

## **Rosanna Costa: Central bank's agenda for payment systems - recent developments and challenges**

Speech by Ms Rosanna Costa, Governor of the Central Bank of Chile, at the Chile Day 2024, New York City, 30 May 2024.

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Good afternoon. I am speaking from New York on behalf of the Central Bank of Chile. I appreciate this opportunity to participate in this new version of Chile Day. Today, I will address a function that is key in every economy but that can be easily overlooked: the development of payment systems. Central Banks have a central role related to the proper functioning of money in all its dimensions: as a unit of measurement and store of value we must give it stability by controlling inflation. But there is a central role related to money as a means of payment. Overall economy is better supported when payments can be made in an easy, safe and efficient manner.

Payment systems basically involve networks, like rails, plumbing or telecommunications systems, carrying money through different points in the economy and the financial system. As in these examples, if an outage or blockage occurs somewhere, the entire system faces a disruption that may have very severe effects.

This highlights why preserving the normal functioning of payment systems is key for central banks. It requires the smooth operation of a wide range of means of payment and providers, supported by a network of Financial Market Infrastructures and appropriate prudential regulation. Achieving this has become increasingly challenging considering the rapid pace of technological advances that offer a broad range of opportunities in innovative solutions for financial products and services. Therefore, this must be accompanied by an adequate and timely regulation to ensure that these innovations are secure, efficient and reliable.

For these reasons, the Central Bank of Chile has placed payment systems at the forefront of its 2023- 2027 Strategic Plan generating and giving continuity to the development of several initiatives. In this presentation I will share with you initiatives and measures we have taken in recent years to improve our payment system and an overview of the main challenges ahead and how we are working to be prepared.

I will approach the payment system from a wholesale and retail perspective. In the former I will focus on market infrastructures with a special attention on foreign currency transactions. In the retail case, I will refer to the efforts to strengthen this kind of payments, expanding access to new providers, as well as provision of digital payment alternatives.

**1. Payment systems are key for the functioning of the economy and therefore are at the core of central banks' mandates.**

As mentioned, the efficiency of an economy is improved when its payment systems allow for smooth and frictionless transactions: from their origin until their settlement. This is valid for persons buying a coffee, a car or a house, for a company issuing a bond or a foreign investor buying stocks in the country.

Because payment systems encompass many participants, processes and rules that interact with each other, they create complex arrangements that need to address several risks, such as legal, operational, credit, and liquidity.

To understand how this works, let me briefly explain the interactions between the participants in the payment ecosystem.

There are two main streams of payments in the economy. The first one, known as retail payments, refers to the large volume of transactions, but low value payments, and it occurs between households and businesses. It is linked to the purchase of goods and services, which involves different payment instruments and payment service providers.

The second one refers to the financial market wholesale payments and settlement, with a low volume of operations, but large value activity and it occurs between financial and corporate institutions, which includes interbank payments as well as the payments that settle financial market activity. These payments are originated in operations carried out in the financial markets, such as the purchase of shares, bonds and other instruments, which involves multiple service providers, trading marketplaces and market infrastructures.

Each of these payment streams opens a range of different market participants, which ultimately trigger payment processing through the different Financial Market Infrastructures, such as Retail Payment Clearinghouse in the case of retail payments, and for financial market operations it involves Securities Settlement System and Central Counterparties among others. Nevertheless, at the core of the payment system is the Real Time Gross Settlement System managed by the Central Bank, where most payments are finally settled.

Continuing with the analogy of the plumbing system, in recent years, the Central Bank of Chile and the private sector have been busy cleaning, maintaining, and updating the "plumbing" of the payment system whenever necessary, in accordance with innovation and markets' evolution and the best international practices. This has been done through legal and regulatory developments; private sector initiatives, and the direct intervention of the Central Bank following a rationale of providing public goods for the Real Time Gross Settlement System (RTGS).

## **2. A strong, efficient, and deep financial market requires a robust and diverse financial market infrastructures network.**

The retail and financial market transactions require a sound set of rules and institutions to support the clearing and settlement of the payments, as well as for registering the operations in an efficient and secure manner. Over the last decade we have made great progress in this sense, with many regulatory and market changes that have strengthened the financial infrastructure landscape in Chile.

In fact, this year we took a major step forward by extending the network of financial market infrastructures to the foreign exchange markets, thus closing an existing gap in this area.

***Financial Market Infrastructure for securities, fixed income, derivatives and FX markets.***

To understand the relevance of these milestones, let me now outline some characteristics of the Chilean financial market and the robustness of its financial market infrastructures. The securities and debt instruments are mostly traded on the Santiago Stock Exchange in a bit more than 2 times the GDP. A considerable fraction of the fixed income, and equity is traded under a proper infrastructure framework, due to the existence of a Securities Settlement System and Central Counterparty. Furthermore, all of this is backed by a local Central Securities Depository, the base of most of the securities operation for the private and public instruments, Central Bank included.

At the same time, the derivatives market is also relevant for the size of the economy, which is around 8 times our GDP, where 48% is interest rate related and 45% is FX derivatives. They are mostly traded over the counter. For years a central counterparty has been in place to clear and centralize NDF US Dollar and Chilean Peso and inflation derivatives. However, there was a need to increase transparency and promote financial stability by mitigating systemic risk. Then, in 2022 and following international recommendations, the Central Bank of Chile with the support of the financial supervisor, developed and operates the trade repository for derivatives of the country. It collects, processes, and disseminates to the public and the supervisor relevant information of this market.

Regarding the FX market, it should be noted that Chilean spot FX market amounted nearly 3.5 times GDP, of which 95% are US dollar/peso transactions. Meanwhile, the FX derivatives market for the same period, mainly NDF (Non-Delivery Forward), is close to 4.5 times GDP, of which almost a half are cross-border.

In the case of spot FX market, it is also mainly traded over the counter, through financial platforms. However, historically the transactions were made without the intermediation and risk management of a proper financial market infrastructure, with the consequent risk of settlement.

So, there was still room for improvement in risk mitigation and making more efficient the post trade process of FX markets. With this in mind, the Central Bank of Chile issued a regulation allowing the creation and operation of clearinghouses to clear payments from spot US Dollar-Peso FX transactions. Thereby, the US Dollar and Peso payments are now channeled in an orderly, centralized, and safe manner through a regulated payment system. This clearinghouse manages the settlement risk present in these transactions, through a collateral framework and coordination mechanism where the Peso leg payment will be settled only if the US Dollar leg is settled following the "Payment versus Payment" (PvP) international standard.

Starting in April 2024, this new clearinghouse, run by a local private institution named Combanc, process around 50% of the transactions of the local FX market, with risk

management and liquidity savings benefits for the financial institutions. Since payments can be settled in US dollars in the Real Time Gross Settlements system as of 2021, this new infrastructure settles its payments in this system, CLP or US dollars, respectively. Together, the FX Clearinghouse and the Real Time Gross Settlement System in US Dollar provide a sound basis to safe and efficiently support the payments from the market.

Besides, we recently finished the process of modernizing our FX regulations, which includes granting a broad authorization for the use of our local currency in cross-border transactions, a streamlined process for entities that wish to become part of the Formal Exchange Market, and made explicit a concern for the transparency and access to trading platforms used by its participants, either in Chile or abroad, among other measures.

All those initiatives have contributed to our infrastructures being well-prepared to manage an increase in the number and amount of FX transactions, but they are not sufficient to increase liquidity and improve price formation in the local FX market. To succeed in that front would require the internationalization of the Chilean Peso agenda to move forward, for instance through greater participation of non-residents in the market, either as participants or even as trading platforms.

We are aware that the cross-border operations with the Chilean peso will be still exposed to settlement risk because the local clearinghouse for spot FX transaction only allows the participation of local counterparties. To solve this issue, it is important to move on with initiatives such as the incorporation of the peso in Continuous Linked Settlement System (CLS) or other equivalent settlement system with an international scope.

Particularly, the regulatory changes necessary to facilitate CLS, are related with the tax reporting regime of the correspondent accounts in pesos, for the settlement of pesos by non-residents. An adequate implementation of this regulation, by our Servicio de Impuestos Internos (IRS Office), aligned with international best practices, would be necessary to the objectives of financial integration.

### **3. Making progress in the deepening and robustness of the repo market entails benefits for the proper functioning of the financial market.**

Let me say something about the repo market, where there is still work to do to improve some remaining aspects required to deepen and diversify it.

A deepen repo market involves benefits for the proper functioning of financial markets: (i) acts as a low-cost short-term financing alternative, facilitating access through the use of low-risk securities as collateral; (ii) allows participants to diversify their financing sources; and (iii) contributes to reducing volatility in the financial market. An active, functional repo market with a diversity of participants allows the financial market to be strengthened against liquidity shocks. It allows the financial institutions, particularly the non-banking ones, to have access to liquidity from the market and reduce dependence on the Central Bank. This is even more important in moments of financial stress, where it represents the first layer of liquidity provision to the market, , enabling a more efficient allocation of resources among market agents.

Now the legislation supports the creation and recognition of repo contracts between market participants, providing legal certainty in case of default, specifically about the treatment of collateral and netting of positions. During this year, we will issue the regulation required for the recognition of local and international master repo agreements, and the financial supervisor has also announced changes to the prudential regulation applicable to these instruments.

We strongly expect that these changes, together with initiatives developed by private sector could contribute to the development of an active and more diversified repo market.

#### **4. For the Central Bank of Chile, the availability of different means of payments and smooth functioning of retail payments is paramount.**

As I said, another important part of the payment system is related to retail payments. In other words, payments services provided to the real sector or to persons and businesses. Most of past and current activities of the Central Bank can be linked to improves about its proper functioning.

Persons and businesses need a variety of means of payments available for their day-to-day transactions, either in their roles as payers or payees. At present, in Chile we can distinguish four main means of payment: i) the traditional cash; ii) other non-digital instruments such as checks; and on the digital means of payments front, iii) the payment cards, and iv) the electronic transfer of funds (TEF in Spanish).

Having access to a broad range of payment methods, provided by diverse financial institutions, is relevant for several reasons. Firstly, persons should be able to use the payment method that suits them best based on costs, efficiency, security, and individual preferences. Secondly, the greater the availability of issuers of payment methods and acquirers and payment services providers, the greater the competition and room for innovation. Lastly, it provides resilience to the system because it allows economic transactions to continue being conducted in events of natural disasters or operational failures in one or more of the payment networks.

Accordingly, the Central Bank has implemented a series of measures to strengthen the existing means of digital payments making sure its regulatory framework allows the development of new payment solutions.

Regarding payment cards, nowadays access to them is relatively easy due to digital onboarding processes and widely acceptance by merchants. This has been possible because in 2017 we undertook a process of complete overhauling of the regulation, allowing non-bank issuers to offer prepaid cards, and introducing a four-party-model that led to the incorporation of new acquirers and payment services providers that have extended the acquiring network of businesses that accept this means of payment. In this way, obstacles to new entrants were removed. Currently, we are finishing a new update of the regulation to incorporate new emerging business models.

As to payments with electronic transfer of funds, TEF, it is important to note that Chile has had a fast retail payment system for roughly 15 years. This system was an innovation at the time, even by international standards. The funds are immediately

available for users, and it is widely used considering an ample access to financial accounts by the population.

Since 2008, the Centro de Compensación Automatizado (CCA in Spanish) has been responsible for the acceptance and clearing of TEF between banks and more recently non-banks account providers. This system is operated by a private institution and processed approximately 2 billion transactions during 2023 (and counting), which amounts to nearly 7.5 payments per month for persons 15 years old and up. This system allows for 24/7 transfer of funds, which are immediately available to persons, although the settlement between financial institutions is deferred (two daily payment cycles).

Both electronic transfer of funds (TEF) and payment cards processes transactions for roughly one GDP each year. Given the increasing use of digital payments and the relevance for users, the Central Bank decided to bring the clearing and settlement part of these retail payment transactions into its regulatory perimeter. This has several benefits: convergence with international standards; mitigation of intrinsic financial risks; and liquidity savings for financial institutions. Finally, transactions cleared through these clearinghouses have finality and they are settled in the Real Time Gross Settlements System.

In fact, since last March the first Retail Payments Clearing House is doing settlements directly on our Real Time Gross Settlements System, twice a day. When the transactions are "accepted" in this infrastructure, they become recognized as "final and irrevocable" giving legal certainty to all the financial system. Going forward, this new regulatory framework should be important as a base to develop more attributes seen in fast payment systems that have been especially useful in other jurisdictions.

In short, we have reached a very efficient electronic transfer market with instant availability of funds. It has gained traction over the years so the number of transactions per person that it processes matches that of some advanced economies. The Retail Payments Clearing House contribute to a strong improvement of financial and legal risk framework management. However, there are still challenges ahead. This is a task in which the Central Bank has been engaged and is part of the Central Bank's 2023-2027 Strategic Plan.

Other jurisdictions started developing their instant payment systems in the last five years with some features that ours is lacking and could facilitate a broader use of this system as a means of payment. Currently they are processing more transactions per person than Chile, particularly for payments from people to business (P2B), which suggests that there is room to increase the use of electronic transfer of funds.

What would it take to increase the use of them? Some small businesses and merchants accept electronic transfer of funds payments, but originate them is burdensome and subject to limits, at least for the first interaction between payer and payee. To solve this problem, in several countries there are proxies and aliases such as email addresses, mobile phone numbers and QR codes that contain in a simple format the information of the account and identity of the payee. For medium-sized and bigger merchants, probably an intermediary providing services like a payment card acquirer would help to manage larger instreams of payments.

In Chile, some merchants can initiate a payment showing a QR code to the customer that pays with a card. This is a positive development, but if different companies develop their own proprietary QR codes the result will be market fragmentation. As for enrolling merchants to accept payment with TEF, payment initiation companies -which will become regulated entities once the Open Finance System of the Fintech Law is fully implemented- may contribute to this, but their potential is yet to materialize.

Some countries have solved these problems with regulation and/or the direct provision of clearing and settlement services by the Central Bank. In this regard, we believe that interoperability is of the essence for the success of any payment method, and therefore the Central Bank needs to promote and ensure it, and this almost certainly will require some regulation and standard setting. As for the direct provision of services, since we are not starting from scratch -unlike other jurisdictions- it seems wise to use the existing infrastructures and regulatory framework.

Then the approach that we are taking is to use our legal attributions to foster the use of electronic transfer of funds (TEF) as a means of payment, particularly P2B. The existing regulation for retail payments clearing house will be certainly a building block for this.

In line with technological changes and accelerated innovation as well as users' preferences, adapting the regulatory framework and the infrastructures, we have set ourselves other short- and medium-term tasks within the framework of our Strategic Plan.

Since the Real Time Gross Settlement system is the core infrastructure where most payments are settled, it must be prepared to cope, as necessary, with a higher number of transactions and new non-bank participants, to eventually increase its operating hours, and certainly adopt international standards as well as proper cybersecurity measures. These are relevant responses for the most immediate challenges. In fact, some of them are required to implement the "Resilience Law" and during this year we will focus on its swift implementation which will require issuance of new pieces of regulation and also operational changes in our Real Time Gross Settlement system.

Also, under our Strategic Plan we have considered building a future-proof payment system. An unconventional policy response that most central banks in the world are exploring, is the development of a Central Bank Digital Currency (CBDC). In broader terms, it could contribute to improve financial inclusion, competition, efficiency -both of domestic and cross-border payments-, and sovereignty, and have a response to the rise of crypto assets and Decentralized Finances.

However, issuing a CBDC has several implications for central banks in terms of operational and reputational risks, in most countries it would require changing legal frameworks, and the effects on financial policy and monetary policy transmission are yet to be fully understood and assessed. These reasons may explain why no major economies have started issuing their own CBDCs, but they are certainly exploring it, some of them more actively than others, which include pilots with actual transactions.

In Chile, we published last March the Second report on CBDCs. One of its highlights is that we announced a more active exploration process which will include the development of one or more Proof of Concepts. Even though Chile does not have a

pressing need to issue a CBDC now, circumstances may change, and the Central Bank must be prepared should that be the case.

## **5. Conclusion: Central banks' involvement in payments system is growing, and Chile will be no exception.**

In this presentation I have spoken briefly of the initiatives and measures that we have taken so far to ensure that Chile has payment systems in place in accordance with its level of development, and I also have outlined the main challenges ahead and how we are planning to tackle them. The resilience of the payment system is a first-order goal for the Central Bank. Therefore, allowing the provision of digital payments alternatives, as different roads for the people and businesses to use, is extremely important. A broader and lower- cost transactions base is a must in a new world where the new technologies are offering a wide range of opportunities.

Furthermore, we are fully aware of the importance of increasing the interoperability of the system. This is a key factor for additional steps. The interaction between financial entities, clearing houses and different payment processors will be crucial. Additionally, the new open-finance ecosystem should be a contribution in this direction.

However, we still have a long pathway ahead of us. Real improvements for our citizens can only be achieved through the greater access of digital payments, and an efficient system that reduces the cost of their daily transactions.

The Central Bank cannot succeed on its own: we need the private sector's engagement to have efficient, secure, and innovative payment systems. We will continue to monitor these developments, and we will be up to date in knowledge and analysis and have the capabilities to address their risks and potential benefits, all in order to have a payment system that contributes to enhancing our economy and society's welfare.