

## **CBC Workshop on “Banking and Financial Stability”**

*Opening remarks by: Luis Felipe Céspedes, Member of the Board of the Central Bank of Chile*

**September 11, 2024**

**Santiago, Chile**

Good morning, and welcome to the Workshop on “Banking and Financial Stability” organized by the Financial Policy Division of the Central Bank of Chile. We gather here today and tomorrow to talk about financial intermediation, the special role of banking institutions, their market organization, and the implication of all these dimensions on financial stability.

Financial intermediation has a fundamental role in the functioning of a modern economy. It channels resources from savers to borrowers and facilitates risk sharing and risk management. Notably, the provision of these services by financial intermediaries to the economy has significant implications for macroeconomic behavior.

Among financial intermediaries, banks are the most important agents in many advanced and emerging economies. They are the most notable source of funding for the real sector and almost the only one for households and certain groups of firms. Therefore, it is natural to think of banks when talking about financial intermediaries.

Now, a basic assumption is that in the absence of financial intermediaries, financial markets are incomplete (just to be clear, I am not claiming that the mere existence of financial intermediaries completes financial markets). This incompleteness emerges because of informational problems. Financial intermediaries help to reduce market imperfections by specializing in aggregating/gathering information about projects and facilitating lending and borrowing. In this context, as discussed by Bernanke and Gertler (1985), changes in the level of financial intermediation due to monetary policy, legal restrictions, or other factors, may have significant real effects on the economy. Notably, according to Bernanke (1983), the severity of the Great Depression was partly due to the collapse of the banking system, leading to the loss of intermediary services.

On occasions, financial intermediation is not only a channel of amplification of economic shocks but a source itself. The evidence is clear regarding the welfare cost of economic crises with a financial crisis component: they are typically deeper and more protracted.<sup>1/</sup>

In Chile, we know this firsthand. In the early 80s Chile experienced one of the most severe economic crises in the recent past. The banking sector was at the center of this crisis.

Just before this crisis, in the first quarter of 1981, output grew by 9%. By the end of 1982 output growth was negative 14% with the unemployment rate skyrocketing close to 30%. The delinquency rate surged to 15%, placing intense pressure on banks' balance sheets and ultimately threatening their solvency. Credit in the economy plummeted. In the years preceding the crisis, annual credit growth was near 40%, but it swiftly dropped to 0% in 1982 and fell to approximately -20% over the following two years. Lack of credit and an impaired financial system were devastating for an emerging economy reliant on financing for growth. The number of firms going out of business in 1982 multiplied by a factor of six, further deteriorating banks' balance sheets. While it is true that several external shocks hit the Chilean economy during that time, the scale and amplification of the crisis were mainly because the financial system had accumulated massive vulnerabilities. Let me mention one: proper regulation and sensible supervision were not part of the financial liberalization process of the 1970s. As Carlos Diaz Alejandro discusses in his classical paper "Good-bye financial repression, hello financial crash": "...even a purely laissez-faire financial system must count with some indirect government inputs in the form of an efficient and fair judiciary and police system to punish fraud and to handle the enforcement of contracts and the settlement of disputes and bankruptcy cases."

This extreme financial liberalization experiment in Chile combined with a fixed exchange rate regime, generated the conditions for the growth of massive imbalances that pushed credit growth to unsustainable rates in the years before the 82's crisis.

The lessons of this crisis profoundly shaped subsequent legal and supervisory developments. The Banking Law of 1986 considered a rigorous approach to which banks had to comply, - including

---

<sup>1</sup> On average, normal recessions are associated with a 2% decline in output in the first year, compared to a 2.7% decline during financial recessions. Moreover, three years into a normal recession, output has typically recovered, while on average it is 2.5% below its level at the beginning of a financial recession. See Jordà, Schularick and Taylor (2013)

strong powers to the supervisors, limits on credit exposure in related entities, capital, risk management and reporting requirements. In a subsequent reform of the General Banking Law in 1997, the principles of Basel I were incorporated. This law was enhanced in 2019 when Chile decided to implement the Basel III guidelines and modernize our regulatory framework.

Yet, regulation and financial policy are not static. Just as the 1982 crisis led to a new regulatory framework in Chile, the Basel III guidelines take into account many lessons learned during the Global Financial Crisis. Notably, they highlight the role of macroprudential policy as a complement to microprudential regulation, with a role to strengthen the resilience of the banking and financial sector and to generate a greater capacity to absorb financial or economic shocks and mitigate their amplification into the real economy.

With Basel III already under implementation in Chile and many countries; academics and policymakers are still learning how specific policy choices can determine the outcome of the framework. Let me give you just one example. Bank capital buffers were introduced to give banks additional capacity to absorb losses, while dividend restrictions were introduced to avoid reckless depletion of capital when it is most needed.

Along the road, research has begun to show that these two features have interesting interactions. At the onset of a crisis, a contraction in credit can amplify the original shock, which translates into further depletion of banks' capital down the road. Thus, it would be desirable that banks do not contract lending, internalizing the effect of their actions on the aggregate. However, distribution constraints limit the banks' willingness to use or get close to using their capital buffers, and instead, it incentivizes them to deleverage or to shift their lending to less risky assets, amplifying the original shock, and ultimately resulting in more capital depletion. Insights such as this one are the result of research by academics and policymakers like you, gathered here today in Santiago to participate in this workshop. Frontier academic research in this area is critical for central bankers. The discussion on how to optimally strengthen the resilience of the financial system is still young, and as such, many important research questions remain open. Take another example: the countercyclical capital buffer —the one macroprudential capital requirement incorporated in Basel III.

A notable feature of the CCyB as a macroprudential tool applied to the banking system, is not only its dynamic character through the financial cycle but more importantly, its releasability. Only

recently, after most of the countries that had accumulated a positive CCyB released it during COVID-19, we have been able to produce empirical evidence on its impact on credit. These empirical findings are now being contrasted against our models and are beginning to guide our understanding of the mechanisms and frictions we need to consider for policy design. With the publication of the Financial Stability Report of the second half of 2023, the Central Bank of Chile announced that during 2024 it would revise and update its framework for the implementation of the CCyB, in line with the global discussion regarding this macroprudential tool and the suitability of a positive neutral level.

In the process, the Bank has engaged in studying and deepening our understanding of the link between bank regulation, the banking sector, and credit market functioning, its linkages with the real economy, and ultimately its impact on Financial Stability. This workshop is part of this larger effort. We are very happy to host this event, where we will have the opportunity to discuss papers that are at the frontier of knowledge and that have a direct contribution to the debate on what a desirable financial policy framework should look like. We also have the pleasure of hosting Professor Rafael Repullo from CEMFI, a highly recognized expert on banking and financial economics. He will deliver the Keynote Lecture “Regulation, Supervision, and Bank Risk-Taking”.

In the first session, we will explore the design of macroprudential tools aimed at enhancing the resilience of the financial system.

Dominik Menno from Deutsche Bundesbank will present a paper that provides a theoretical justification for building up a positive countercyclical capital buffer in “normal” macro-financial environments. In particular, the interaction of an occasionally binding equity issuance constraint with an occasionally-binding capital requirement constraint is the crucial feature of the model that induces state dependence in the impact of changes in bank capital requirements on loan supply.

Gianni De-Nicolo from Johns Hopkins University will discuss the importance of increasing capital requirements gradually. In his model, when the regulatory tightening is introduced with a transition period, the anticipation of larger profits from lending induces banks to retain more earnings during the transition phase. This accelerates the accumulation of capital buffers and reduces the risk of a credit crunch.

In our second session, we will discuss the implementation aspects of macroprudential and microprudential policies. First, Josef Schroth, from the Bank of Canada, will talk about the time consistency problem that can emerge in the operation of the CCyB and how to avoid it. His paper offers insights into the importance of proper communication and the predictability of future increases in capital requirements after a release. Next, Maximiliano San Millán, senior economist of the Central Bank of Chile, will discuss the financial stability implications of the design of risk weights on residential real estate exposures of banks. Finally, Haelim Anderson from the Bank Policy Institute will present evidence of late 19th-century corporate governance requirements on how policies imposing that bankers have some “skin in the game” could reduce risk-taking. Tomorrow, in the third session, we will examine how banks' incentives shift in response to policy design. This session will feature empirical papers that apply estimation techniques from industrial organization literature to assess when and how changes in specific policies can enhance welfare. David Stillerman from American University will highlight how partial credit guarantees can distort banks' incentives to acquire information, potentially leading to increased default rates. Next, Cristián Sánchez from the Central Bank of Chile will discuss Chilean banks' incentives and costs to shift risk across government guarantee plans under the large expansion of Chile's main credit guarantee program throughout the pandemic.

Finally, Eric Richert from the University of Chicago will address bank resolution costs in the U.S., examining how these costs can escalate during periods of financial stress due to more intense constraints on potential bidders, and will discuss potential strategies for reducing these costs.

In the last session of the workshop, we will discuss how balance sheet restrictions affect bank credit supply. The empirical papers presented will leverage micro-level data to provide reduced-form estimates of how various exogenous shocks affect bank lending behavior. David Jaume from Banco de México will discuss how government borrowing in the form of loans, as opposed to bonds, can crowd out SMEs from bank lending by affecting the collateral banks use to secure funding in the interbank market. Next, Andrew McKinlay from Virginia Tech will talk about the benefits of asset diversification on bank lending, including greater resilience during bad times and positive spillovers to the economy.

Then, Alexandra Matyunina from the University of Zurich will discuss how bank specialization can enhance lending to new firms and improve their survival rates. Finally, Olga Briukhova, also from

the University of Zurich, will address the potentially unintended consequences of financial regulation and how these effects may spill over to other financial intermediaries.

On behalf of the Central Bank of Chile, I would like to extend my gratitude to all the participants, discussants, and attendees for joining us today and making this workshop a premier event that will undoubtedly enrich the ongoing dialogue on banking and financial stability. I also want to thank Maximiliano San Millán and Cristián Sánchez for their work in organizing this program, as well as Tomás Cortés, Mónica Espinosa, Javier Moreno, and María José Reyes whose contributions were essential in making this event possible. I wish you all two days of exciting discussion and a nice stay in Santiago.

## References

Bernanke, Ben S, 1983. "Nonmonetary Effects of the Financial Crisis in Propagation of the Great Depression," *American Economic Review*, vol. 73(3), June.

Bernanke, Ben & Mark L. Gertler, 1985. "Banking in General Equilibrium," NBER Working Papers 1647, National Bureau of Economic Research.

Diaz-Alejandro, Carlos, 1985. "Good-bye financial repression, hello financial crash," *Journal of Development Economics*, vol. 19(1-2), 1-24.

Jordà, Òscar, Schularick, Moritz, & Taylor, Alan M., 2013. "When credit bites back," *Journal of Money, Credit and Banking*, 45(s2), 3-28, November.