Comisión Nacional de Productividad

Disruptive Technologies:
Regulation of Digital Platforms

Fintech Platforms

Abstract

This chapter deals with financial services platforms (FinTech) in Chile. FinTech platforms are companies that apply information technologies and digital platforms to all segments of the financial sector. The chapter presents the financial services platforms and analyzes its disruptions in the traditional financial sector. The sub-sectors of Payment Methods and Alternative Finance are analyzed, and recommendations put forward.

5.1 Introduction

The financial sector is fundamental in the modern economy. As the market mobilizes resources, it allows the conversion of savings into investment, diversify risk, and reduce transaction costs through the authorization of Payment Methods. For this reason, asides of being a market in itself, it is also a market enabler. Its importance stems from three crucial factors: development, liquidity and depth.[1] Development refers to the expansion of the market, and the creation of companies and instruments that support investment and growth (FitzGerald, 2007). Liquidity refers to the ability of converting assets into money, and vice-versa. Depth refers to the availability of instruments that allow dealing with events and efficient credit allocations to economy (Schmidt-Hebbel et al., 2000). By consolidating these three elements, a country can achieve an efficient and competitive capital market.

Over the centuries, innovation in financial products and services has created opportunities for exchange, investment and savings. These market development processes and its agents are accompanied by organizational, cultural and social changes, generating in turn reactions from the political and sectoral authorities. For example, advances in payment means such as checks-which were widespread during the eighteenth century- or credit cards- during the second half of the twentieth century- reduced trading costs in all markets, driving greater and more intense economic activity. Premiered in England in the 60's, credit cards and ATMs became massive as of 1970. Currently, the bulk of innovations in the sector have affected the market, for example, through online services to consumers and electronic transfers between bank accounts, generating significant savings to both consumers and businesses, including banks. Recently, the financial market has been shaken by the application of new technologies and business models based on the digital economy, mobile devices and the creation of alternative means savers and investors' aggregation and also of payment means. If the OECD predictions of are met, by 2022 there will be 14 billion electronic devices connected to the Internet (OECD 2015(, and these will be linked to the financial market some way or another.

Fintech companies, as financial services companies that operate in digital environments are known, use information technologies intensively to offer new services and products, and are present in practically all segments of the financial sector. Some offer new payment means, or facilitate the use of traditional means, while others are crypto-currencies. There are also those that gather information of the agents for their credit assessment, improve financial

1 King and Levine, 1993; De Gregorio and Guidotti, 1995.

education, make transactions, find insurance savings or investment options, etc. Often these innovations come from non-banking companies, and their products reduce or eliminate the role of the usually highly regulated intermediary, replacing it by algorithms or through direct user management (at very low cost). Its emergence promises to increase competition in key areas, reduce transaction costs, and advance in terms of financial inclusion. Due to its versatility and low costs, some of its services and products enable the development of the market in digital environments, similar to the use of money in the physical market.

This chapter will discuss some relevant aspects of Fintech and the financial market, including the state of the sector in Chile and its regulation. The subsectors of Payment Methods and Collective Financing are analyzed in depth. The segment of electronic money issuance, crypto currencies will not be discussed.

5.2 Traditional Financial Sector and associated services

The Chilean economy enjoys a higher degree of financial depth than any other emerging countries,[2] highlighting the banking services' coverage and the institutional investors' relative size, which has allowed a higher financial products'[3] development, whilst reducing household and business' financial vulnerability (Marcel, 2017).

Banks are the most relevant traditional financial parties, and a determining factor in the credit channel, the creation of secondary money, the facilitation of transactions and the offer of financial products and services. They allow transforming short-term savings into long-term productive investments, diversifying risks, and stabilizing consumption trajectories. Other relevant parties are savings banks, credit cooperatives, societies and investment funds, insurance companies, pension fund administrators, general fund administrators, *factoring* companies and reciprocal guarantee companies (RGCs)

The financial system's stability is an essential public policy objective because its malfunction may have serious consequences for the whole system. A financial crisis is quickly transferred to the real economy by reducing output and employment. In Chile, as in the rest of the world, the financial sector is widely regulated. Regulations seek to prevent systemic risks, diminish information asymmetries, and protect the consumers' interests, among others. Regulation and supervising institutions fulfill the key role of generating confidence on the participants, the products offered and the functioning of the system as a whole.

The Central Bank of Chile (CBC) ensures the currency's stability and the normal functioning of internal and external payments, promoting the financial system's stability and effectiveness. For these purposes, it conducts monetary policy and establishes regulations in monetary, financial, credit and international exchange matters. Faced with lack of transitory

2 Over the past three decades, Chile has been characterized by increasing its financial openness by removing controls on foreign capital, allowing further development and deepening of the financial system, resulting in greater access to credit and increased investment possibilities (De Gregorio , 2007). In the early nineties, bank loans accounted for 45% of GDP while in 2015 exceeded 85%, leading in Latin America (Working Group for the Analysis of a New General Banking Law, 2015).

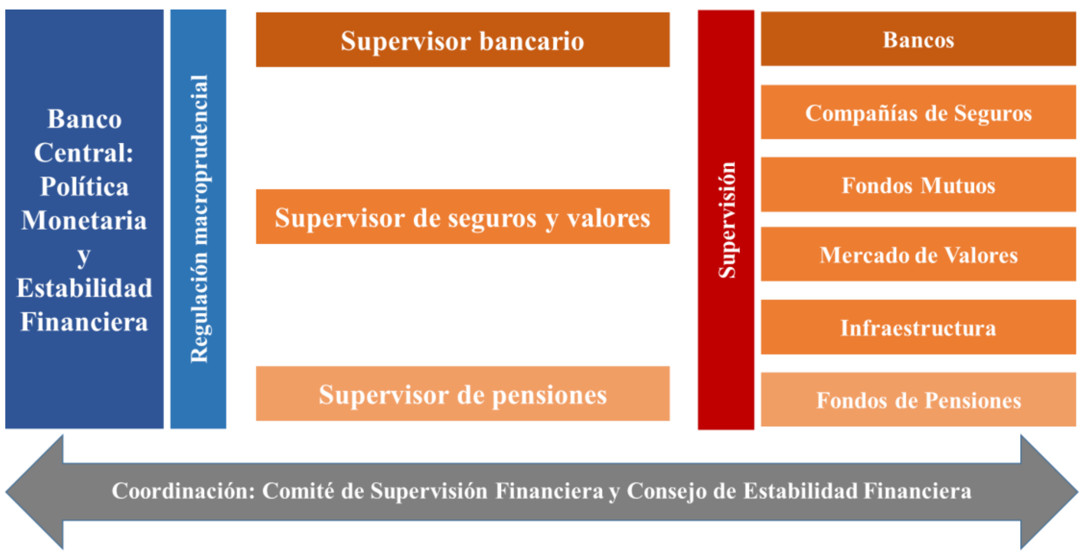
3 For example, mortgage loans, corporate financing and currency derivatives.

liquidity of a banking company, it may act as a lender of last resort or take over the payment of deposits and other obligations of an insolvent bank.

The Superintendence of Banks and Financial Institutions (SBFI), which has its basics on the General Banking Act (1997), is in charge of supervising banks and other financial institutions, in defense of depositors or other creditors and the public interest.[4] On the other hand, the Financial Markets Commission (CMF)[5] ensures the financial market's proper functioning, development and stability, facilitating the market agents' participation and promoting public faith. Additionally, it ensures that audited persons or entities, comply with the laws, regulations, statutes and other provisions that govern them. Meanwhile, the Superintendence of Pensions supervises the correct functioning of the Pension System and Unemployment Insurance.

Additionally, these supervisors have regulatory powers in their areas of competence and share responsibilities regarding financial stability with the Central Bank of Chile and the Ministry of Finance through the Financial Stability Council (CEF). Currently in Congress is the largest reform in twenty years to the General Banking Law. [6] Figure 5.1. synthesizes the institutional map of the sector's regulation.

Figure 5.1. Institutional map for the regulation of the financial sector in Chile.



Source: Marcel (2017)

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4 In particular, banks are especially important in regulatory terms for they have a role in creating money in a modern economy, and being highly dependent on third-party funds.

[5] Former Superintendency of Securities and Insurance (SVS)

[6] Some of its components are: the requirements of the Basilea III international agreement, the incorporation of the SBIF in the recently created CMF, the updating of tools for crisis scenarios or banking problems, among others.

Overall, the Chilean financial system has evolved significantly, which places us as Latin American leaders in depth and efficiency. This does not imply that our regulation and institutions are ready to face the sector's challenges, such as greater access. In fact, during the last few years there has been progress in the institutional modernization, for example, with the transformation of the SVS in the CMF, granting institutions with greater control attributions, but also with a task of integrally developing the financial market, along with the SBIF's incorporation to the CMF. Likewise, the biggest reform in twenty years to the General Banking Act is currently in Congress.

Finding 5.1: The Chilean financial ecosystem has had an important development in the last thirty years becoming the Latin American leader. Recently, a new process of institutional modernization has begun which includes the transformation of the Superintendence of Securities and Insurance into the Financial Markets Commission and the preparation of a new General Banking Act.

5.3 General FinTech Services

5.3.1 Characterization

"FinTech" incorporates the set of financial market services that take advantage of information and communication technologies (Nicoletti, 2017.

Fintech can perform financial institution activities and are located in all segments of the sector's value chain and perform final functions or facilitate intermediate support processes. Amongst other services, Fintech offer: payments and transactions (including digital currency, collections, transfers, mobile points of sale, and electronic commerce, etc.), financing of investments via credits or participation (crowdfunding, crowdlending, etc.) credit ratings of companies and individuals, financing, wealth and investment management, insurance, security, application programming interfaces or open platforms that allow the creation of banking applications based on preexisting modules, financial education, among others. Those that offer direct services to clients have been especially disruptive.

Box 5.1 Some of these segments include:

Alternative Payments Methods and Remittances (including digital currency, collections, transfers, mobile sale points, e-commerce). For example, MACH, linked to the BCI bank, is a prepaid virtual card, associated to a RUT[7], which can be loaded from any bank account. The platform allows you to make transactions with all cell phone contacts that have MACH. Funds can be paid or received through messaging.

Credit ratings of unbanked people and firms. Destácame is a platform in Chile, whereby the user allows access to his/her information, generating an unbiased evaluation report based on facts (including positive information), which allows the user gain access to better rates

[7] RUT: Rol Único Tributario is the tax registration number.

thanks to their behavior. The user is the only one who can access their score, payment and consumption data. Thanks to these instruments, it is possible to decrease the credit cost.

Financing to people (loans). The American Prosper and Lending Club are platforms whereby people can request and invest in loans to other people (P2P). Multiple sources of information are used to evaluate the risks associated with the credits.

Financing to companies (loans, credit and factoring). In this category, there are many platforms, mainly Alternative Finance. For example, the Facturedo platform allows buying or selling invoices in Chile. It is aimed at Chilean companies that sell products or services to other companies on credit, at an operating cost between 1% and 2.5% per month of the value of the invoice (depending on the size of the invoice, date and risk).

Personal Financial Management (PFM) (accounting, financial and investment management, trading). For example, the Fintual platform is a General Fund Administrator regulated by the CMF that works as a "robo-advisor" by automating portfolio rebalancing, according to the investors' risk preferences.

Insurance (InsurTech). An example is the Connected Insurance platform (Falabella Insurance), a car insurance whereby payment is made according to traveled kilometers, allowing the reduction of insurance costs.

Security (fraud detection, authentication). The TOC Biometrics platform allows banks and companies to safely identify their clients through biometric facial and fingerprint technology.[8]

Platforms and financial technologies (for example, application programming interfaces or open platforms). Analytics applied to financial services. The Singular Banking platform stands out, which allows the creation of banking applications based on pre-existing modules.

Financial education. These are platforms such as Übank, which allows saving through automatic savings rules. The user decides how much to save and to what term, generating goals. The savings rules allow converting the user's habits into savings.

FinTechs are an important opportunity since they increase service supply, the sector's competition, the percentage of people and companies with access to financing and financial services and enable other markets by facilitating their transactions.

Its ease, transaction speed, affordability, security and cost, allow at the same time to increase supply, demand, and access to financial services. For example, they permit that people or Small and Medium Enterprises (PYMEs in Spanish) without prior credit history or without collateral access a loan. They may have electronic payment mechanisms even if they don't

[8] TOC is accredited by the Ministry of Economy to provide services of Electronic Signature and Advanced Electronic Signature of documents according to Law 19,799.

have access to formal banks; they also increase the offer of assets to investors, responding in this way to gaps and information asymmetries related to credit allocation.

There may be complementarity and substitution levels between FinTech and traditional financial institutions, although specific to the segment and context. Fintech often use products and rely on traditional banking institutions, and the traditional financial sector has increasingly offered digitized services both to reduce costs[9] and to react to FinTech through acquisitions or collaborations improving their offer.[10] Worldwide, approximately 60% of banks have some type of collaboration or partnership with FinTech (Capgemini, 2017).

The size of the market and the level of investment in several countries reflects the sector's explosive growth worldwide, where the United States and the United Kingdom stand out (see Table 5.1).

Table 5.1. Main FinTech Markets Worldwide

Country	Market Size (US$ million)	Investment (US$ million)
United Kingdom	6.600	500
New York (USA)	5.600	1.400
California (USA)	4.700	3.600
Germany	1.800	400
Australia	700	200
Hong Kong	600	50
Singapore	600	40

Source: National Productivity Commission based on Nicoletti (2017)

There are 76 FinTech[11] in Chile as of December 2017 (Finnovista, 2017) predominantly in payment methods companies (30%) and Alternative Finance sectors (*crowdfunding and/or*

9 Much of the frequent interaction of a user with his bank can be done digitally with the consequent savings in time and resources for both parties.

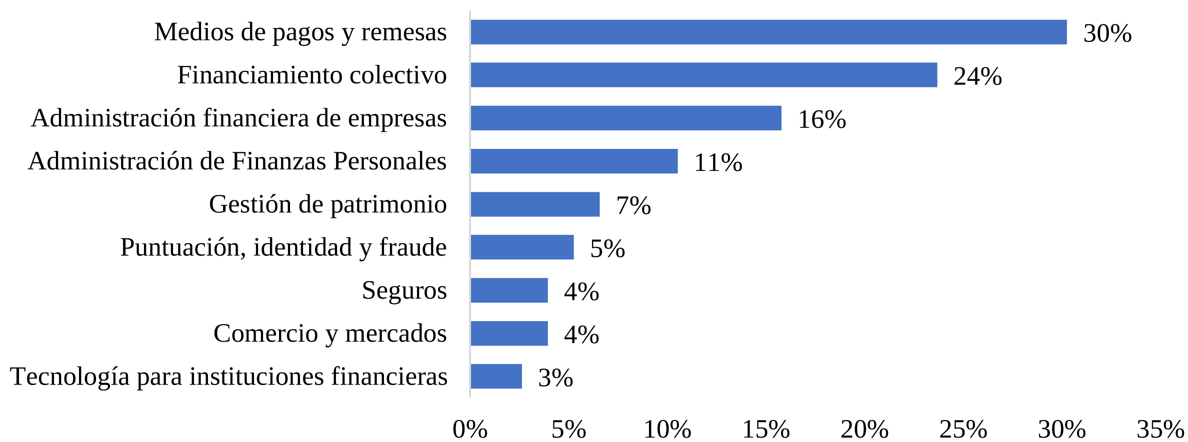
10 There are also companies that connect parts of the ecosystem for the benefit of consumers (eg, BUD).

11 Payment methods and remittances: Finciero, Coinaction, Masblu, Slice. Uanbai, Ionix, chilebit.net, Cryptomkt, Puntopagos, Pipol, Cryptopayment, Buddha, Mach, Surbtc, Digital Octupus, Kiphu, Currencybird, Mactron Payment, Multicaja, MercadoPago, Flow, CityWallet, Yaykyu, Easy Payment. Heritage management: Fintual, N Fondos, Axiom, Fintree, Fol. Punctuation. Identity and fraud: Destacame.cl, 7oc biometrics, Keyou, Variacode. Commerce and markets: Finvox, Capitaria. Collective financing: Facturado, RedCapital, Becual, Cumplo, Buerse, 2nd impact, Loans between people, founderlist, Broota, Dodo, Desafío Levantemos Chile, Godzillion, Capitalizarme.com, weeshing, returned, Propieus, BeSafe, Crowfunding.cl. Personal Finance Administration: übank, UR Savings, mifutu.ro, AgentPiggy. Personal Finance Administration (Comparison): juus.to, Invests Simple, Fintonic. Insurance: Compare Online, SecureAqui.com, securely connected. Technology for financial institutions: Less Komplex, Singular. Financial management of companies: ComunidadFeliz, Cforemoto, SmartCob, Fintree, GoSocket, QVO, Paperless, Payment Portal, [organizaMe], Chipaxm Cobrotechm Blinking. Source: https://www.finnovista.com/wp-content/uploads/2017/12/FintechRadarChile_print-version2018.pdf

loans) (24%) (See Figure 5.2).). These two sub sectors are addressed in sections 5.4 and 5.5 respectively.[12]

The sector's formation in Chile has led to the creation of new companies (although most have relationships with companies in the traditional sector) and has derived to the creation of trade associations such as the FinTech Chile Association,[13] incubators such as CORFO's StartUp Chile that have worked with several FinTech, and testing spaces such as those offered by Bci Labs stand out.

Figure 5.2. FinTech segments' participation in Chile 2017 (%)



Source: National Productivity Commission based on Finnovista (2017)

Finding 5.2: Worldwide, the FinTech sector has grown steadily, increasing efficiency and competition, and allowing greater access to financial services to companies and individuals.

Finding 5.3: In Chile, the FinTech sector has grown in recent years, with domestic companies concentrating in the Payment and Remittances (30%) and Alternative Finance (24%) segments. These companies are mainly new actors, although several maintain links with traditional actors.

5.3.2 General Regulation

The financial sector and particularly banking is vigorously regulated. The current regulation and supervision system are based on actions that followed the 1982 financial crisis, attributed mainly to the lack of regulations in certain areas, which led to a new General Banking Act, securities markets and anonymous societies. The sector and its institutions' regulations have

12 The selection criteria was the number of companies by sector based on the Finnovista cadastre, which does not imply that other sectors such as cryptoactives (included in means of payment for this cadastre), or insurance are not generating significant disruptions.

13 See www.fintechile.org. There is also a Union Association for Collective Financing (AFICO).

evolved in successive reforms, the most recent being the banking reform of 2018. The transformation of the Superintendence of Securities and Insurance into the Commission for the Financial Market and the new Banking Law are proof that the regulators have become aware of the need to update and revise the general financial regulations, especially regarding the benefit of integrated supervision under a single agency. There is currently no specific regulation for Fintech companies.

It is beyond the scope of this chapter to cover all the banking and financial sector regulatory challenges in Chile, so we will focus on mentioning entry barriers for new technologies, both due to the existence of rules that limit entry, and the absence of standards that allow it. These affects both the traditional actors that want to enter the sector, as well as newly created Fintech companies.

For example, the banking service providers (SAG), allowed since 1986 within the reforms of the General Banking Act permit banks to constitute companies that facilitate their activities, excluding money collection. This allowed new companies (owned by banks) to emerge, such as Transbank (acquiring role of credit and debit transactions), Redbanc (ATM network), Sinacofi (consolidates customers' commercial information), Servipag (service payment), among others. These structures generate risks such as banking concentration and vertical integration,[14] which may constrain competition and act as entry barriers, especially to Fintech companies that operate in digital and data-intensive environments and their exchange. There have been reports of dominant position abuse and tariff discrimination,[15] causing barriers to new companies that need bank association in order to operate.

Financial innovation potential can also be reduced by regulation absence in certain areas.[16] For example, the absence of a (positive) debt information base that incorporates information on all relevant credit providers threatens competition and financial inclusion, and increases information asymmetries.[17] Regulating the use of positive information would allow promoting responsible indebtedness, and increase financial inclusion. Linked to this, in 2015, the Tribunal for the Defense of Free Competition (TDLC) authorized Equifax to provide credit information service to retail.

FinTech firms and their emergence enhance already existing tensions regarding regulations. Concern over their regulation has increased along with the growth of its consumer base. The Financial Stability Board (2017) identifies FinTech´s main potential risks: (i) erosion of the central banks‘ role in the payment systems and provision of fiduciary currency system, (ii)

[14] Three decades later, the context is different, because, for example, some banks have bought others, increasing their participation in SAGs.

[15] In this matter, the SBIF has ruled demanding that its operation be reviewed in a context where the industry shows solid, stable and well capitalized banks, and spaces to improve competition. In this regard, Chapter 11-6 RAN, Annex 3 regulates the requirements applicable to the establishment of SAG linked to the payment system, in terms of network interconnection, tariffs, access and others.

16 Note that the main objective of financial regulation is to mitigate risks, but in some cases their absence can inhibit development.

17 There is a basis, but it only covers banks and cooperatives supervised by the SBIF.

the banks' greater vulnerability to operational and cyber risks, especially if the institutions become dependent on certain services, such as hosting and cloud computing, (iii) risk for users especially due to lack of financial education, (iv) risk to the system's integrity regarding money laundering and terrorism. Due to its low scale, there are no risks to the stability of the financial system but that it must be monitored.[18]

Worldwide, the sector's novelty and heterogeneity mean that there are still no standardized practices in regulatory matters. The speed with which new solutions enter the market is high, challenging the capacity of understanding and response of regulatory bodies, both in developed and developing countries.

In the United States, the regulatory approach is based on the principle that those who perform the same activities are subject to the same rules, regardless of whether they are carried out by a bank or a non-financial institution (Fonté, 2013). Many FinTech would be doing banking functions, and many FinTech activities are covered by the existing regulatory frameworks (FSB, 2017), but this is also an opportunity to review and update the current regulations. The regulatory framework is important, especially when the FinTech appear due to the disintegration of the different financial activities that used to be carried out by a single entity.

There is no consensus regarding FinTech regulation in Europe, and most countries have opted not to flexibilize access to financial platforms. England is an exception, as it seeks to become an international center of FinTech activity and has adopted a flexible approach. France maintains greater regulation and demands of the platforms homologous licenses to those of traditional services (banking and insurance especially) and compliance with current regulations. In Italy, there is no defined legal framework yet.

The strong growth of FinTech in Asia caused the authorities to accelerate the sector's regulation. In July 2015, the Central Bank of China published a set of regulations for online payment services provided by non-bank payment institutions, seeking to guarantee the stability of the payment system and protect consumers (Zhou, Arner and Buckley, 2017). Like England, Singapore seeks to position itself in Asia as a financial center. It has adopted a less demanding regulation to allow the industry's proliferation (Nicoletti, 2017).

In Latin America, Argentina and Colombia have regulated collective financing, and Mexico approved the only general Fintech law in the region, with specific sections for collective financing, means of payment and virtual assets (eg Bitcoin).

Chile has made progress with new regulations on Payment Methods,[19] upon the introduction of non-banking service providers. However, the country does not have a general legislation that covers the FinTech ecosystem and its evolution.[20] Moreover, regulators and supervisors

18 Even some Fintech could help financial stability, for example, through better risk assessment when allocating a loan.

19 Addressed in the next section.

20 Probably a combination of a general law that establishes principles and a miscellaneous that adjusts existing regulations is required to incorporate the most relevant Fintech models.

often do not have the legal powers to act accordingly, and rather, the legislation categorizes FinTech within existing financial service providers.

Given that there are various FinTech services in the country such as Payment Methods, Alternative Finance, financial advice, finance management to people and businesses, a general legislation could establish minimum principles for them.[21]

Experience has shown that a specific regulatory framework is necessary for FinTech, including: new mandates and powers for regulators, the creation of new registered and licensed activities within the regulatory perimeter, regulatory sandboxes, dialogue and a lot of coordination amongst regulatory agencies (CCAF & IADB, 2018). FinTechs are growing both in the region and in Chile, and other countries are adapting and modernizing their protocols.

Given this international context, and the sector's explosive growth, it is urgent to review regulations, evaluate the services' externalities and risks, and design their adequate incorporation into the financial ecosystem. Additionally, update the capacity of regulators and supervisors to deal with the new risks. Not doing so would limit the advantages Fintech offers the country and Chile would risk losing the option of becoming a future regional financial center.

A wide-ranging FinTech law should establish general principles leaving the details to the supervisory bodies. Considering the development of Fintech in Chile, which already offer services in alternative financing markets, financial advice, and management of finances to people and companies, means of payment, etc., a general law could establish minimum principles for them. They should be priority given the size of certain sub sectors in our country (such as Alternative Finance and crypto assets). The regulation should consider the need to report / respond to governmental entities such as the Financial Analysis Unit, the Internal Revenue Service and the National Consumer Service.

Finding 5.4: The regulators' reaction to the growth of Fintech has differed between countries. Several developed and emerging countries have modified their regulatory bodies to include FinTech, while others extend the traditional norm. Chile's regulatory lag is evident even at the regional level, and the gap is huge compared with countries like England or the United States.

Recommendation 5.1: Develop a FinTech regulatory framework, which should cover the whole sector, including services delivered by non-banking providers, with general aspects and regulatory details.

[21] The collegiate bodies of the Central Bank and the CMF offer a robust and more flexible institutional framework.

Part of the challenge of regulating new technologies and business models lies on the limited information concerning risks and associated transmission mechanisms. Often, some aspect of these will conflict with the current regulation -conceived at a different time and for other purposes- and the regulator reacts by limiting them, since it is undeniable that entrepreneur innovation can manifest faster than the regulator reaction. To resolve the inherent tension between innovation and regulation, some countries -especially England- have created test environments for new technologies and business models, called *Sandbox*.

In a *Sandbox* the regulator defines action spaces for companies, setting levels of tolerance to risks with explicit boundaries, and creating monitoring mechanisms that relieve the regulator's limiting impulse facing an unknown scenario. Thus, after a period of observation, the regulator and the regulated can better estimate the risks, understand the mechanisms by which they are transmitted and the relevant criteria to anticipate them, therefore calibrating the transitory regulations and constructing the definitive one.

A regulatory Sandbox provides clear and proportionate regulations, although with (temporarily) minor requirements than those considered by the authority as necessary for the sector to develop on a permanent basis. This offers a familiar environment that encourages innovation in companies, and an understanding of the sector for the regulator. England developed in 2016 the Sandbox concept focused on the financial sector (and it has been extended to others), and has been successfully imitated in Australia, Canada, Switzerland, Malaysia, Singapore, among other countries.

A mechanism such as the Sandbox requires a specific law for its appliance in Chile, and an ad hoc structure by regulators.[22] In practice, the Sandbox implies a temporary license with defined criteria, and close supervision by the regulator to understand the business model and its inherent risks. Clearly, regulations regarding the prevention of money laundering or tax compliance are not relaxed, but other criteria may be adjusted according to the estimated risk threshold. Parallel to the testing spaces through the sandbox, permanent worldwide monitoring of the financial sector is required, with a prospective role that allows anticipating potential developments of new markets in Chile, and a proactive attitude of the regulator.

Recommendation 5.2: Establish a temporary legal license for FinTech firms in Chile within a regulatory Sandbox, granting security to the participants (users and entrepreneurs) and allowing the development of financial innovations. Sandbox participants must provide information to the authority for the development of the eventual regulation.

A crucial part of the FinTech’s and the Sandbox’s success, along with the creation of a general regulatory framework, lies in the monitoring of global financial changes.

A key problem is that often, new services, technologies and bank or FinTech applications fall in a regulatory void, lacking supervision and oversight. The regulator is partly responsible of this void and must tackle this issue.

22 The Commission for the Financial Market appears as an interesting institutional alternative for its administration.

In that sense, a monitoring, and technological and regulatory prospecting department would be a contribution, which could be hosted by the Financial Markets Commission. In case of detecting topics of interest, they could be raised to the Financial Stability Council and other instances. The objective of monitoring (as with the sandbox) is to promote a proactive rather than conservative regulation. Without monitoring, it is difficult to generate the appropriate regulatory tools for the country, therefore increasing the risks associated to innovations.

Recommendation 5.3: Monitor financial and regulatory technological changes in order to update constantly the Sandbox's regulatory framework and requirements.

An important part of the restrictions on FinTech firms' development and financial innovation is due to information fragmentation, already captures by established traditional companies. It is vital to expand banking data opening and establish the minimum conditions for it to be shared (by the company or the user, the user, on whom said data has been collected) would boost competence and innovation in the entire financial system. Known as "open Banking", it allows financial and credit institutions open their technological platform to other parties, such as FinTech, and - with the authorization of the data's owner - share the information through an Application Programming Interface (API).[23]

For example, Destácame is a Chilean credit rating FinTech that helps people display their payment behavior to their banks and department stores and obtain cheaper loans according to their risk profile. Through APIs, this type of FinTech could access more information, benefiting both consumers and credit institutions through better risk assessment and, therefore, better credit allocation. In Chile the "open bank" is just emerging. Among the few initiatives, BCI Labs stands out. In September 2017, it launched the first open APIs portal of Chilean banking, available for developers or start-ups seeking to work with the bank's clients.[24]

Open Banking has important implications in terms of security, privacy and consumer protection,[25] and is a key element for banking's digital future. International experience includes governments like the European Union or Japan that have forced banks to use APIs so that FinTech can provide services directly to users of accounts deposited in financial institutions. Others, like Singapore have proposed less coercive measures to promote openness, along with guidelines to FinTech banks and companies on how to minimize risks. There are also private initiatives that seek synergy between both types of financial entities, whereby the exchange of data is limited to associated companies.[26] It is important to

23 The APIs seek to facilitate the interaction between applications through codes and specifications. For example, when accessing airline information from an online travel agency, the web page serves the request through a connection with the airline that contains the flight data.

24 See https://developers.bci.cl. The APIs available on the portal are BCI ATMs throughout the country, branches throughout Chile, daily economic indicators such as UF, dollar and copper, consumer credit and mortgage credit simulator, bank benefits to their customers and banking accounts.

25 For example, there could be concern regarding personal data protection, whereby the owner's consent is required for access. Countries like the United Kingdom that have driven Open Banking's development through APIs have data protection laws that are substantially more demanding than the Chilean one.

26 See, for example, the case of Dwolla (Fintech for payment services) and BBVA in the United States in Rojas (2016).

distinguish the collaborative or commercial behavior between traditional financial institutions and Fintechs, from concentrating acquisitions of the new models by the traditional sector whose ultimate aim is to reduce competition[27]

Recommendation 5.4: Promote "Open Banking" by facilitating the opening and exchange of information between traditional parties such as banks, and with new companies of the financial sector like FinTech firms.

5.4 Payment Methods

Payment methods are goods, instruments or forms whereby a payment can be made for the acquisition of goods and services. Historically, money (cash) has been the most widely used payment method, although promissory notes, checks, bills of exchange, prepaid, debit and credit cards, among others, are other payment methods.

5.4.1. Traditional Payment Methods

More and better payment methods directly affect people´s welfare and businesses' well-being, mainly through their effects on financial inclusion. Among its benefits are the transaction costs' decrease, the increase in security, distribution facilitation, social benefit payment and monitoring, electronic commerce and tourism promotion, and consumption promotion in formal commerce (Ministry of Economy, 2014).

Debit and credit cards (as payment methods) have had a considerable impact on economic transactions in the last decade, revealing a large shift regarding the use of cash. In Chile, debit card numbers increased from 0.7 to 21 million from 1995 to 2017. The number of credit cards increased from two to 13 million during the same period, with an average of 2.3 cards per person (over 15 years old) resembling OECD countries' average (Abif, 2017a). Indeed, debit and credit card transactions currently exceed 900 and 300 million transactions (respectively) per year.

The RUT account[28] of Banco Estado (State Bank) has been a financial inclusion driver, allowing access to sight and savings accounts, and the corresponding debit card (see Figure 5.3). Currently, over 9.5 million people have this product, where, over 5 million could not have accessed the financial system otherwise.[29] Additionally, access to this Payment Methods permits access to electronic payments such as transfers and electronic deposits, 61% and 45% respectively of the RUT account transactions.[30] On the other hand, the company Caja Vecina[31] of Banco Estado has also revealed the positive effects of access to payment

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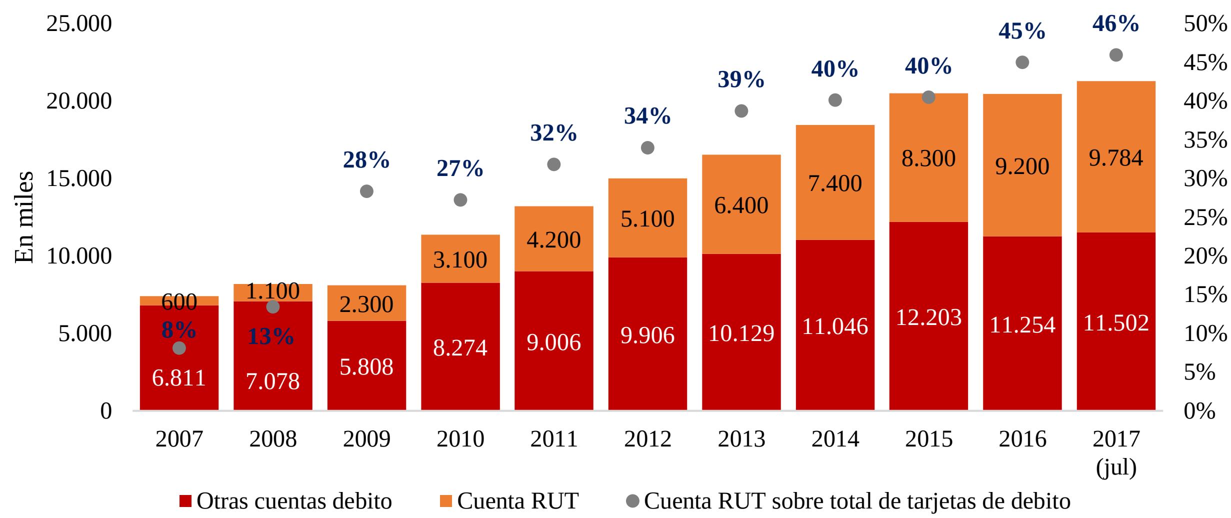
[27] In the United States, JP Morgan partnered with One Deck, but acquired WebPay. Both are payment methods.
[28] The Rut account (cuentaRUT) is a specific account issued only by Banco Estado. It is a relatively limited bank account, and the only requirement to obtain it is to have an identification number (the tax number).
[29] https://huellasocialbancoestado.cl
[30] https://huellasocialbancoestado.cl
[31] It allows approaching financial and non-financial services, offering users to make money orders and deposits, tax payments or Fonasa medical consultation vouchers payments. The attention network is present almost all over the country (at stores, fairs, hairdressers, etc.).

and financial services on people's quality of life. The "Minga Plan", which operates since 2016, is worth mentioning. It is a Caja Vecina that covers, by boat, 106 isolated locations in the Chiloé archipelago. Estimations point at a 10% benefit in time and money of its inhabitants' monthly income.[32]

Figure 5.3. RUT account's evolution over total credit cards.



Source: Marshall and Winkler (2017)

These greater card transactions have been accompanied by a constant growth of the electronic Point-of-sale terminals (POS), which allow cards to be used to purchase goods and services in different commercial establishments (Abif, 2017a). In addition, its uses have expanded greatly with electronic commerce and Internet services.

It is worth understanding the credit and debit cards' payment system to appreciate what changes FinTech introduces in the payment schemes.

In the Chilean credit and debit card market, there is a four-party scheme. In the first place, there are the card brands such as MasterCard, VISA, American Express, etc. Secondly, there are issuers, which are mainly banks,[33] and are authorized and licensed by the brands to issue credit and debit cards.[34] The issuers deliver the cards to cardholders and manage their accounts. Third, there are the operators,[35] companies that provide the issuer with the services

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33 According to Casen 2015, the per capita income of the rural areas of the province of Chiloé is $ 216,221, so the savings of 10% would be approximately $ 21,622.[32]

[33] The issuers are banks or other financial entities that grant credit / debit cards. The issuers have processors who are in charge of managing the cardholder's account (the cardholder), transaction authorization, the charges and statement generation. The issuer and the acquirer can be the same entity with two roles.

[34] Non-bank credit institutions can issue cards without an international brand. However, since there are multiple benefits of being associated with a brand, frequently, non-banking institutions also join Visa or MasterCard for their cards.

[35] Known as "switch" in Chile.

they capture (clearing and settlement) and electronically authorize debit and credit card transactions, connecting the affiliated merchant with the card issuer (either directly or through a credit card network). Fourthly, is the acquirer, in charge of affiliating commercial establishments to the system, so that cardholders can purchase and transact with their cards. The acquirer charges a percentage of the total sale (merchant discount). In this way, the acquirer is the only one who has obligations with the businesses that they affiliate.

In each operation carried out in a commercial establishment, the card information travels through the intermediaries from the place of trade to the bank. Then, the money makes the reverse route (from the bank to the merchant), a process that includes authorization, authentication, clearing and settlement stages. The cardholder pays the merchant who accepts his card as a payment method through an intermediary (acquirer) who affiliates the merchants and provides them with the payment-processing instrument. A similar operation occurs in online purchases (non-contact).[36]

For the four-party scheme work, interchange fee must be established between the different networks. The acquirer must pay the issuer an interchange fee for each transaction. Historically, this is set every six months by card brands and, in practice, it is a merchant discount base in a competitive market. Thus, the interchange fee is a balancing mechanism, through which some of the (issuing) costs are covered by the acquiring party.

Of the model's four parties, the most complex market to regulate and introduce competition in Chile has been acquirers. With greater competition in the acquirers, banks would tend to offer better rates and products, which would generate lower merchant commissions (merchant discounts) and better services for all.

For almost three decades, Transbank S.A.,[37] the first and only acquirer, has been the only company authorized to process bank cards in stores, and then on the Internet. The corporate purpose of Transbank is to fulfill the operator role. However, by N ° 1 of Title VI (Chapter III.J.1 of the Compendium of Financial Regulations of the CBC), it fulfills the role of acquirer.[38] The legal framework (the General Banking Act and the Organic Law of the CBC) does not distinguish the acquisition market in particular. According to regulations, the CBC allows that, regarding payment cards, affiliation to the payment methods is made by the

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[36] In an online payment, neither the seller nor the buyer physically matches. The same applies to any online process that requires disbursements, such as transfers or remittances. In the virtual market, instead of a physical store, there are trading platforms linked to payment platforms that allow making a transaction by entering the details of a credit card in the online trading platform, or by associating a card or checking account to a payment platform. One of the largest global companies in the payment media sector is Paypal, which has about 203 million active account holders in more than 200 markets (including Chile). It obtained revenues of US $ 10.8 billion in 2016, mediating a payment volume of US $ 354 billion in 6.1 billion transactions.

[37] Transbank S.A. is an Auxiliary Financial Company whose owners are banks (issuers). It relies on Nexus and Redbanc, who manage the ATM networks in the country.

[38] "Without prejudice to the foregoing, operators may affiliate establishments and be responsible for payment thereof, provided they comply with the provisions of N ° 1 of Title VI (Chapter III.J.1 of the Compendium)"

issuer.[39] However, in the operation contract with the banks, Transbank included a clause whereby each bank grants it the role of acquirer, that is, the faculty and the duty to affiliate merchants.[40] This allowed a single model to emerge, resulting in a monopoly with vertical integration, where Transbank S.A. is operator and acquirer, and the issuers are its owners. This operation generated conflicts of interest, because if there were another network with the capacity to operate as an acquirer, banks would have no incentive to connect with this other network since Transbank's profits go directly to the issuers (shareholder banks).

Therefore, the National Economic Prosecutor's Office (FNE) denounced Transbank's dominance position in the acquisition market in 2004.[41] However, in 2005, the Tribunal for the Defense of Free Competition (TDLC) declared the company as an "essential facility" arguing that the market could not cope with more than a party in the area of operation and acquisition, so a Self-Regulation Plan[42] was opted for. In view of complaints, the TDLC proposed in 2017, among other measures, to encourage competition, and prohibit the joint action of the issuing banks in the acquisition.[43] Since then, several regulatory changes have taken place, which are reviewed in the regulatory context section.

As of September 2018, Banco Santander announced that it would terminate the contract that cedes its acquirer role to Transbank bt 2019, beginning to operate with an exchange rate set by MasterCard for the local market and acquirers will be able to compete in commissions (same network that uses Multicaja)[44].

Finding 5.5: It has been a permanent challenge in Chile to introduce more competition in the payment methods sector and to have more options, at a lower price, for consumers.

5.4.2 FinTech Payment Methods

FinTech payment methods are companies that offer intermediation services for payment methods and operate with money transfers deposited in accounts maintained by institutions other than those of the payer and collector.[45] The service provider intermediates between the

[39] In the terms in which it establishes N ° 6 and 7 of Title I of Cap. III.J.1 of the CNF; and Titles I and III of Chap. III.J.2 CNF.

[40] The relationship between Transbank and the commercial establishments is set through the Affiliation Agreement and the various subscribed Annexes.

[41] The complaint by the FNE was based on multiple reasons. On the one hand, the fixing of their undifferentiated rates on credit and debit cards, despite different risks and operating costs, and, on the other hand, the offering of discounts for transaction volume only to shareholders, and not to all connected institutions, generating an entry barrier to banks not belonging to the SAG. Finally, it was required that their different products be offered separately, so that businesses could connect through some products and not have to accept the full package of services (all or nothing).

[42] See TDLC, Judgment N | 29/2005, of September 12, 2005. Case No. C-16-04.

[43] See TDLC, Proposition No. 19/2017, of January 13, 2017. ERN Role N ° 20-2014.

[44] The end of this contract implies that Santander will customize its products and deliver different benefits to the rest of the industry.

45 A more specific definition is in CNF III.J.2, which defines the Payment Processing Services Providers (PSP) to companies, not operators, that perform one or more of the following activities: (i) the authorization and record of the transactions made by the Holders or Users of the Card (s); (ii) the affiliation procedures of entities to the system, without them comprising the provision of regulated services by the card operation; (iii) the provision of point-of-sale terminals or

two parties, and reduces some inherent risks for both. These FinTech insert themselves in different phases of the payment process: authorization, authentication, clearing and settlement.

In a market like Chile, these companies have a high potential to add value and increase competition and financial inclusion. In Chile, the adult population has a prevalence of 70% sight accounts and 72% in debit card,[46] but only one third has a credit card,[47] and only 15% with a bank account. The access to these services could potentially activate important groups of the population that are usually excluded from the financial market in general and of alternative payment methods (other than cash) (SBFI, 2016).[48]

Being a heterogeneous sector, payment method companies can be grouped based on the delivered services:

> **a) Payment platforms and sending / receiving money:** Both parties to the transaction keep an account in a payment platform, and the operation is performed within a closed system. Examples of these platforms are the electronic money account PayPal, Mercadolibre and remittance companies.
>
> **b) Payment services (buttons or payment initiators):** that facilitate bank account use in the virtual market, without credit cards and without PayPal. This category includes two types:
>
>> i. Those that redirect the user to their bank's "online" channel to complete the transfer. An example in Chile is the PuntoPago firm that allows access to electronic commerce sites to a wide variety of payment methods.
>>
>> ii. Those that, having obtained authorization from the users to act on their behalf, operate as originators or transfer collectors processed in the interbank infrastructure. An example in Chile is Khipu, which allows payments / collections to be made via the internet using its user's bank accounts. WebPay and Dwolla are other global companies that provide this service.
>
> **c) Services that facilitate the use of credit / debit cards, remotely or in person:** There are several providers, including specialized software companies in sectors (restaurants, hotels, hospitals), whose IT solutions incorporate payment processing. For e-commerce, there are "aggregators" that offer a virtual terminal and execute the information's secure transmission to the card operator.[49] These companies offer

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channels or applications of an electronic or computer nature that allow the authorization, capture, aggregation and communication of payment transactions, so that they may be subsequently processed by an Operator for the purposes of their settlement and / or payment; and (iv) other activities related to the operation of Cards, provided that they do not involve the settlement and / or payment of the benefits owed to the affiliated entities, as a result of the use of said instruments.

46 Both percentages are largely due to the State Bank's RUT Account and the private sector's efforts to expand coverage.

47 Banking and non-banking.

48 See SBIF (2016) Financial Inclusion Report in Chile.

49 Traditional acquirers offer businesses their own account and a unique sales code. The aggregator uses an account or more from a bank where it "aggregates" the businesses and then transfers the amount of the settlement to their individual account.

businesses the possibility of accepting all payment instruments, including electronic transfers, which has been a solution for SMEs, for whom selling digitally is more cumbersome. Uanbai (a Chilean firm), allows buying and selling directly from Facebook and other social networks.[50] Additionally, Pipol is an application that allows speedy restaurant bill payments, which are then charged to the associated credit card.

d) Digital wallet services (e-wallets): Allow storing in a smartphone various forms of payment, including virtual accounts and cards. The data is stored in the cloud, and the consumer selects one, as if he had a physical wallet. This allows transferring funds and purchasing both in physical stores and online (e.g. Google Wallet). In Chile, Ionix is a system that allows buying and selling transactions with credit and debit cards, and opens, to other sectors (e.g., taxis) the possibility to accept these methods.

Finding 5.6: There are at least four types of FinTech Payment Methods platforms, which have been introduced in the financial sector with increasing importance to facilitate transactions and augment commercial exchange.

5.4.3 Regulatory Context

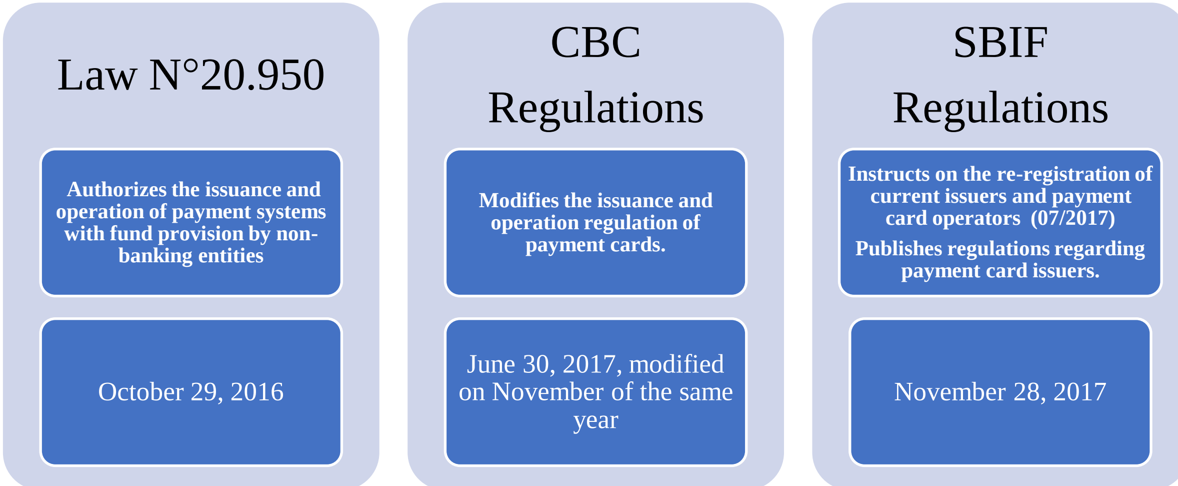
The main legal norm that regulates the payment methods segment is the Organic Law (LOC) of the Central Bank of Chile (CBC). It grants the issuing institution the responsibility of ensuring the currency's stability and the internal and external payments normal functioning (Compendium of Financial Regulations and Compendium of Foreign Exchange Regulations,[51] both from CBC). Thus, it is up to the CBC to dictate the rules that regulate companies whose business consists in the issue or operation of credit cards, payment cards with fund provision, or any other system similar to the aforementioned payment instruments, and which are under the Superintendence of Banks and Financial Institutions' supervision. The other institution in charge of regulation is the Superintendence of Banks and Financial Institutions SBFI, responsible for authorizing and supervising the banks and the card issuers and operators.[52]

50 It is an online shopping platform based on Twitter: offers are made on Twitter and with a ReTweet the purchase is reserved for a period of 60 minutes to for payment by any means. The purchase is confirmed via Twitter and in case of need, an electronic Coupon that enables the withdrawal to the email is sent.

51 Chapter III, letter j, on "payment systems through cards and other electronic means".

52 The General Law of Banks regulates the Auxiliary Financial Services (SAG) in the art 74. The SBIF normative includes the chapters 3 and 2-15 of the Updated Compilation of Norms (RAN): circulars nº1 / 2009 and nª40 / 2013; and chapter 11-6 RAN, circular 3.539 / 2012 (SAG).

Figure 5.4. Regulatory changes in Payment Methods in Chile 2016-2017. Source



: National Productivity Commission based on CBC and SBFI

These institutions have developed a modernizing process for the regulation of payment methods during the last two years (Figure 5.4). Law 20,950 of October 2016 includes the provisions that regulate the issuance and operation of payment systems with fund provisions by non-banking entities.[53] With this approval, non-banking entities can be payment card issuers with provision of funds,[54] despite being considered as money collection from the public. The non-bank prepaid system allows storing funds in plastic cards, internet accounts / mobile phones or any other electronic / magnetic support. Until now, Chile was one of the few Latin American countries that allowed the issuance of instruments with pre-paid funds only to banks. With the new law, the unbanked consumer or those with fewer resources has more alternatives, favoring financial inclusion, especially if the issuance of these kind of instruments is accompanied by other governmental actions, such as State social benefits payments, payrolls, food vouchers, etc.

The payment methods law expands issuance: a) special limited societies with exclusive rotation that meet CBC requirements b) Family Allowance Compensation Funds, c) the Metro SA,[55] and d) the Savings and Loan Cooperatives not audited by the SBFI. In June 2017, the CBC delivered regulations for the issuance and operation of payment methods with provision of funds, and reviewed the regulations related to credit card issuance and operation. This regulation was adapted in November same year. In November 2017, the SBFI issued the regulations that will allow auditing.[56]

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53 Colloquially known as “Pre Payment Law” or “Payment Methods Law".

54 We focus on prepaid funds, although electronic money has a broader definition. See BIS (2017) for a taxonomy of money.

55 There are synergies between prepaid means for public transport and other businesses; although there are technical limitations that still prevent the overcrowding of the BIP card as a payment method in commerce.

56 See Annex A.5.1 for the regulations of the SBIF.

The main elements of the CBC and SBFI regulations are:

- Redefines the critical activities of the payment card operators, limiting them to those entities *"that carry out the settlement and / or payment of the expenses owed to the affiliated entities for the use of the Cards"*.

- Eliminates the requirement whereby the operator must have a contract with the issuer to provide the processing service. The operator can have a contract with a Brand Owner. This change implies the possibility of greater competition for Transbank, the only acquirer and operator in Chile until 2017.

- Acknowledges payment service providers (PSPs) other than acquirers and operators, who may carry out the following activities without being audited (as long as they do not involve operator processes): i) transaction authorization and registration ii) entities' affiliation to the system, iii) provision of electronic channels, and iv) exceptionally, settlement and payment owed to affiliated entities. The latter implies a contractual requirement between payment service providers (PSPs) and issuers and / or operators to allow the former to assume payment settlement functions to clients.

- Obligates operators to grant access to their services under public, general, objective and non-discriminatory conditions. Additionally, to interconnect with other networks and entities related to card operation, including, where appropriate, PSP companies. Moreover, to consider in its bylaws as an exclusive corporate purpose the operation of Cards in accordance with the Compendium of Financial Regulations and the complementary activities to that specificservice authorized by the Commission through a general rule.

These regulatory changes are positive and important for FinTech development in Chile, since payment methods enable a series of other services offered virtually, and which require payment alternatives. In January 2018, the SBFI approved the Compraqui commercial operation, a new electronic payment network that competes with Transbank.[57] This system was built from an alliance with the company SumUp Limited (belonging to the mobile payment industry) and Banco Estado. Initially, it works connected to the Transbank switch network,[58] as an intermediary actor. Compraqui includes an online affiliation, does not charge fixed monthly costs, and introduces a low-cost mobile payment terminal to the market, which is operated through the cell phone (POS). On the other hand, Transbank leases its POS terminals monthly, and charges other fees mentioned in its terms and conditions as dues or

57 Compraqui operated in a trial period since October 2017.

58 As of December 2017, there are two switch networks in Chile, one is Transbank, which operates with the acquisition systems of Transbank and Compraqui, and the Mastercard switch that operates with the Multicaja terminals (Marusic, 2017). The trademark switch system is well used in other countries; it allows the issuer of the brand's cards not to ask permission from the acquisition network to operate.

commissions dependent on the amount traded and the trade item. Compraquí's potential market is given by the size of Banco Estado, which has 12 million customers and 190 million monthly average transactions.

As of January 2018, Transbank rates are 1.49% per transaction for debit cards and 2.29% for credit (both + VAT), while Compraquí charges 2.90% + VAT (3.45% total),[59] regardless of the type of plastic.

Under Transbank's "monopolistic" business system, since it provides the acquisition market service on behalf of its partners, it has an exchange rate, implicit in its tariffs (there is no exchange rate that balances the market of issuers and acquirers). A rate that is being paid by Its competitors Compraqui and Multicaja.

Transbank sets the commission (merchant discount) charged in accordance with the provisions of the Self-Regulation Plan for Commercial Establishments and Issuers of Credit and Debit Cards ("PAR"). This results in the classification of establishments into categories, distinguishing also between card type (TDLC, 2018). Within each category, double entry tables are available, which allow defining the applicable rate (TDLC, 2018). These tables would use different variables to determine the merchant discount to charge for credit and debit cards (TDLC, 2018).

Once the market develops and competition increases, a person or a company will be able to operate through an electronic payment method with another non-bank institution, potentially paying a lower commission than Transbank's. More transactions at lower costs (in money and time) will directly benefit the population.

However, there is still a gap in Chilean regulations in relation to reforms such as the European Union Payment Services Directive (PSD), designed to generate a single payment market and to regulate non-banking providers. The most recent instruction (PSD2) creates the *Third-Party Providers (TPP)* category,[60] and the subcategories *Account Information Service Providers (AISP)* and *Payment Initiation Service Providers (PISP*), and authorizes payment institutions to provide payment services, and electronic money institutions to be responsible for issuing it. Thus, credit institutions (banks), payment institutions, and electronic money institutions can be considered PSP insofar as they provide payment services. However, only banks and electronic money institutions qualify as electronic money issuers.

Third-party providers (TPP) refer to entities that, with the cardholder's authorization (1) access financial information, and (2) act on behalf of the client. The *account information service providers (AISP)*, which by having the agents' financial information (even if they have accounts in different banks), perform the first function, present it in a single interface and provide services such as monitoring consumption patterns, set savings goals, alert in case

[59] While Compraquí's rates are higher, the cost of using Transbank is higher since it leases its terminals.

60 The directive includes categories of service providers such as those that facilitate online payment operations without using cards (payment initiation services) and companies that offer value-added services based on the customer's financial information (account information services).

of excess expenses, give recommendations, offer personalized credit solutions, etc. In turn, the information collected can serve the developers of credit rating platforms. The second function is performed by the *payment initiation service providers (PISP)*, which allow the disintermediation of the payment process through bridging software between the issuer bank and the receiver (e.g. APIs), thus initiating a payment from the buyer's account to the seller's account. Buyers can pay without the need for cards, and both banks and commercial or social platforms (e.g. Amazon and Facebook) can become payment initiators. This implies more and better services for consumers, benefitting them directly.

The PSD2 establishes that the TTP may have direct access to the client's bank account with previous authorization, but without the need to have a contract with the bank.[61] Moreover, although they must register to carry out their activities, they will not need to have liquidity requirements since they do not keep an account with customer funds, but rather have a professional liability insurance or some equivalent guarantee. Payment service providers must be registered and a prudential requirement of an initial capital of US $ 150,000 is required to execute settlement and payment functions to businesses.[62] To be an electronic money issuer US $ 420,000 is required.[63]

In the United States, money remitters[64] have capital requirements that vary from US $ 250,000 to US $ 1,000,000, depending on the number of cities where they have offices.In Chile, a paid capital must be kept at all times, and have minimum reserves of 25,000 UF[65] (US $ 1,000,000) to be an electronic money issuer,[66] the same as to be operators (perform settlement and payments functions).

Finding 5.7: The Executive and the regulatory institutions (CBC, SBFI) have developed a process of regulation modernization with the aim of inducing higher levels of competition and financial inclusion in the Payment Methods sector in recent years.

Finding 5.8: To be authorized as an issuer or operator of electronic money in Chile, an initial capital of approximately US $ 1,000,000 is required, while in Europe it is US $ 420,000 and in the United States it varies between US $ 250,000 and US $ 1,000,000. To be an operator in Europe, the amounts are US $ 150,000 and in the United States, it varies between US $ 250,000 and US $ 1,000,000.

61 Banks are required to guarantee online access to customer accounts through APIs and not deny access, impose costs or delay the operation in any way. All this, as in the PSD1, safeguarding customer rights regarding privacy and personal data protection; maintaining consistency with the regulations on banking secrecy and reserve.

62 In addition, it establishes a registry for small payment entities with a turnover of less than 3 million euros per month.

63 Facebook and AmazonPrime had to obtain this license to operate in Europe.

64 It would apply for payment aggregators in some states.

65 The **Unidad de Fomento** (**UF**) is a Unit of account that is used in Chile. The exchange rate between the UF and the Chilean peso is constantly adjusted for inflation so that the value of the Unidad de Fomento remains almost constant on a daily basis during low inflation.

66 Title II of sub Chapter III.J.1.3 of the CNF.

5.4.3 Payment Methods Regulation[67]

The efforts carried out by the financial sector regulators are crucial for FinTech development, and for the better functioning of payment methods in Chile, especially considering last decades' uncompetitive environment.

The case of Transbank and its integration levels is practically an exception worldwide and has been a permanent challenge for public policy. As determined by the National Economic Prosecutor's Office and the Tribunal for the Defense of Free Competition, there are anti-competitive risks given the joint operation of issuers in the acquisition, which are intensified when the issuers act without competing. On the one hand, the possibility of setting high exchange rates that keep the *merchant discounts* high, even if competition in the acquisition market (4-part model) exists. On the other hand, the direct monopolization of the acquisition market (4-part model with vertical integration of issuers and acquirers), which makes it possible to go without the existence of an explicit exchange rate. So, although exchange rates may, depending on their magnitude, reduce competition in prices in the acquisition market, vertical integration allows them to set *merchant discounts* above what would exist in a competitive market. In this sense, the TDLC proposes to prohibit the joint action of the issuing banks in the acquisition, pointing out that the court's ruling No. 29 has no current justification.

Insofar as *merchant discounts* are passed on to consumers, the lack of competition in acquisition generally implies higher prices. Additionally, the non-discrimination rule imposed by the card systems would imply, in turn, that the higher costs are evenly distributed among consumers, which would result in a cross-subsidization of unbanked consumers - who tend to be poorer- than banked consumers. In this sense, the Tribunal for the Defense of Free Competition proposes to eliminate the non-discrimination rule.

The evidence would reveal that effective competition in the acquisition market would result in better commercial conditions for the merchants. Indeed, the Australian case points out that the *merchant discounts* minus *interchange fees* for credit and debit card transactions would have been reduced respectively by 35.6% (September 2003 - December 2007) and 27.8% (Sep 2006 - Dec 2007). In Brazil, there used to be no intra-brand competition, until the exclusivity on card brands was eliminated in 2010, achieving competition among purchasers. After this regulatory change, the charges to the merchant decreased and the quality of service improved. Indeed, within the first year of this regulation's application, *merchant discounts* decreased by 16%. In the Netherlands, the introduction of competition in the acquisition, together with the regulatory pressure and the public's attention on the *merchant discounts* levels, caused them to decrease for debit cards between 18% and 21% from 2003 to 2006.

Regarding the difficulties of entry into the acquisition, the European Commission has indicated, "The existence of *joint ventures* in acquisition services can effectively prevent a

67 Part of this section is based on the resolution of the TDLC, Proposition No. 19/2017, of January 13, 2017. ERN Role N ° 20-2014.

foreign purchaser from making a competitive offer to local merchants". In this context, it is necessary to increase competition and take measures that encourage it. The TDLC's regulatory proposals made in January 2017 cover these objectives and have led to some progress in the sector. These include: (i) a comprehensive regulation of the payment card industry with credit cards, (ii) a series of specific measures to separate the issuance, acquisition and processing (operation) activities such as the fixing of the exchange rate, and (iii) promotion of acquisition competence by prohibiting banks from acting jointly in acquiring processing.

Recommendation 5.5**:** Promote competition for payment methods in the market through the implementation of the Tribunal for the Defense of Free Competition proposals (2017).

Additionally, on September 5, 2018, the TDLC issued Resolution No. 53/2018,[68] which concluded that the merchant discounts criteria, established in the Transbank Self-Regulation Plan (PAR), do not meet the criteria of being public, objective, of general application and non-discriminatory and, therefore, is not compatible with the rules of free competition. Therefore, the TDLC provided that Transbank must propose a new PAR,[69] which must be submitted to the National Economic Prosecutor's Office.

Regarding the new guidelines on payment methods, the Central Bank's regulation and that proposed by the SBFI find the payment settlement activity critical. They therefore establish that any company that accounts for more than 0.5% of the total payments made by an issuer or operator, for more than two consecutive quarters, must be constituted as an operator to be able to continue providing these services. If the settlement and payment is a critical process for the normal functioning of the financial system then the relationship terms between PSPs and the other market participants must be safeguarded, and can perform the settlement and / or payment functions via exception, as long as they act on behalf of an issuer or contracting operator.[70] In particular, this allows the regulated operator / issuer to be accountable for problems in the PSP.

Nonetheless, if the settlement and payment functions are to be monitored, the requisite could be proportional to the risk that companies represent according to their size and the type of

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[68] Consultation presented by Farmacia Cruz Verde S.A. ("Cruz Verde"). It requested the Court to decide on the criteria applied by Transbank S.A. ("Transbank") in the determination of the merchant discount charged concerning the commercial item to which it is attached, in the light of the commission charged in other analogous items. Also, as to the compliance or not of such practical application with free competition, establishing if necessary, the conditions that Transbank must comply with in this regard.

[69] The new PAR must, at a minimum, meet the following criteria: a) It must not discriminate by categories or by items; b) It may only establish discounts on the merchant discount based on the number of card transactions of each trade; c) Merchant discounts may apply discounts for the average value of the card sale; d) The discounts applied to merchant discounts must be marginal; e) It is necessary to define what is meant by the number of transactions and the amount (or value) of the average sale of a particular business; f) The single double entry table with the merchant discounts applicable to credit cards may apply a discount, percentage to the value of the sale, in the case of a transaction with a debit card; and g) No merchant discount on cards may be higher than the largest merchant discount currently charged to transactions with the respective card type.

70 When a PSP company performs certain activities on behalf of an operator it is involved in the process of settlement and payment, and, consequently, in financial stability.

activity, especially if funds are not kept in account.[71] The requirement of having a paid capital, and reserves for UF25,000 (US $ 1 million) to be an operator creates an entry barrier, and limits the number of bidders, but it is necessary to safeguard financial stability. In Europe, the requirements are lower (US $ 150,000) and in the United States they range between US $ 250,000 and US $ 1,000,000 depending on the number of branches. Something similar happens with electronic money issuers.

That said, all payment service providers (whether they are operators or not) should be subject to the same obligations regarding consumer protection, money laundering and fraud as larger companies.

Recommendation 5.6: Create the figures of small electronic money issuer and operator with capital requirements adjusted according to risk.

The boundaries between the different services are increasingly blurred, and there are many companies that integrate payment facilitation within their process, with the card operation (or the processing of another type of electronic payment) not being their main line of business. An example of this would be the Alternative Finance platforms since they need to be able to receive, send and process payments (see Section 5.5). Something similar occurs with the electronic money issuance and its combination with other activities, without the issuance being the exclusive aim. For example, Intuit is a US company that offers business finance management services, allowing SMEs to invoice and charge with their software, whereby an alliance was set with Chase Paymenttech as acquirer / processor, even though its line of business is not card processing. In the United States, Intuit is licensed as a money transfer company. Other companies may decide to use a third party as a provider for payment processing, such as Uber.

Generally, in Chile, subsidiaries are created for the different regulated activities, with respect to those whose exercise is restricted to authorized entities by law, in order to mitigate risks. The above generates costly regulatory structures. For example, companies in the financial sector such as bank draft must generate subsidiaries to perform financial leasing activities, real estate leasing, factoring, credit collection or financial advice. It would be an advance to allow companies that combine payment activities and that are subject to a license to carry out other activities, and that do not have as an exclusive corporate purpose the operation of payment cards.

Concerning current regulations, it may be difficult for authorities to supervise the payment activity if it is not separated from other activities. Therefore, it is desirable to consider relaxing the norm and think of a hybrid license, such as in Spain. Another possibility could be that the same company obtain a license for different activities, such as in the United States and Europe. For example, platforms that are simultaneously loaning and payment entities.[72]

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71 In effect, initially the rules of the Central Bank of Chile contemplated differentiated requirements between the relevant and non-relevant issuers, according to the amount of payment obligations that they assumed annually.

72 The banking license allows this as well as savings cooperatives, but they are not the same as what exists in Spain, the United States and Europe.

Recommendation 5.7: Consider creating a hybrid license that allows companies subject to control to have licenses for multiple activities adjusting for risk.

5.5 Alternative Finance

Alternative Finance[73] involves the use of low amounts of money from a large number of individuals or organizations to finance a project, a loan or other needs through an internet platform.[74]

5.5.1 Characterization

Specifically, they are the technology-enabled online channels or platforms that act as intermediaries in the demand and supply of funding (e.g. capital formation and allocation activities) to individuals and businesses outside of the traditional banking system (Ziegler et al., 2017). The platforms provide information on projects seeking financing, and intermediate between claimants (e.g., that seek financing) and suppliers (e.g. donors or investors).

There are multiple types of Alternative Finance Models based on donations, rewards; lending and equity (see Table 5.2). In general terms, these four models are grouped into investment-based models (reward-based crowdfunding and grant-based crowdfunding, capital-based and loan-based models).

a) **Donation-based Crowdfunding platforms:** Originally, these platforms were established as a mechanism to obtain funding from third parties to finance non-profit projects (e.g., charity). Currently, they are platforms whereby donors do not expect retribution, based on philanthropic or civic motivations. In Chile, there is the Desafío Levantemos Chile, a platform that arose in the aftermath of the 2010 earthquake to gather donations for the reconstruction process. Currently this platform is still in operation and continues to receive donations.
b) **Reward-based Crowdfunding:** These platforms connect project promoters and potential backers, who receive non-monetary rewards or products (an investment return) in exchange for their contribution. It can be used to finance the launching of new products. As an example, Patreon is a website that was created with the aim of financing the careers of emerging creatives through a more regular income. This portal is characterized by financing specific projects, such as a book, the development of a video game or a hospitality business. Kickstarter is another example of this type of platform.
c) **Lending Platforms:** In this category, the platform either enables the gathering of the individuals or institutional funders that provide a loan to a consumer (peer) or business borrower with the applicant or acts as an intermediary. In the first case, the platform signs a loan contract with the company seeking funding, and then offers

73 Also called Alternative Financing in the literature.

74 According to the International Organization of Securities Commissions (IOSCO).

parts of it to potential investors. In the latter case, it captures deposits from investors that it then channels to projects.[75] Loans' crowdfunding could be a good option for small or medium-sized companies, which either face higher rates in the financial system,[76] or have limited access to bank financing,[77] and collateral requirements. Examples of loan platforms are:

- Platforms that contact investors with people (Peer to Peer or P2P) or businesses (Peer to Business or P2B) that seek financing. The loans can be with or without guarantees.

- Platforms that directly finance the applicant and issue debt securities on behalf of companies seeking financing.

- Platforms that raise money to grant credit lines based on their invoices' discount, and those that grant loans using the invoices as collateral.

Cumplo is a platform that operates in Chile financing companies and, to a lesser extent, people. Through it, loans are granted at lower rates for entrepreneurs, and investors obtain better returns than through other options. Cumplo is one of the main crowdfunding companies in Latin America with 4,099 investors and 1,075 SMEs intermediating loans for US $ 265 million accumulated to November 2017. Other lending platforms are Becual, Facturedo and RedCapital.

d) **Equity-based Crowdfunding[78]:** They join investors (financiers) and companies that offer a share in the company's capital (shares) in exchange for financing. Broota is the main equity-based crowdfunding platform in Chile, and raised US $ 2.2 million in 2016 and accumulates US $ 4.3 million in 30 campaigns since its inception. This represents an average close to 150 thousand dollars per campaign. There are also models that facilitate investment in instruments other than shares, such as royalties or options.

75 In Chile, the regulation establishes that they cannot receive under article 39 of the General Banking Law.

76 Abarca (2018) indicates that the annual interest rates on loans to companies fluctuate between 12.5% and 14.2% per annum, which is lower than 19% for SMEs in traditional actors (such as banking), although it warns about the comparability between credits.

77 Having no credit history, it is expensive to make an adequate assessment of the risk of non-payment.

78 Also called stock investment platforms since it is usually the focus.

Table 5.2. Platform types, Crowdfunding.

Platform type	Description	Example
(1) Donations	Users donate money (usually small amounts) to a company or cause without receiving anything in return.	DESAFIO LEVANTEMOSCHILE
(2) Rewards	Investors receive a reward (e.g., good, service, or gift) in exchange for the funds.	patreon
(3) Loans/Debts	Companies / people borrow money from platform users instead of a bank. The loan is returned based on agreed interest rates and conditions; invoices or other collateral can guarantee it.	cumplo TASA JUSTA.
(4) Equity	Investors receive capital or property from the company in exchange for their funds.	broota

Source: National Productivity Commission

Crowdfunding's main virtue is a greater access to funding for individuals and companies without credit history (e.g. SMEs and start-ups), with sectors usually neglected by traditional financial institutions due to transaction costs, information asymmetries and associated risks. Crowdfunding platforms help reduce costs and risks by using multiple mechanisms asides their initial credit history.

Crowdfunding platforms' potential problems lie in their virtues. Due to the low requirements, there is a risk of granting credit to people or companies that will be unable to pay or invest in unprofitable projects.[79] If the projects are substantial, they may affect the public faith. Crowdfunding related to Donations and Rewards are linked to the "collaborative economy" due to the exchange's nature. As for the Loans or equity-based crowdfunding categories, the platform performs mainly a commercial activity by adding bidders. These two categories compete not only with banking organizations but also with cooperatives, factoring companies and even insurance companies. Additionally, these categories participate in the payment chain similarly to financial instruments and can complement or substitute traditional financing sources (Abarca, 2018). From a financial stability perspective, it is important that their benefits and risks are properly balanced (FSB, 2017).

79 Although it does not differ from any investment because any investment involves a risk.

In Latin America, crowdfunding platforms tripled their activity, going from US $ 110 million to US $ 342 million in the period 2015-2016 (Ziegler et al., 2017). Although the number of loans originated in the platforms is small (less than 1%), the trend is strongly growing (in the US, the crowdlender's' growth rate has doubled since 2010). Chile was the second market in the region with almost a third of the total funded, an amount of US $ 97.8 million in 2016 (Ziegler et al., 2017) and as the largest crowdlender in the region. The peer to company loan platforms (P2B) category, such as Cumplo, Red Capital, Billed and Becual account for more than 90% of this amount. In 2017, the Chilean crowdfunding industry moved more than US $ 150 million according to amounts reported by the platforms, of which US $ 116 million are attributed to Cumplo, US $ 18 million to RedCapital, US $ 10.6 million to Becual, US $ 5 million Weeshing, and US $ 1.8 million to Broota (Tirado, 2018).

Finding 5.9: *Chile is the second most important country in Latin America regarding Alternative Financing, with one third of the total capital financed in 2016, highlighting financing through loans. Three of the categories of crowdfunding platforms (donations, loans and capital) are available in our country.*

5.5.2 Regulatory Context

Public saving and economic well-being are closely related to Fintech's activities, so a regulatory framework is necessary. This regulatory framework must comply with the essential objectives of protecting financial consumers, guaranteeing the efficiency and transparency of competition and mitigating systemic risks.

International

Until 2014, many countries tried to force crowdfunding platforms into existing regulations. From 2014 onwards, amendments to existing regulations were introduced and new regulations were created to promote crowdfunding and protect investors. The regulators have focused on three problems: non-payment risk of the applicants' obligations,[80] platform failures risk[81] and illiquidity risk.[82]

The requirements that platforms must comply depend largely on the financial services they are authorized to offer. In some cases, they are allowed to offer complementary services to crowdfunding, such as payment and advice to investors, whereas, if they offer other services must obtain a separate license. Public money deposits and money brokering usually depend

80 Investors may not get their money back or profitability may not be as expected. The authorities seek to reduce information asymmetries before the investment takes place. In particular, it seeks to protect investors with less knowledge of the risks. In Spain and the United States, a project is not financed if a percentage or the total amount of funds to be collected is not reached on the published date.

81 It refers to the possibility that the platform stops working temporarily or forever in order to protect investors. It also includes cyber security issues and financing use for fraud, money laundering or other illicit activities.

82 It occurs in capital platforms (investment in shares), where the investor finds no way out for his investment given the absence of a secondary market.

on some financial market intermediaries, such as banks, so platforms must be accordingly authorized if they maintain deposits. There are also minimum capital requirements.[83]

In the United States, the supply of securities, the obligation to register the issue, and the fulfillment periodic obligations through the platforms, which are very expensive for SMEs, are exempt. The participation of small, not accredited investors is allowed. The issuance and sale of securities must be carried out through a financial broker authorized by the Financial Regulation Agency.

There has also been progress in regulation in Latin America. Mexico enacted a general FinTech law containing a specific section on crowdfunding. In Argentina, the National Securities Commission (CNV) regulated the Crowdfunding System, acknowledging the Crowdfunding Platform in charge of a public limited company, authorized and registered by the CNV. In Brazil, the Central Bank authorized P2P loans, requiring platforms to have a minimum capital to operate. In Colombia, a bill for crowdfunding was presented at the end of 2017.

National

There is no specific legislation for Crowdfunding in any of its forms in Chile. Current standards and their enforcement are open to interpretation and therefore, platforms operate with legal uncertainty. The platforms cannot report the list of investors to the Financial Analysis Unit because they do not belong to the financial institutions referred to in Article 3 of Law 19,913. This increases the risk of illicit use such as official offenses, terrorism funding or money laundering.

Depending on the business model and the fund transfer structure, platforms may be considered as violating the General Banking Act, the Payment Methods Law and the corresponding SBFI and CBC regulations. The loan platforms must receive, send and process money transfers, and due to operational reasons, can keep funds in custody while the collection campaigns are completed,[84] all of which could be considered capture and therefore a violation of the bank draft, and the new law on prepaid funds.

Regarding loan crowdfunding, Article 39 of the General Banking Act presents some regulatory difficulties, since it establishes that " *No person, either an individual or legal entity, which has not been authorized to do so by other law, may engage in activities that, according to this statute, correspond to the banking enterprises, and, especially, to accept deposits or receive, in a customary manner, money from the public, whether by way of deposit, loan or any other manner. No person, either and individual or legal entity, which has not been authorized by law, may engage, whether as principal or on behalf of a third party, in the brokerage of money or loans represented by securities or commercial paper, or any other credit title.*" Therefore, under this regulation, a person violates the provisions of

83 50,000 euros in France if funds are not received from the public, 60,000 euros in Spain along with civil liability insurance.

84 This gray area is reflected in the complaint of the SBIF to the Cumplo platform in 2012 for an eventual violation of the General Banking Law, when perceiving that the banking activity was being violated due to the money brokerage.

the article when either he/she has a venue or office whereby, through advertising or directly, the public is invited to bring money for any reason. Finally, the norm penalizes with ordinary imprisonment of a minimum to maximum terms to those who violate this regulation.

The main regulatory challenge for equity crowdfunding platforms is that current regulations were not designed for the type of public offer made by crowdfunding platforms.[85] Law 18,045 of the Securities Market regulates the issuance of securities, the participants (issuers, intermediaries, agents, others) in the capital market, the type of information that must be presented, and the financial instruments that can be commercialized. Companies that wish to issue or make a public offering of their securities[86] must comply with this Law, and with the Commission for the Financial Market's regulations (former Superintendency of Securities and Insurance).

The Securities Market Law calls for a series of requirements for corporations to make Public Offerings of Securities, which implies a gray area regarding capital crowdfunding, since public offerings are those aimed at the public, to certain specific sectors or groups. Article 5 of the law requires that any issuer (company or investment fund) of a public offering register the offered issue with the CMF.[87] Likewise, the law regulates the public limited companies' stock market, in which, at least 10% of its subscribed capital belongs to a minimum of 100 shareholders, or that have 500 shareholders or more.

In sum, the rules of both Law 18,045 and the CMF were not designed for Alternative Financing public offerings.[88] Applying current regulations implies imposing onerous reporting requirements on financial, accounting and administrative aspects that SMEs do not normally have. They are expensive for SMEs or *start-ups*, for they do not have the governance of large, traditional securities issuers. On the other hand, the requirements imply that the applicant company and the platform must obtain prior approval before making the public offering, which is time consuming and distorts the crowdfunding's characteristic efficiency. Therefore, there is room to consider an intermediate point between both visions[89] and, although it exceeds the scope of this chapter, it grants the opportunity to re-examine the emissions' requirements to reduce excessive costs in the placement of debt and equity.

Finding 5.10: In Chile, there is a regulatory vacuum for crowdfunding and loans platforms' operation, so their users operate with high levels of uncertainty.

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85 For this reason, the platforms would operate under the assumption that they are making a private offer of securities (General Rule 336) or that they make public offers exempted from the registration requirement (General Standard 345), in the framework that provides the CMF (ex SVS) in Law 18.045 or Securities Market Law. Both NCG reflect awareness and interest on the part of the regulator regarding the importance of allowing access to resources to small and medium enterprises.

86 Be short or long-term debt securities or stocks.

87 With the corresponding penalties in case of supplying incorrect information.

88 For example, NCG 345 requests that, for shares, the offered instruments represent at least 10% of the issuer's capital, and that the minimum conditions of the offer contemplate, as a minimum investment on the part of each investor, an equal or greater than 2% of the issuer's capital.

89 In the capital market reforms (MKI and MKII), a framework was established to encourage risk capital by creating the emerging segment in the stock market, but the requirements remained very high.

Finding 5.11: There are barriers in the General Banking Act and in the Securities Market Law that hinder the development of Alternative Financing for both loans and capital.

5.5.3 Alternative Financing Regulation

The first step to regulate crowdfunding platforms in Chile is through a law that expressly authorizes the debt and investment platforms under license operations.[90]

This concern is not new, since the Inter-American Development Bank (2015) suggested a series of measures, which include:

- Place loans / debt and capital Alternative Financing under the supervision of the Financial Market Commission (ex SVS) but with rules that agree with the banking regulations purposes.
- Not to impose the same procedures or banks' minimum capital requirements to platforms, since they do not lend their own money, but rather act as intermediaries. The requirements should be scalable according to the activity.[91]
- Write a standard document for the debt offers that platforms lodge and present electronically to the CMF and the Central Bank.
- For platforms that wish to have funds in custody, a framework for money brokerage should be created that includes an operational policy and how to specify businesses (contract models), manage information and regulate platforms.
- Due to information presentation rules, the legal faculty should be granted to the CMF to establish a difference between small companies and larger companies. This would allow for an annual report and consolidate the appropriate reports according to company size.

The law should establish that, in accordance with Article 4 of the Securities Market Law, crowdfunding platforms' public offerings be exempted from the obligation to register in the Securities Registry. Additionally, they must comply with the requirements set forth for Open Corporations: "*considering the type of issuer and the type of investor to which it is addressed, the methods through which they are communicated or materialized, and the amount of the securities offered."* The exception must be complemented with protection provisions for investors-lenders, non-payment risks, platform failures and illiquidity. An example of

90 Other than the bank activity.

91 As an example, in Spain the capital base requirements start from 60,000 euros.

protection is the minimum capital requirements[92] and, additionally, could be the creation of Coverage Funds within the platforms.[93]

To avoid conflicts with the General Banking Act, and with the Law on Payment Methods, it is advisable to define the Alternative Financing complementary activities that can be carried out by the platforms.[94] The most important are the counseling services and the payment services. The platforms could require some type of complementary license as payment service provider or as an electronic money issuer, or, the Spanish model could be used and create a hybrid license for whenever necessary. Otherwise, the platform will have to use a third party to process the payments, with the corresponding increase in cost of the service. Recommendation 5.7 presented in the Payment Methods section on a hybrid license seeks to solve this problem.

Finally, while developing a specific regulation, the Alternative Financing platforms could operate under a temporary license within the Regulatory Sandbox proposed in section 5.3.

Recommendation 5.8: Create a specific legislation for alternative financing platforms for loans and equity to eliminate legal uncertainty, imposing requirements proportional to the risks that the business presents. The regulations should:

(i) include the authorization to operate and supervise the platforms by the Commission for the Financial Market,

(ii) Have minimum capital requirements adjusted to the level of operation, and

(iii) Consider that the platforms comply with differentiated and simplified requirements regarding those established for the Public Limited Companies in the Securities Market Law and for the Banks in the General Banking Act.

5.6 Conclusions

Whether it is a small business applying for a loan, a foreign worker who sends home remittances, an electronic market buyer, or someone who shares dinner with some friends, FinTech innovation affects the way consumers and businesses interact with money.

FinTech also present risks that should be handled appropriately. Governments can help build trust by providing users with a comprehensive legal and regulatory framework for new products and services. Additionally, they can protect those most vulnerable and with little financial education. At the same time, they need to ensure that new technologies do not

92 Required to guarantee the normal operation of the platforms.

93 It resembles a collective insurance where each platform would contribute a percentage of its commission to create a fund that guarantees the loans that fall into non-payment.

94 The requirements for applicants can be defined by law or by the CMF

become tools for illicit activities (e.g. fraud, money laundering and terrorist funding), and that they do not jeopardize financial stability.

Despite FinTech's potential contribution to financial inclusion, their unregulated operation specifically threatens both business' profitability and users' safety. There is also a dilemma between competition and efficiency. A greater number of participants in the financial market does not necessarily imply an advantage, since the benefits of economies of scale are reduced. Additionally, the cross-border dimension of these companies poses a challenge regarding taxes.

The main findings of this chapter point at regulation improvement to encourage innovation and the entry of FinTech firms into the market. Although the objective of financial regulation is to mitigate risks and not encourage the growth of the sector, the incorporation of FinTechs at a general and specific level to the regulatory framework is relevant for their development in Chile. Complementarily, the implementation of a Sandbox, the constant monitoring of technological and regulatory gaps and the impulse to open banking would help the development of the sector. In Payment Methods, the main objective is to level the competition conditions of non-banking providers in relation to banks and other suppliers, to grant more secure options to consumers and to promote the technological modernization of payment systems through FinTech innovations. The regulation would eliminate potential conflicts with the current regulatory framework for alternative financing.

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5.8 Annexes

Annex A.5.1 - Regulations issued by the Superintendency of Banks and Financial Institutions regarding methods of payment in November 2017

a. Notice No. 1 (addressed to non-bank issuers). This Notice contains the rules that will be common to all Non-Bank Payment Card Issuing Companies (credit and / or payment with provision of funds), as well as the specific instructions applicable to the issuance of each type of card in particular.

It applies the same requirements to all issuers of non-bank cards that assume payment obligations regarding others, irrespective of their volume of operations.

b. Notice No. 1 (addressed to Operators). This Notice contains general instructions addressed to all Payment Card Operators (credit, debit and payment cards with provision of funds), except those that are bank subsidiaries, which in any case must comply with equivalent standards, but contained in other SBFI regulatory entities. It specifies the scope of the activities that are specific to the payment card operators subject to SBFI monitoring.

c. Notice No. 2 (Issuers and Operators). This Notice establishes the set of operational and security safeguards that are specific to payment systems through cards and other electronic methods, along with other specific matters and elements that complement the management of operational risk applicable to both Card Issuing Companies of Non-Banking Payments, as well as the Payment Card Operators.

d. New Chapter of the RAN (Banks) for bank payment cards. This new Chapter updates, consolidates and replaces the rules applicable to the Issuance of Debit Cards and Credit Cards (current chapters 2-15 and 8-3 of the RAN), along with incorporating the specific rules on the Issuance of Payment Cards with Provision of Funds by banks.

Updates and approves as appropriate: provisions applicable to contracts between issuers and operators, and between these and the affiliated entities; security safeguards required for payment transactions and fund transfers.