_sme” corresponding to the largest amount of credit assistance in each of the periods under analysis since, in some cases, the same company is assigned different “code_sme” for the same period. We used the domicile for tax-related purposes registered in the AFIP database to allocate a province to each MSME.

Abbreviations and Acronyms

ACSF	*Agencia complementaria de servicios financieros* (supplementary agency of financial services)
AFIP	*Administración Federal de Ingresos Públicos* (Federal Administration of Public Revenue)
APR	Annual percentage rate
ATM	Automated teller machine
BCRA	*Banco Central de la República Argentina* (Central Bank of Argentina)
BFS	Broad financial system
CABA	*Ciudad Autónoma de Buenos Aires* (Autonomous City of Buenos Aires)
CBU	*Clave bancaria uniforme* (single banking code)
CENDEU	*Central de deudores del sistema financiero* (debtors' database of the financial system)
COELSA	*Cámara Compensadora Electrónica* (Electronic Clearinghouse)
CPI	Consumer price index
CUIT	*Clave única de identificación tributaria* (taxpayer identification number)
CVU	*Clave virtual uniforme* (single virtual code)
DC	Debit card
EPH	*Encuesta Permanente de Hogares* (permanent household survey)
ET	*Con opción de precancelación* (with early termination option)
ETCNBs	*Emisora de tarjetas de crédito no bancarias* (non-bank credit card issuer)
FAS	Financial Access Survey
MMF	*Fondo común de dinero* (Money Market Funds)
FCIs	*Fondo común de inversión* (mutual fund)
FI	Financial institution
GDP	Gross domestic product
Hs.	Hours
HY	Half-yearly period
IFE	*Ingreso familiar de emergencia* (emergency family bonus)
IIF	*Informe de Inclusión Financiera* (Financial Inclusion Report)
IMF	International Monetary Fund
INDEC	*Instituto Nacional de Estadística y Censos* (National Institute of Statistics and Censuses)
K	Thousand
LFIP	*Línea de financiamiento para la inversión productiva* (credit line for productive investment)
LP	Legal person
MB	Mobile banking
MPE	Electronic means of payment
MPOS	Mobile device at point of sale
MSME	Micro-, small- and medium-sized enterprise
Mun	Municipalities
NEA	*Noreste argentino* (northeastern region)
NOA	*Noroeste argentino* (northwestern region)
NoET	*Sin opción de precancelación* (without early termination option)
NP	Natural person
NW	Net worth
OB	Online banking
OPNFC	*Otro proveedor no financiero de crédito* (other non-financial credit provider)
p.p.	Percentage point
PCT	*Pagos con transferencia* (payment by transfer)
PDA	*Punto de acceso* (access point)
PNFC	*Proveedor no financiero de crédito* (non-financial credit provider)
POS	Device at point of sale
PSP	Payment service provider
SA	Savings account
SEPyME	*Secretaría de la Pequeña y Mediana Empresa y los Emprendedores* (Secretariat of Small- and Medium-Sized Enterprises and Entrepreneurs)
SMVM	*Salario mínimo vital y móvil* (minimum wage)
SPNF	*Sector privado no financiero* (non-financial private sector)
TAS	*Terminal de autoservicio* (self-service terminal)
TD	Time deposit
TO	*Texto ordenado* (consolidated text)
TR	Tranche
UVA	*Unidad de valor adquisitivo* (unit of purchasing power)
VAR	*Variación* (change)
y.o.y.	Year-on-year