

Cumplo

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It was a very mild austral fall afternoon on June 7, 2012. Nicolas Shea, founder of Start-Up Chile and Founding President of the Chilean Association of Entrepreneurs (ASECH), was giving a talk to a group of young entrepreneurs before attending a dinner at La Moneda, Chile's presidential palace, in honor of President of Mexico Felipe Calderón. The phone rang continuously. He picked up and on the other side of the line there was a journalist from *Las Últimas Noticias*, a Chilean daily tabloid newspaper. She wasted no time and asked Nicolas straightaway: "Mister Shea, how do you feel about being accused of criminal offense by the Chilean Government for infringing on the banking law?"

While he had recently resigned from his position as Innovation and Entrepreneurship Advisor to Minister of Economy Juan Andrés Fontaine to start Cumplo, the first Latin-American peer-to-peer lending platform, Nicolas was still very much at home in the entourage of Chile's president Sebastián Piñera. The night was still young, but he was itching to go home. The Cumplo story was on every main news network and he was keen to resume the conversation with his wife Josefa, Cumplo's co-founder and general counsel, about the future of their enterprise.

As these ideas were mulling in his head, Nicolas decided it was time to leave the dinner. One of the people sitting at his table had offered to introduce him to Jorge Awad, President of ABIF (the Chilean Bank Association), who was also at the dinner and had very kindly offered them both a lift home. During a very pleasant ride, they discussed the role of innovation in the future of the financial industry. It was only when the car turned onto Nicolas' street that Jorge's tone of voice turned from friendly to paternalistic, "let me give you some advice, kid. Your business is too dangerous and complicated. You should forget about it."

A Desperate Cry for Help

Chile has been one of the fastest growing economies in Latin America in recent decades. However, despite making considerable progress, the country still faces important challenges in reducing income inequality.²

It had occurred to Nicolas that there was a need for a new way of providing financing to people in February 2011, when he was still an Innovation and Entrepreneurship Advisor to the Ministry of Economy and leading Start-Up Chile. During the summer, their nanny Teresa had approached Nicolas and Josefa to borrow money in order to make a payment on an

¹ This was written for teaching purposes and it may impute to some players thoughts that did not arise at that time. We thank Sara Bagagli and Paula Silva for research assistance.

² For more details, please see Exhibits

overdue installment of debt; debt that she had accumulated from three retail companies to help her 20 year old daughter pay for her higher education. She was forlorn.

Nicolas and Josefa were ready to help her, but they knew that lending her the money to pay back one installment would not solve anything. Teresa had accumulated a debt of \$7 million Chilean pesos (roughly US\$ 10,000), almost 1 year's salary. They tried to construct a reasonable debt repayment plan, but the calculations kept showing a yearly compounded interest of 73.2%; certainly there must have been a mistake. Nicolas decided to personally go to the retailers to renegotiate the debt and ask them how it could be possible that they were charging such a rate.

While patiently waiting in a customer service line at one of the retailers, Nicolas realized that Teresa's problem was much more widespread than he first thought. In the last decade, consumer credit from Chilean retailers had exploded. People were using credit not only to buy cars and appliances, but also to pay for student loans and food. Withdrawing cash from retail credit cards had become harmful and addictive. The astronomical rates charged for that credit ensured that once a customer was hooked into borrowing, she could never get out of debt.

Renegotiating the debt turned out to be more difficult than Nicolas expected. To make sure that he was paying the correct amount he asked for basic information about the loan: initial amount, amount already repaid, interest rates charged, number of installments, etc. To his surprise, he was denied that information. Undeterred, he asked to talk with a supervisor, and then with the manager. To no avail: the answer was the same. Faced with his indignation, the manager approached him and whispered in his ear, "This conversation is being recorded and I'd risk my job if I give you more information. I have two children, I hope you understand," and slipped a piece of paper with a telephone number on it into Nicolas' hand. "Call me next Saturday, and I swear it for my children that I'll give you all the details you want," he concluded.

The short conversation opened Nicolas' eyes. This process was no accident, it was designed in such a way that people had no incentive to repay their debt: once someone delays the payment, the interests rise so much that debt will take forever to be paid back.

In a couple of hours, Nicolas was able to renegotiate Teresa's debt with the three retailers and bring it down 85% to \$1 million Chilean pesos, but it was too late. Teresa had been paying on and off for years and decided that "those usurers did not deserve anymore of her money." In less than a week, she went from being someone willing to meet her economic obligations to someone who rejected them because she felt abused by the system. In a short period of time, the lenders had not only crushed her ability to pay, but even worse, her civic capital.

"Josefa and I were really conflicted with this reaction," Nicolas later said, "since it wasn't about affecting customers' interests', but about eroding social trust, the basis of a civic and responsible society."

A Eureka Moment

A few months later, in May of 2011, Nicolas had to cover for the Minister of Economy at the Milken Conference in Los Angeles, California, to present Start-Up Chile in a panel with former Intel CEO Craig Barrett. In a different panel on Fintech (finance & technology), he met Chris Larsen, the founder of Prosper. Nicolas had heard about the concept, but was shocked by its impact on the American consumer loan market and its potential for Chile. "It was like finding the antidote to cancer," remembers Nicolas. If borrowers like Teresa, who are paying

over 50% in interest, could borrow directly from individual investors, who are receiving less than 5% on their deposits, the benefits would be extraordinary.

Back in his room, Nicolas discussed it with his wife Josefa and they spent the night searching the internet for more information about the subject. Josefa, an experienced corporate lawyer and expert in corporate communications, told Nicolas that she would be willing to break their golden rule of never working together; “if you are serious about starting a company to solve this problem, I’ll help you on the legal and communications front.”

The next day, Josefa and Nicolas flew back home and started studying whether the Propser.com model was feasible in Chile.

Peer-to-Peer Lending Market

Since the 2008 financial crisis, all forms of financing taking place outside of the traditional financial system exploded (see Figure 1: A working Taxonomy of Alternative Financing for a taxonomy). Among them, peer-to-peer consumer lending played a prominent role. In this market, individual borrowers acquire mostly unsecured personal loans from several other individual lenders (often lending a small amount each) through an online ‘marketplace.’ Peer-to-peer lending is generally able to offer more attractive interest rates to borrowers—around 10-14%, (as compared to bank’s charges of 18% or more),³ and high returns to investors, using technology to match borrowers and investors, and not incurring in costs of legacy and branch networks.

Started in 2005, Prosper.com is the first online peer-to-peer platform in the United States. It allows borrowers to post a request for funds, explaining why they need the money, and gives potential lenders the ability to choose the person they loan their money to. Two years later another peer-to-peer lending platform, Lending Club, started operating in the United States.⁴

The two companies have different business models. Prosper accepts loan applications only from those with FICO scores of at least 520. Lenders bid for the right to invest: the more people who are willing to invest in loans, the lower the interest on the loan. According to a *New York Times* article, over one third of the loans made through the Prosper platform went bad.²

Lending Club, instead, requires a minimum credit score of 640 (raised to 660 in 2011). Interest rates are set not through a bidding process, but according to the borrower’s credit history, credit score, and debt-to-income ratio, as well as on the borrowing amount that is requested. In 2009 Prosper adopted the same approach.

Between June 2007 and December 2011, Lending Club helped fund over 42,000 loans, for a total of \$460m, at an average interest rate of 12.2%. 3 out of 4 loans were 36 months in length, with the remaining to be repaid within 60 months. During the same period, over 418,000 loans were rejected, suggesting an acceptance rate of as little as 10%,⁵ not quite different from Prosper.com. In the words of Lending Club’s then-CEO Renaud Laplanche in January 2010, “Prosper’s 10% is very different in nature: most loan applications received by Prosper get listed on their platform, and only 10% actually get funded, either because of insufficient

³ Ron Lieber, “The Gamble of Lending Peer to Peer,” by *New York Times*, February 4, 2011, http://www.nytimes.com/2011/02/05/your-money/05money.html?_r=0.

⁴ Schumpeter Blog, “Peer Review,” *The Economist*, January 5, 2013, <http://www.economist.com/blogs/schumpeter/2013/01/lending-club>.

⁵ Own calculations based on Lending Club Statistics data (available here: <https://www.lendingclub.com/info/download-data.action>).

supply of investors' funds or just because investors don't want to fund the other 90% of the loans. The question here is whether the 10% that get funded are 'the right 10%'." ⁶

Figure 2 shows the activities of the two leading P2P lenders. As of December 2011, Lending Club had three times as many loans as Prosper. ⁷

UK Market

Launched in the UK in early 2005, Zopa is considered the world's first peer-to-peer lender.⁸ The founders, Richard Duval, James Alexander, and David Nicholson previously worked for Egg, an online bank created by Prudential in 1998. It made extensive and innovative use of the internet in the banking sector, and its early commercial success opened up the idea of creating a purely online intermediary. They argued that potential borrowers could even be contract workers not in full-time employment, creditworthy but unable to access credit from banks. In the lenders' market, they targeted two groups: on the one hand, those who see a "social angle" and who value having some real connections to where the money they invest actually goes, and, on the other hand, expert investors that may look at P2P loans as a new class of investments through which to diversify their portfolios.

While, at the beginning, there were many un-creditworthy would-be borrowers and few potential lenders, with the financial crisis, more and more lenders became interested in the market, attracted particularly by higher interest rates. As the market sped up in 2010 new competitors started operating in P2P Lending: RateSetter and Funding Circle.⁹ The former provided unsecured personal loans, as the incumbent Zopa, whereas the latter was the first P2P platform to fund business loans.⁶ In 2011, the industry created its own self-regulatory body (Peer-to-Peer Finance Association, or P2PFA).¹⁰

UK P2P Lending Market Volume has been calculated based on data released by Zopa, RateSetter, and Funding Circle, the three largest P2P platforms operating in the period under examination.¹¹ With the exception of Zopa, full disclosure on loan data is available only for P2P platforms' registered lenders. Nevertheless, Open Data Institute released the full dataset of loans made through the three platforms starting in October 2010 (the first month in which all three companies were operating at the same time), which is hence used as a data source for the period October 2010 – December 2011.¹² Prior to that, data uniquely refers to Zopa, as it was the only P2P platform in the UK since its debut in the early 2005; data has been downloaded from Zopa's website.¹³

⁶ Felix Salmon, "The problem with the peer-to-peer lending," *Reuters*, January 19, 2010, <http://blogs.reuters.com/felix-salmon/2010/01/19/the-problem-with-peer-to-peer-lending/>

⁷ Mark Gimein, "You are Unlikely to Prosper," *The Big Money*, January 18, 2010, <http://www.markgimein.com/TBMPdf/Prosper.pdf>.

⁸ e.g. Ulrich Atz, and David Bholat (2016). "Peer-to-peer lending and financial innovation in the United Kingdom". Bank of England Working Paper series (available here: <http://www.bankofengland.co.uk/research/Documents/workingpapers/2016/swp598.pdf>).

⁹ An additional P2P company, Quackle started operating in 2010, but closed down in 2011, with default rate of close to 100% (see for instance Elaine Moore and Jonathan Moules, "Peer-to-peer loans company closes" – *Financial Times*, December 7, 2011, <http://www.ft.com/intl/cms/s/0/2db417a6-20c1-11e1-816d-00144feabdc0.html#axzz4Aolsaxf4>).

¹⁰ Robert Wardrop et al., "Moving Mainstream. The European Alternative Finance Benchmarking Report," University of Cambridge, 2015.

¹¹ The procedure follows the analysis made by the Open Data Institute "Show me the money": <http://smtm.labs.theodi.org/summary/>.

¹² Data available for download here: <http://smtm.labs.theodi.org/download/>

¹³ Zopa's Loan Book data available here for download: www.zopa.com/public-loan-book

During the period in which Zopa was the only P2P platform in the UK market (between 2005 and September 2010), more than 20,000 loans were made (see Figure 3:), for a total of £100 million. Loan amounts ranged from a minimum of £500, to a maximum of £18,280 during the period.¹⁴ On average, the lending rate was set at 8.3% (median 7.87%), ranging between 4.6% and 13.6% (representing, respectively, the 1st and 99th percentiles of the distribution). Around 70% of the loans were 36 months in length, and slightly less than 20% were for a longer term (5 years). The remaining loans were for less than 24 months. During this initial phase, Zopa experienced a 4% default rate.¹⁵

Continental European Market

The UK-based company Zopa began operating in Italy in 2008, with 40,000 lenders registered on the platform and 7 million euros lent to over 5,000 people during the first 18 months after its launch. However, after a year and a half it was forced to cease its operations after it was removed from the register of financial intermediaries; an action taken by the Ministry of Economy and Finance on recommendation of the Bank of Italy.¹⁶ After the UK and Germany, Italy was the third P2P Lending market in Europe by volume, according to *La Repubblica*.¹⁷

In Germany, Smava.de started its business in the P2P Lending Market, mostly arranging non-commercial credit projects (while commercial credit is permitted as well, the platform established a loan cap of 25,000 euros, so all commercial projects originate from small non-incorporated businesses). The platform allows borrowers to propose the credit conditions, such as amount, maturity (either 3 or 5 years), and interest rate. Then, it publishes a credit score and a rough debt-to-income ratio that lenders use to make their investment decisions.¹⁸ Between its launch in 2007 and December 2011, it managed a credit volume of 60 million euros.¹⁹

Chinese Market

Given the difficulty for Chinese small and medium sized firms to get access to credit through standard means, there has been a proliferation in the rise of P2P Lending platforms since early 2007. Here, the vast majority of users of P2P platforms are indeed small businesses.²⁰

¹⁴ Own calculations based on Zopa's Loan Book data.

¹⁵ Unfortunately, we are unable to make comparisons with the other two P2P companies, since this information is only available for Zopa's business.

¹⁶ Rosaria Amato, "Il Tesoro cancella Zopa dall'albo 'Sospese tutte le attività'," *La Repubblica*, July 14, 2009, <http://www.repubblica.it/2009/07/sezioni/economia/zopa-sospesa/zopa-sospesa/zopa-sospesa.html>.

¹⁷ Ibid.

¹⁸ Stefanie Potzsch and Rainer Bohme, "The Role of Soft Information in Trust Building: Evidence from Online Social Lending," in *Trust and Trustworthy Computing* (Berlin Heidelberg: Springer, 2010), 381-395.

¹⁹ Daniel Brueckner, "Interview with Alexander Artopé, CEO of Smava.de, a Peer to Peer Credit Marketplace," CEO-Interviews.com, December 20, 2011, <http://www.ceo-interviews.com/interview-alexander-artope-ceo-smava-de-peer-peer-credit-marketplace/>; and <http://www.wiseclerk.com/smava/geld-a-entwicklung-kreditvolumen-l-entwicklung-kreditvolumen-m-kredite.html>.

²⁰ "China Shadow Bankers Go Online as Peer-to-Peer Sites Boom," *Bloomberg*, July 23, 2012, <http://www.bloomberg.com/news/articles/2012-07-23/china-shadow-bankers-go-online-as-peer-to-peer-sites-boom>.

The pioneer companies, CreditEase, Ppdai, and my089.com, started their businesses in 2006, 2007, and 2009, respectively.²¹ Wangdaizhijia, the company that studies the P2P lending market in China, provides market data.²²

A different Chinese version of the P2P lending platform is Qifang, which focuses on student loans. In China these loans are usually provided by community group-lending schemes, so this is simply the online version of an existing practice.²³ In addition to providing personal information, borrowers also have to give family details (like parents' names and copies of their national ID)²⁴, which is likely to increase social pressure not to default. According to an article in *The Economist*, in the first six months after its launch, the platform arranged 2,500 loans for an average of \$400 each, to be repaid between one and three years. Interest rates vary between 5 and 15%, depending on the perceived trustworthiness of the borrower.

Chilean Consumer Markets

Josefa and Nicolas thought that the fast growth of P2P lending in the United States was very inspiring. Yet, Chile was different. First, the United States is an advanced economy, with highly sophisticated financial markets. Could the same idea be exported to a much more backward market like Chile? Second, how would Chilean regulation deal with this innovation? In 2008 Prosper faced a class action lawsuit. Fairplace, the first Brazilian P2P lending service, was suspended in 2010 after a government investigation. Would Chilean regulation and local incumbents allow for this innovation? Before taking any further steps, Josefa and Nicolas decided to study these issues. They started from the consumer loan market.

Until the mid-1970s, the consumer loan market was non-existent in Chile. Interest rates were regulated by law and inflation was around 30%, so real interest rates were negative. Most people barely saved and the only type of deposits was checking accounts. Ordinary people had no access to mortgages and around 90% of people rented. The banked population was less than 10%, but there was an informal lending market for people (and companies) who wanted to invest.

With the stabilization of the economy in the early 1980s banks started to offer consumer loans to people, at very high rates and with many restrictions, so not many had access. Informal lenders continued to serve those with less income.

From the early 1990s, banks' consumer-loan markets became more developed, but at usurious rates, high commissions, and with a profitable collection business on the side. At the beginning of the 1990s even retailers started to offer installment buying, in a completely unregulated market, with very little transparency of terms and conditions.

During the first decade of the 2000s, borrowing rates were still high, on average 27.6 percent, while consumer market loans were increasing over time. At the same time,

²¹ Simon Rabinovitch, "CreditEase shines in China peer-lending market" and "Peer-to-peer lending takes root in China," by *Financial Times*, February 7, 2012, <http://www.ft.com/intl/cms/s/0/ec6d28ee-472d-11e1-b847-00144feabdc0.html#axzz4AqeQPLXj>, <http://www.ft.com/intl/cms/s/0/ec6d28ee-472d-11e1-b847-00144feabdc0.html#axzz4AoIsaxf4>, and <http://www.lendacademy.com/the-most-important-chinese-p2p-lending-companies/>.

²² Link to the website (in Chinese): <http://shuju.wdji.com>

²³ "Chinese borrowing," *The Economist*, May 7, 2009.

²⁴ Panthea Lee, Patrick Ainslie and Sarah Fathallah, "Embracing Informality: designing financial services for China's marginalized", 2012, http://reboot.org/wordpress/wp-content/uploads/2013/01/EmbracingInformality_Reboot_2013.pdf

consumers, seeing the fast rate of income growth, started to lose their traditional aversion to debt. Up to 2007, banks provided more than 85 percent of the total mortgage loans in Chile.²⁵ However, only 9.9 percent of informal workers had a bank account and 46.8 percent of the informal households did not have access to financial market.

As a consequence, many retail companies started offering their services to low-income families. In 2007, 13 percent of the informal households had access to credit cards and loans, most of them through retail stores and other financial companies.²⁶ Credit cards could be used on purchased merchandise at stores, gas stations, supermarkets, and drugstores.

In October 2008, banks adjusted the loan market conditions (because of a reduction of external funding due to the financial crisis), asking for higher collateral requirements and higher spread on loans, producing a temporary reduction in credit (see Figure 4) and an increase in borrowing rates (see

²⁵ “Chile, Housing Finance Market Overview, *Housing Finance Network*, <http://www.housing-finance-network.org/index.php?id=351>

²⁶ Alfredo Shclarek and Mauricio Caggia, “Household saving and labor informality: The case of Chile,” *Inter-American Development Bank*, May 2015.

Figure 5:). Hence, access to credit from retail companies provided an avenue of possible loans to this unbanked population. In 2009, retailers and others non-banking institutions financed 50 percent of households through consumer loans and 10 percent of mortgage lending.²⁷

According to the Central Bank of Chile's Household Financial Survey, in 2010 the average household allocated 38.3% of its income to debt repayments (18.9% for the median household), with households at the bottom of the income distribution devoting 6 out of 10 dollars earned to debt repayment.²⁸ The expansion of credit opened the door to abuses, as credit issuers have used predatory techniques to lure customers, particularly young and less affluent ones.²⁹

In 2011 there were 3 million people (out of a population of 17 million) registered in the public bulletin of people in debt, known as Dicom.³⁰ Under standard contracts, it was established that if someone became unable to meet his financial obligations on the debt, its terms changed to the "Tasa Máxima Convencional" (i.e. the conventional maximum interest rate). This implied that 3 million people were subject to an annual interest rate of at least 50% and additional costs associated to the loans (like servicing charges, insurance costs, etc.) were increasing the total annual rate to 70% or 80%, or even more.

The lack of transparency on the issue had already forced minister Juan Andrés Fontaine in 2010 to implement a law that obliged firms to publish the so-called "Carga Anual Equivalente" (CAE), similar to the Annual Percentage Rate (APR) in the US, requiring interest rates and all the costs associated with the loan to be expressed in percentage terms, making it easier for consumers to know the value of the final fee, and to make comparisons among them easier.

Differently from the other OECD countries, Chilean retailers and non-banking financial institutions are not required to disclose all their financial transactions. This makes it impossible to know the exact "consolidated levels of debt" of individuals and the Chilean financial system as a whole, and it makes it impossible to evaluate individuals' ability to pay, therefore reducing competition in the system and generating asymmetric information. This lack of transparency produces high variability in the interest rates applied by different banks for the same loan amount. The minimum annual interest rate charged can be as low as 12.95% or as high as 36% (see Table 1).

Chilean SME Market

As in many Latin American countries, small and medium enterprises (SME) play a very important role as a source of employment and as contributors to economic output. During the 1990s, around 50% of Chilean workers were employed in small and medium

²⁷ Kevin Cowan and Marfán Manuel, "The evolution of Credit in Chile," *Bank for International Settlements*, 2010.

²⁸ "Encuesta Financiera de Hogares", *Banco Central de Chile*, 2014.

http://www.bcentral.cl/es/faces/estadisticas/EnCoyunturales/FinanHogares?_afzLoop=53941321088950&_afzWindowMode=0&_afzWindowId=j80c7w5pr_87#!%40%40%3F_afzWindowId%3Dj80c7w5pr_87%26_afzLoop%3D53941321088950%26_afzWindowMode%3D0%26_adf.ctrl-state%3Dmaxt9h3pm_4

²⁹ Alexei Barrionuevo, "Rise of Consumer Credit in Chile and Brasil Leads to Big Debts and Lender Abuses," *New York Times*, July 23, 2011, http://www.nytimes.com/2011/07/24/business/global/abuses-by-credit-issuers-in-chile-and-brazil-snare-consumers.html?_r=0.

³⁰ Dicom (Dirección de Información Comercial) is a database that collects individual or company activities in the Chilean financial sector to assess the credit risk of its customers.

enterprises, representing 25% of total production.³¹ In 2010, 99 percent of all enterprises in Chile were SME firms, which employed 57 percent of the labor force.³²

In spite of their importance to the economy, SMEs have limited access to credit, as evidenced by the low level of credit received (Table 2) and the differences in the interest rates paid (Figure 6:). At least in part, these differences are due to the higher risk of small loans (Figure 7:). 40% of Chilean SMEs report that the most important obstacle to credit is high interest rates.³³ As a result, only 72% of Chilean SMEs had access to bank credit vs. 92% for SMEs in the United States. Furthermore, 68% of Chilean SME financing is from equity, compared to 20% as a whole in the United States.³⁴

Chilean Banking Regulation

Contrary to the advice of the Chicago Boys, in 1979 Augusto Pinochet pegged the Chilean peso to the US dollar. Combined with the high interest rates, the peg led to massive capital inflows and an overvaluation of the Chilean peso. In 1982 Chile experienced what is now known as a “sudden stop”: foreign capital stopped flowing in, the ability of financing investments dropped, forcing a massive currency devaluation, which led to a generalized banking crisis.

As it is often the case, after the crisis a ‘Ley General de Bancos’ or General Banking Law was passed. Being passed in the aftermath of the crisis, the law was primarily concerned with stability. Article 39 of the law prohibits any individual or legal entity to provide deposit services or to act as financial intermediary or broker without formal authorization.

The first lawyer Nicolas consulted told him, “You are insane. This can’t be legal and if it is, banks will smash you in a heartbeat.” However, he confessed to not being an expert in banking law, so he moved to his partner and the banking expert of the law firm.

In a brief and informal conversation, this second lawyer, one of the leading lawyers in the banking field in Chile, was intrigued by the idea. After Nicolas told him what he had in mind, he remained silent for a couple of minutes and then replied: “How fascinating. How come nobody has ever come to me with such an idea during my 50 years of professional activity? In fact you are not taking deposits nor investing other people’s money. You are the marketplace that will allow people to borrow and lend directly. You are very close to “the line,” but Chilean law allows people to lend to others, and it looks like this would be the case here. As long as you pay the taxes involved and don’t allow usury rates, this should not be unlawful. In addition, I don’t see any jury or judge ruling against an entrepreneur that wants to lower interest rates for Chileans, which is such a grave social problem.” That sentence echoed back to Nicolas several times, “Cumplo should not be considered illegal”.

A third lawyer, another renowned banking lawyer said that Cumplo was not doing financial intermediation, but instead its opposite, financial disintermediation. However, he warned Nicolas and Josefa about the term “correduría de dinero” (a phrase similar to money brokerage). “Its definition is not clear in the legislation, and to be honest, nobody really has a

³¹ Molly Pollack and Alvaro Garcia, “Crecimiento, competitividad y equidad: rold del sector financiero,” CEPAL, Chile, 2004, http://repositorio.cepal.org/bitstream/handle/11362/5132/S045402_es.pdf?sequence=1

³² Finance and SMEs and Entrepreneurs 2012, *OECD*, http://documents.worldbank.org/curated/en/989061468152974523/pdf/713140PUB0fina00Box370065B00PUBLI_C0.pdf

³³ Pollack and Garcia, “Crecimiento, competitividad y equidad.”

³⁴ *Ibid.*

clear understanding of its exact meaning. The law was drafted after the collapse of banks in the early 80s and it was deliberately meant to be that way [in order] to have discretion to restrain banks that seemed too risky." Then he warned: "The problem with article 39 of the banking code is that the crime is unclear, but the sanction is not."

The last and youngest lawyer agreed that "since the process did not involve deposit services—reserved only to the bank by law—there could not be intermediation." In fact, the website of the superintendent of banks defines intermediation of money as the act of taking deposits from the public and lending it to the public, i.e. lending other peoples' money. In the case of Cumplo, lenders give precise instructions regarding what do to with the money being invested, since they decide who the borrower will be. In other words, P2P lending platforms are not financial but operational/technological institutions. In the case of a bank, those who deposit their money don't know what the bank will do with it. Nevertheless, the lawyer suggested to the Sheas to save time and money and not even bother to ask for a formal legal opinion: "It's unlikely that any renowned banking lawyer would support Cumplo on the record," he claimed, "because that would affect the interests of their largest clients."

The Birth of Cumplo

Even without a formal supporting legal opinion, the Sheas decided to move ahead. On August 1, 2011, in an open space in Santiago (Chile), Cumplo was born. Josefa came up with the name based on the idea that, under reasonable and transparent conditions, people would be able and willing to fulfill their financial obligations ("cumplir" in Spanish).

Around that same time, in August of 2011, Nicolas, as president of the National Association of Entrepreneurs (ASECH), hosted a lunch with 100 entrepreneurs and 50 top Government officials to honor Minister Juan Andrés Fontaine in his departure as Minister of Economy. The idea of ASECH had emerged after a presidential trip to Silicon Valley with a group of Chilean entrepreneurs in 2010 and this in fact was its founding event (in 2015 ASECH had reached 25,000 members and was one of Chile's most influential and fast growing NGOs).

After three months of working on the prototype, interviewing potential customers and investors, they decided to present Cumplo to the new Minister of the Economy Pablo Longueira. He found the idea fascinating and was willing to support the project. "These are exactly the new ideas that our country needs to reduce income inequality," he said. His advice was that it made no sense to consult with the financial regulators, because there was no financial intermediation. He suggested instead that they meet the director of the National Consumer Service, SERNAC, and the Chilean innovation agency CORFO. At Sernac, they tried to apply for the "best practices stamp" but were unable to obtain it, since "it was uniquely designed for financial intermediaries, which Cumplo was clearly not," said the director of the financial branch of Sernac (sernac financiero).

How Cumplo works (Cumplo's market loan eligibility and its performance)

The peer-to-peer lending market has emerged as a solid alternative for credit. Cumplo was the first company to launch crowdfunding in Chile, connecting its credit seekers and investors directly (without intermediation).

Eligible personal consumer loans at Cumplo required information on the borrower's workplace, salary, age, delinquency rate, and bank account.³⁵ Cumplo checked that the borrower met the requirements before publishing his profile online. The installments had to be paid directly through payroll deductions, meaning that Cumplo established contacts with the applicant's employer in order to receive the payment. In addition, the applicant had to sign a notarial act with the details of the credit contracted.³⁶ One of the most important requirements was to impose a maximum monthly installment equal to 15% of the borrower's gross income.³⁷ Compared to the average percentage of income devoted to debt repayment, as depicted by the Financial Survey, Cumplo clearly favored the development of "responsible indebtedness" practices.

In the allocation of loans, the platform operates in the following way: an eligible borrower sets the highest interest rate at which he is willing to pay, and the amount he would like to borrow. Then, during the next two weeks, interested lenders can decide to stay with the interest rate established by the borrower in his offer, or to lower it. Of course, they also decide how much financing they are willing to contribute. In this way, each lender fixes the lowest interest rate at which he is willing to invest. If the loan is completely financed, but the offer is still open (the borrower may decide to close the deal after 70% of the amount he requested has been collected, but not before), lenders can keep adjusting their offers to more advantageous terms (i.e. either by offering lower interest rates, or by contributing to larger amounts) until the term of the offer is due. Then, if the amount has been collected, and there are no other interested investors left outside of the deal, the interest rate on the loan is equal to that offered by the borrower.

If, instead, more lenders offer to invest their money, so that the entire amount requested has been offered by just a fraction of them, then they are ranked according to (1) lending interest rates (from the lowest to the highest); (2) amount willing to invest (from the highest to the lowest) and (3) eventually on a first come-first serve basis (i.e., if two lenders offered the same interest rate and the same amount to invest, then the one who entered the deal first is given preference). As a result, the lower the interest rate at which a lender is willing to invest, the higher his chances of taking part in the deal. Once the investors have been ranked, the first n investors whose financing amount sums up to the borrower's request are the investors who make the loan. The interest rate at which it is made however, corresponds to that set by the $n+1$ investor (i.e., the first excluded). This guarantees that each lender lends at an interest rate that is at least equal to the one he fixed during the initial phase.³⁸

Cumplo started offering personal consumer loans through a virtual platform. In its first nine months, loans mediated by Cumplo totaled to about 87 thousand dollars (see Figure 8).

Cumplo in the news

In May 2012, an article in *La Segunda* reported that new users were registering at a pace of 2,500 per week. The same article, however, attracted the interest of banks and the banking regulator. Cumplo's team was called to a meeting in the office of Julio Acevedo, the Bank

³⁵ Requisitos de los créditos de Cumplo.cl, *Prestamo.cl*, <http://prestamo.cl/requisitos-de-los-creditos-de-cumplo-cl/>

³⁶ "Invertir en créditos de consumo", *Cumplo*, <http://cumplo.cl/invertir-en-un-credito-de-consumo/>

³⁷ "Sueldo Bruto (Sueldo Imponible)", *Cumplo*, <http://noticias.cumplo.cl/sueldo-bruto-o-sueldo-imponible/>

³⁸ "Conoce cómo funcionan los Remates en Cumplo", *Cumplo*, <http://noticias.cumplo.cl/conoce-como-funcionan-los-remates-en-cumplo/>

Intendant, a former manager at Banco de Chile (and current board member at Transbank, the online payment monopoly that is owned by Chile's main banks). He opened the conversation with something like, "guys, I invited you here for a coffee to tell you that if you don't stop doing what you are doing in 48 hours, I will be forced to report your activity and you may end up spending 541 days in jail." In the deafening silence he continued: "You are infringing on the banks act: I give you 48 hours to shut down your website." He did not even try to disguise that he had been alerted about their site by a lawyer from BBVA's legal department.

A few days later, a letter from the *Superintendencia de Bancos* (SBIF) made the allegations official. The letter was signed by Mr. Acevedo as Superintendent, filling in for Superintendent Raphael Bergoing, who that day was on leave. The letter stated, "You are working as a "money broker" (*corredor de dinero*) because it keeps investors' money in a virtual account before they assign it to the loans where the money is invested. In doing so, Cumplo violates Art 39 of the General Banking Law." In the letter, they gave Cumplo five days to file their depositions.

Two days later, the Sheas met with Sbiif's general council Ignacio Errázuriz, to explain Cumplo's business model to him. After a two hour meeting, he agreed that Cumplo did not take deposits, and therefore was not a financial intermediary as described in the law, but he was still concerned by the use of virtual accounts. Cumplo kept those virtual accounts as collateral, to be sure that investors had the funds they allocated to investments. The clients' money was kept separate from the company's money and by contract Cumplo was not allowed to use that money on anything other than what the client instructed.

Although Cumplo was confident that it was not violating any law by offering virtual accounts to its customers, as a sign of good will towards the regulator, and despite the operationing cost implied, it decided to cancel this service. Within the next 48 hours, the founding team at Cumplo—engineers Guillermo Acuña, Jean Boudeguer, and Felipe Lyon—modified the operational model to eliminate the use of virtual accounts and replaced them with direct transfers at the moment the "loan auctions" were completed, while Josefa modified the terms and conditions documents to switch to this model.

As agreed with Mr. Errázuriz during their meeting, Cumplo formally replied to the Superintendent's letter, stating that they would eliminate the virtual accounts. They had agreed to reply within 14 days, but until February 2017, Cumplo never heard back. On June 7, SBIF replied that stopping the use of "virtual accounts" was not enough because Cumplo was still intermediating money, and initiated a criminal investigation.

While Nicolas was in La Moneda, that same night cofounders Felipe Lyon and Josefa, drafted a tough press release to face the accusations, including the claim that no authority has been so harsh in prosecuting usury and financial abuses as they have in trying to shut down Cumplo, an insignificant start up, with US\$10,000 in operations.

The next morning, Cumplo called for a special board meeting. Unanimously, the board agreed to ask for a legal opinion from the best lawyers in Chile. If the model was not crystal clear, they would shut down the company.

Victor Vial, former general counsel of Chile's Central Bank, adjunct member of the Supreme Court, distinguished professor of Civil Law at Universidad Católica and Universidad de Chile's Law School, and one of the most prestigious lawyers in Chile, agreed to give his legal opinion. In a 43 page legal report, co-authored with Alberto Lyon, also a Civil Law professor and Miguel Angel Fernández, Constitutional Law professor, both at Universidad Católica, they explained in detail the concepts of *correduría de dinero* (money brokerage), *captación y recepción habitual de dinero* (regular money uptake and reception), and why Cumplo was not violating the law nor any regulation. Moreover, they argued that the

action taken by the Superintendent of Bank was a clear infringement on their constitutional rights. Victor Vial was truly fascinated by the concept, in his words, “Cumplo is rebuilding the Greek Agora and will allow people to do what they used to more than 2,000 years ago. If it does any intermediation, it’s of people, not of money!”

In addition, they hired Chile’s top criminal lawyers Juan Ignacio Piña (who later had to resign Cumplo’s defense to assume the position of Undersecretary of Justice) and Francisco Cox, and communications experts Nicolás Vergara and Claudio Racciatti. To cover all of these non-budgeted costs, they had to raise additional capital to the tune of US\$150k.

An Unwelcome Visit

Nicolas had not yet recovered from the initial shock, when on July 12th, seven armed police agents entered the co-working space Cumplo had moved to. They had been sent to search Cumplo’s office, interrogate the team (7 people who averaged 26 years of age) and look for hidden hard drives and secret files, in front of many other early stage entrepreneurs who could not believe what was going on. In spite of the circumstances, Nicolas tried to keep his composure and explain what Cumplo was about. “All our files are on the web. We are what you see.” Then, he tried to explain to the baffled policemen what Cumplo did and improvised a “role play” session with them. “It is very simple: while 15 million Chileans are saving at a rate of 4% per year, the other 5 million are borrowing at 50%. Cumplo’s job is to allow them to meet so they can lend to each other directly.” The policemen listened carefully and left empty handed. One week later, one of them returned to Cumplo to apply for a loan.

On July 19, Nicolas and Jean Boudeguer, Cumplo’s founding COO, were interrogated by the district attorney in the presence of police officers from the department of high complexity crimes.

“Starting a start-up is hard enough, but these additional issues made it epic,” Nicolas says. “When things got nasty, my initial lawyers turned their backs on us; my mother came one night to beg me to let this go; a good friend in Government called me to advise me to eat healthy and exercise; but by far the hardest event was when my 11 year old daughter asked me in tears if I would spend Christmas in jail.”

The Challenges Ahead

After a very successful launch, their new venture had reached two major stumbling blocks. The first was on the regulatory front. The other roadblock was on the business side. Cumplo had started as a peer-to-peer lending platform focused on the consumer loans market, but the numbers did not seem to add up. As a new entrant, Cumplo was facing adverse selection, attracting risky borrowers and raising doubt on the feasibility of the model, and the publicity they were receiving on the legal front did not help at all. Was it worth risking jail time for a business that did not seem to have much potential?

Nicolas and Josefa were sitting at the dinner table. With their five children finally in bed they had the time to discuss their future. Did they have to abandon their dream and shut down Cumplo? Could they end a possible “antidote” that could help millions of highly indebted Chileans? If not, how could they defend themselves from the accusations? Should they talk to the press to express their outrage or should they listen to their lawyers and keep a low profile? After all, they were not just risking money. They were facing the possibility of spending the next year and a half in jail.

If that was not enough, the business was not doing well. In spite of the great attention it generated, the clients were few and not particularly good. The risk was to have all of their

investors' money entangled in lengthy legal battles in order to recover it from clients who had defaulted. The fear was that Cumplo had become "No Cumplo" (unfulfilled financial obligations). Was it worth the risk?

Apart from the great attention Cumplo received in the media, it was not performing well. But what alternative did Cumplo have? Perhaps the Small and Medium Enterprise (SME) market could be an attractive opportunity. SMEs have limited access to credit, face high interest rates, and their repayment rates seem to be better than the Consumer Market (see **Error! Reference source not found.**). Cumplo could potentially offer loans to small and medium-sized firms in order to reduce their high interest rates.

Figure 1: A working Taxonomy of Alternative Financing

Peer-to-Peer Consumer Lending	Debt-based transactions between individuals; most are unsecured personal loans.
Reward-based Crowdfunding	Backers have an expectation that recipients will provide a tangible (but non-financial) reward or product in exchange for their contribution.
Peer-to-Peer Business Lending	Debt-based transactions between individual/institutional investors and existing businesses who are mostly SMEs.
Equity-based Crowdfunding	Sale of registered security by mostly early-stage firms to investors.
Community Shares/ Microfinance	Microfinance refers to the lending of small sums to entrepreneurs who are often economically disadvantaged and financially marginalised. There is a debt obligation incurred, but the amounts lent are very small. Community shares refer to the sale of withdrawable share capital in cooperative and community benefit societies.
Donation-based Crowdfunding	No legally binding financial obligation incurred by recipient to donor; no financial or material returns are expected by the donor.
Invoice Trading	Firms sell their invoices or receivables to a pool of individual or institutional investors.
Debt-based Securities	Lenders receive a non-collateralised debt obligation, typically paid back over an extended period of time. Similar in structure to purchasing a bond, but with different rights and obligations.
Pension-led Funding	Mainly allows SME owners/directors to use their accumulated pension funds in order to invest in their own businesses. Intellectual properties are often used as collateral.

Source: Robert Wordrop et al., "Moving Mainstream," University of Cambridge, 2015.

Figure 2: US Peer-to-Peer Lending Monthly, Number of Loans

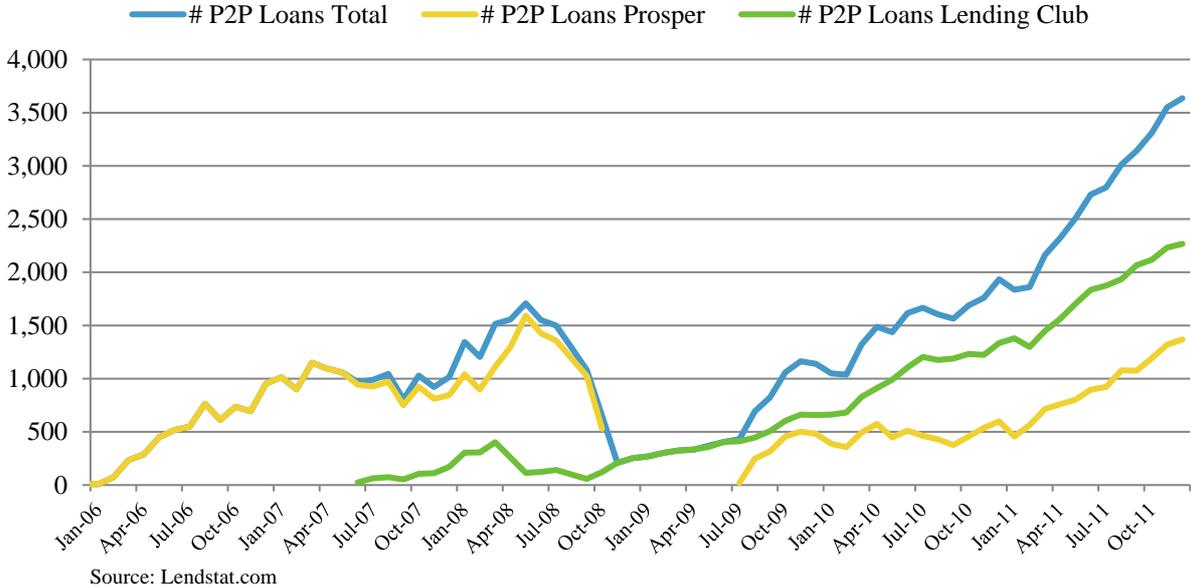
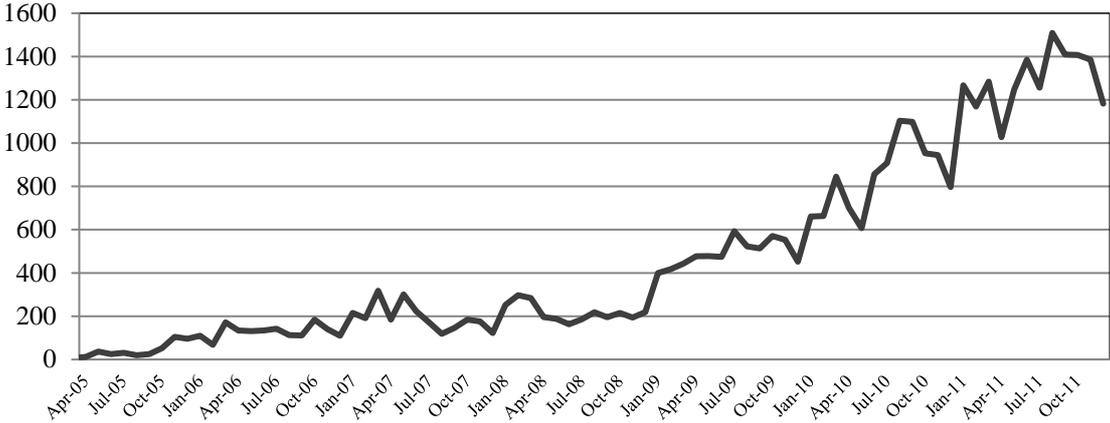
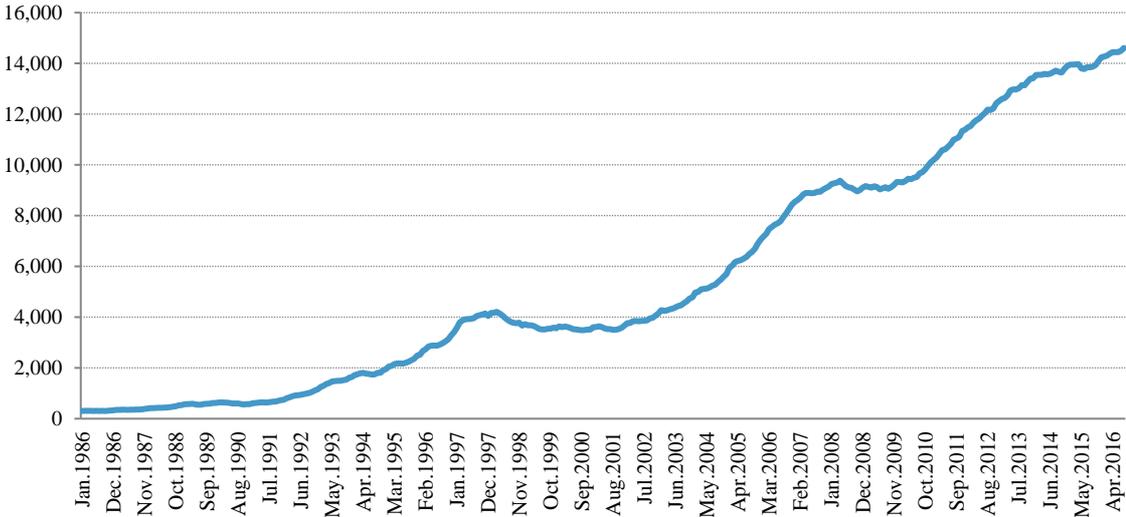


Figure 3: UK Peer-to-Peer Lending Monthly Number of Loans



Source: Own calculations based on Zopa's Loans Book and Open Data Institute "Show me the Money" data.

Figure 4: Consumer Loan Market Chile



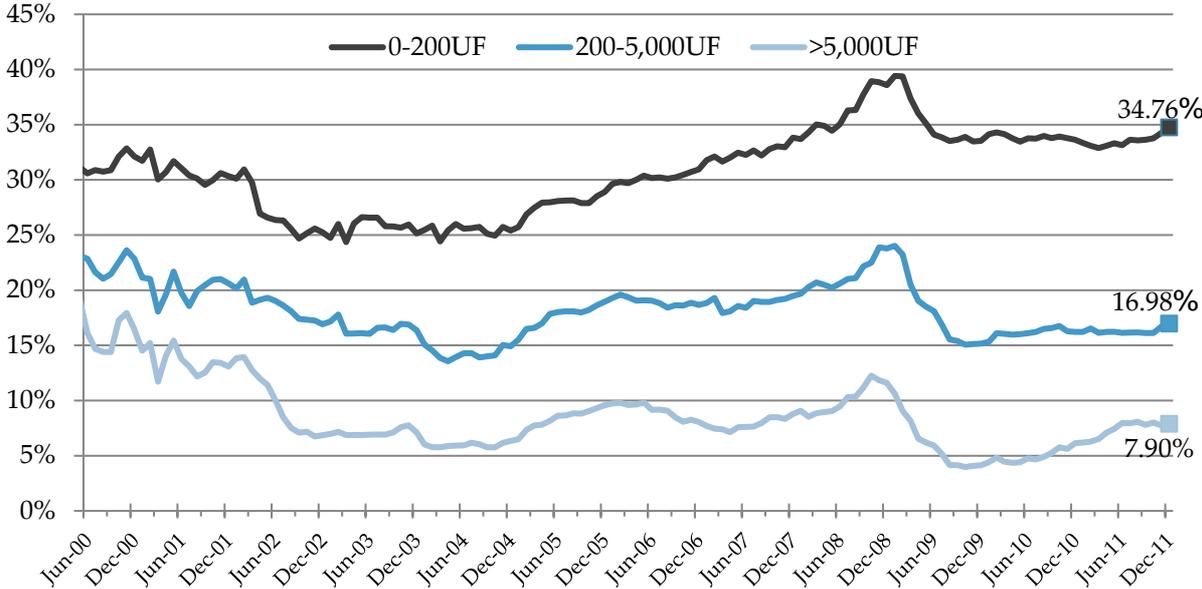
Source: Central Bank of Chile

Figure 5: Borrowing Rate for Consumer Loan Market Chile– 2002 to 2016



Source: Central Bank of Chile

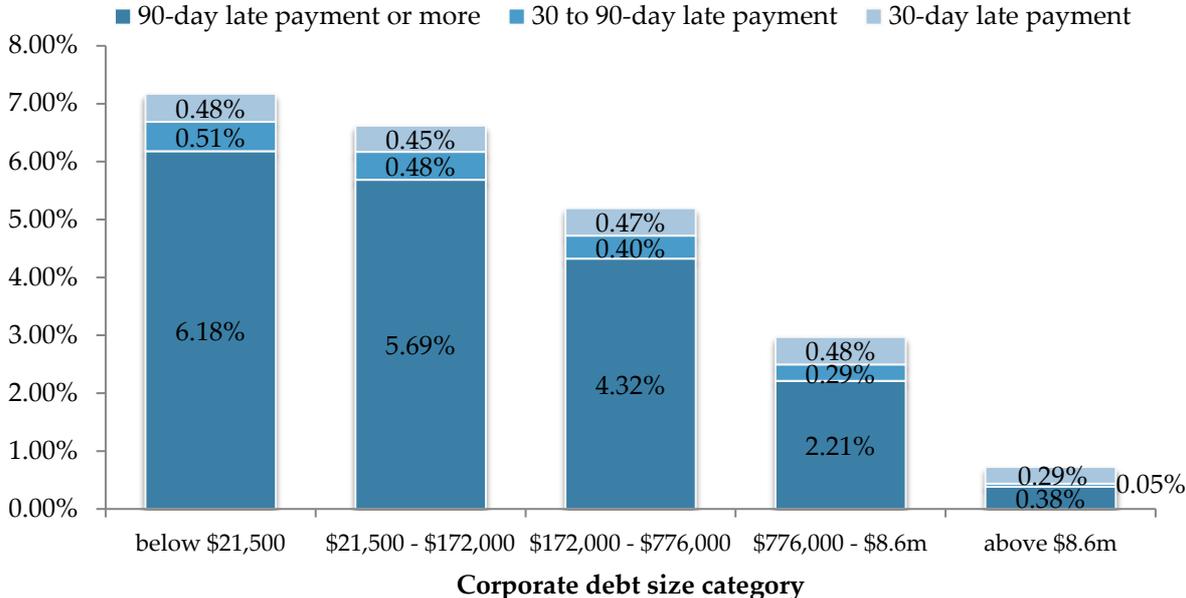
Figure 6: Interest Rates for Different Size of Credit



Source: Superintendency of Banks and Financial Institutions

Debt size categories are reported using the Unidad de Fomento (UF), a unit of account adjusted for inflation. (1) Between 0 and 200 U.F. is between approximately US\$0 and \$9,000; (2) between 200 and 5,000 U.F. is between US\$9,000 and \$230,000; and (3) above 5,000 U.F. is above US\$230,000.

Figure 7: Delinquency rate by corporate debt size



Source: Superintendenteny of Banks and Financial Institutions (December 2011)

**Table 1: Annual Interest Rates on Consumer Credit
(December 2011 – week 3)**

Banks	Credit: US\$ 1,000 ca.				Credit: US\$ 2,000 ca.				Credit: US\$ 3,000 ca.			
	24 months		36 months		24 months		36 months		24 months		36 months	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Banco de Chile	N.A.	N.A.	N.A.	N.A.	16.20	25.82	16.56	26.94	14.40	21.39	15.00	22.42
Banco de Crédito e Inversiones	N.A.	N.A.	N.A.	N.A.	11.48	27.72	11.48	27.96	10.50	24.00	10.50	24.12
Banco del Estado de Chile	27.36	30.96	27.36	30.96	27.36	35.75	27.36	35.75	22.32	29.23	22.68	29.23
Banco Falabella	16.54	29.64	16.67	29.88	14.93	26.76	15.13	27.12	14.26	25.56	13.79	24.72
Banco Paris	22.24	36.70	22.96	37.92	18.00	34.55	18.72	35.87	15.12	27.47	15.84	27.47
Banco Ripley	31.20	36.84	31.20	38.04	30.12	34.56	30.12	35.88	18.24	27.48	18.24	27.48
Banco Santander Chile	12.95	30.97	12.95	30.97	12.95	30.97	12.95	30.97	10.20	24.92	10.20	24.92
Banco Itaú Chile	N.A.	N.A.	N.A.	N.A.	14.46	26.40	14.85	27.03	13.71	23.76	13.53	24.00
BBVA Banco	13.22	26.38	14.03	28.02	13.22	26.38	14.03	28.02	12.02	25.64	12.68	26.53
Corpbanca	16.32	27.84	16.56	28.32	15.84	27.00	16.32	27.60	15.48	25.44	15.84	25.80
Scotiabank Chile	22.41	26.36	22.74	26.75	22.41	26.36	22.74	26.75	19.62	23.08	20.07	23.61
Special Divisions												
Banco Condell	21.48	35.88	21.48	35.88	21.48	35.88	21.48	35.88	21.48	35.88	21.48	35.88
Banefe	23.76	40.80	23.76	40.80	23.76	40.80	23.76	40.80	23.76	36.55	23.76	36.55
Banco Credichile	24.72	35.88	24.72	35.88	24.72	28.80	24.72	28.80	23.40	27.48	23.40	27.48
Banco Nova	24.24	35.76	24.48	35.88	23.76	35.76	24.00	35.88	19.80	31.80	20.28	31.92
Banco del Desarrollo	25.40	33.46	25.57	33.66	24.82	32.62	24.98	32.82	21.07	27.62	21.29	27.89
Cooperatives												
Coopeuch	23.40	33.20	25.80	34.80	19.80	31.20	23.88	31.80	19.80	31.20	23.88	31.80
Coopretal	27.48	34.80	27.48	34.80	27.48	34.80	27.48	34.80	27.48	34.80	27.48	34.80
Oriencoop	21.48	41.88	21.48	41.88	21.36	35.40	21.36	35.40	17.64	33.00	17.64	33.00
Capual	18.77	28.28	18.50	28.01	18.32	23.49	18.19	23.36	18.03	23.19	17.98	23.15
Detacoop	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	30.00	30.00	30.00	30.00

Source: Superintendency of Banks and Financial Institutions ³⁹

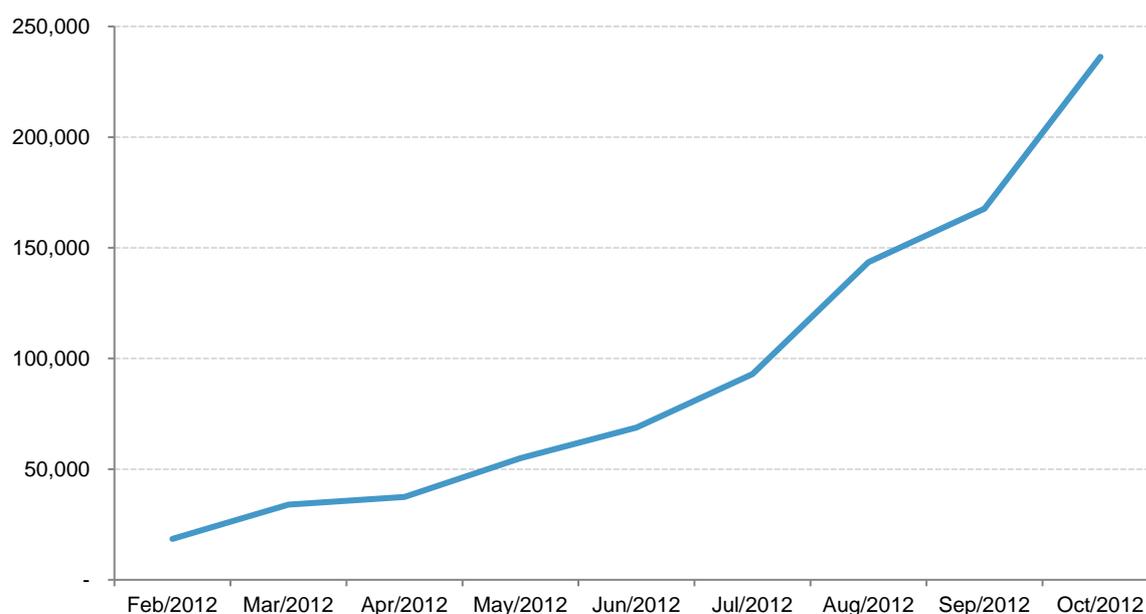
³⁹ <http://www.sbif.cl/sbifweb/servlet/InfoFinanciera?indice=4.1&idCategoria=1611&tipocont=0>.

Table 2: Distribution of Chilean Corporate Debt

Debt size (US\$)	Number of corporate debt holders	As % total number of debt holder	Debt amount (billion US\$)	As % total debt amount	Average debt size (US\$)
below \$21,500	628,424	72.61	2.78	2.51	4,424
\$21,500 - \$172,000	188,356	21.76	8.17	7.39	43,369
\$172,000 - \$776,000	34,341	3.97	8.33	7.54	242,594
\$776,000 - \$8.6m	11,921	1.38	19.38	17.53	1,625,551
above \$8.6m	2,467	0.29	71.90	65.03	29,146,098
TOTAL	865,509	100.00	110.56	100.00	127,741

Source: own calculations based on Superintendency of Banks and Financial Institutions data⁴⁰

Figure 8: Amount transacted by Cumplo in the past 12 month for consumer market, dollars



Source: own calculations based on Cumplo data

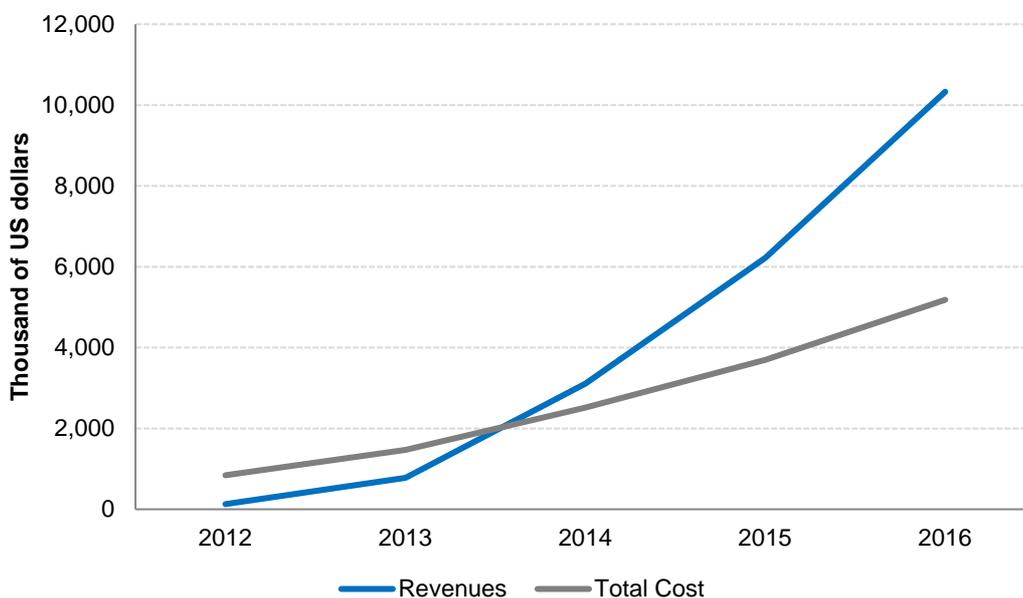
⁴⁰Available here: <http://www.sbif.cl/sbifweb/servlet/InfoFinanciera?indice=4.1&idCategoria=564&tipocont=0>

Notice that debt size categories were reported by the SBIF using the Unidad de Fomento (UF), a unit of account adjusted for inflation. They have been converted to Chilean pesos using the December 2011 average (1 UF corresponding to 22,259.95 pesos). The volume of debt presented by the SBIF was reported in Chilean pesos. All values in pesos have then been converted to US dollars using the average exchange rate as of December 2011 published by the Banco Central de Chile (corresponding to 517.17 CLP per USD). Exchange rate series are available here: <http://si3.bcentral.cl/Indicadoresiete/secure/Indicadoresdiarios.aspx>.

Exhibits 1: Cumplo Projections

Cumplo was the first peer-to-peer lender in Chile and was created as an alternative source of credit. The idea of the firm was to connect credit seekers and investors through a virtual platform without any intermediation. Before Cumplo started their operation, the Sheas implemented a cost-benefit analysis. For the first three years, the total cost would be higher than the revenues, until 2016 when the revenues would be 0.5 percent of the total consumer market in Chile (see Figure A.1). In their projections, around 90 percent of the total cost would come from salaries and marketing. Revenues were calculated assuming a 5 percent fee on loans in the potential consumer market for Cumplo.

Figure A.1: Cumplo revenue and cost projections



Source: own calculations based on Cumplo data

The expected consumer loan market for Cumplo in 2012 was around 2 million US dollars. However, despite the great attention that Cumplo received from the media, the number of people asking for a loan was less than expected and the loans issued up to October 2012 were lower than the projections (US\$87,064).

Exhibit 2: Key Players at Cumplo

Nicolas Shea: as a Director at Cumplo, he obtained his commercial engineering degree at the Pontificia Universidad Católica de Chile (PUC), a master's in Education at Columbia University, and an MBA at Stanford University. Founder of Cumplo, Start-Up Chile, eClass, and the Chilean Association of Entrepreneurs, Shea received two national awards for innovation (Avonni), for Start Up Chile in 2011 and Cumplo in 2012. In 2013 he was honored as Entrepreneur of the Year by the University of Santiago and the Association of Engineers of Chile, and in 2014 was elected as one of the Young Global Leaders by the World Economic Forum. Nicolas Shea was a former advisor of entrepreneurship and innovation to the Chilean Ministry of Economy during the Piñera presidency in 2010.

Josefa Monge: as a lawyer specializing in Corporate Communications, Josefa obtained her degree at the Pontificia Universidad Católica de Chile (PUC). As a co-founder of Cumplo, she is currently part of the Directory of Cumplo.

Guillermo Acuña: co-founder and COO at cumplo, Acuña studied Civil Engineering at PUC and received an MBA from the Stanford University Graduate School of Business (Stanford Ignite Santiago). He was in charge of operations at Cumplo. He is also a co-founder at HuntMe (an employment agency in Chile) and Koywe SpA (a software development company).

Jean Boudeguer: he was a co-founder and general manager at Cumplo until 2015. He has a degree in Civil Engineering from PUC and obtained his MBA in Management at Bath University. He is currently working at Clay Technologies (management services for companies).

Felipe Lyon: co-founder at Cumplo, he received his Civil Industrial Engineering degree at PUC. He is currently working at CTO (infopáginas).

Alvaro Sostin: He received his Civil Industrial Engineering degree at the PUC and an MS at Stanford University. He found Art2Travel and Delta Pricing.

Roberto Loehnert: he has a Civil Engineering degree from PUC and obtained an MBA at Stanford University. He is also a Director at Endurance Investments S.A. He previously worked as general manager in EFT and was a consultant at McKinsey.

Cristobal Undurraga: he has a Civil Engineering degree from PUC and an MBA from Stanford University. He is a Development Manager at Econométrica and a Director at Asech. Between 2010 and 2014 he worked as a manager of the venture Corfo, as executive director of InnovaChile, and as general coordinator of the Year of Innovation.

Appendix: Chilean Economy

Since the mid-1980s, Chile has been regarded as the Latin America success story. With a per capita income growth of 3.3 percent per year on average since 1980 (see Figure B.1), it is now the richest country in Latin America. But it has not always been that way. While in 2009 only 15% Chileans lived below the poverty level, in the mid-1980s that number was 45%. Much of the credit for this success is attributed to the influence of ideas from the University of Chicago. Back in the 1960s, Chile's Universidad Católica established an exchange program with the University of Chicago economics department. Pretty quickly a significant fraction of their professors had a master's or a PhD from the University of Chicago.

When Pinochet took power in a military putsch in 1973, he found himself in need of economic advice. The only non-leftist economics department in Chile was at the Universidad Católica. Pinochet, thus, was forced to rely on their advice. With the help of the so-called "Chicago boys" led by Arnold Harberger, the Universidad Católica team developed an economic model based on free markets, minimum government, low inflation, and—eventually—flexible exchange rates.

By the time Pinochet was removed as President in 1989, this model—known in Chile as *el modelo*—was so successful that even the new center-left government decided to embrace it. The outcome was thirty years of remarkable growth and the development of a very robust capital market.

The increase in per capita income was not Chile's only achievement. While in 1990 only 200,000 young Chileans went to college, by 2012 that number had surged to 1.1 million.⁴¹ Most of this surge was achieved thanks to newly created private universities, which at the same time were an additional burden for household indebtedness.

In spite of all these improvements, however, Chile remained a very unequal society (see Figure B.2).

Figure B.1: Evolution of the GDP in Chile



⁴¹"Progress and its discontents," *The Economist*, April 14, 2012.

Figure B.2: Income Inequality

