

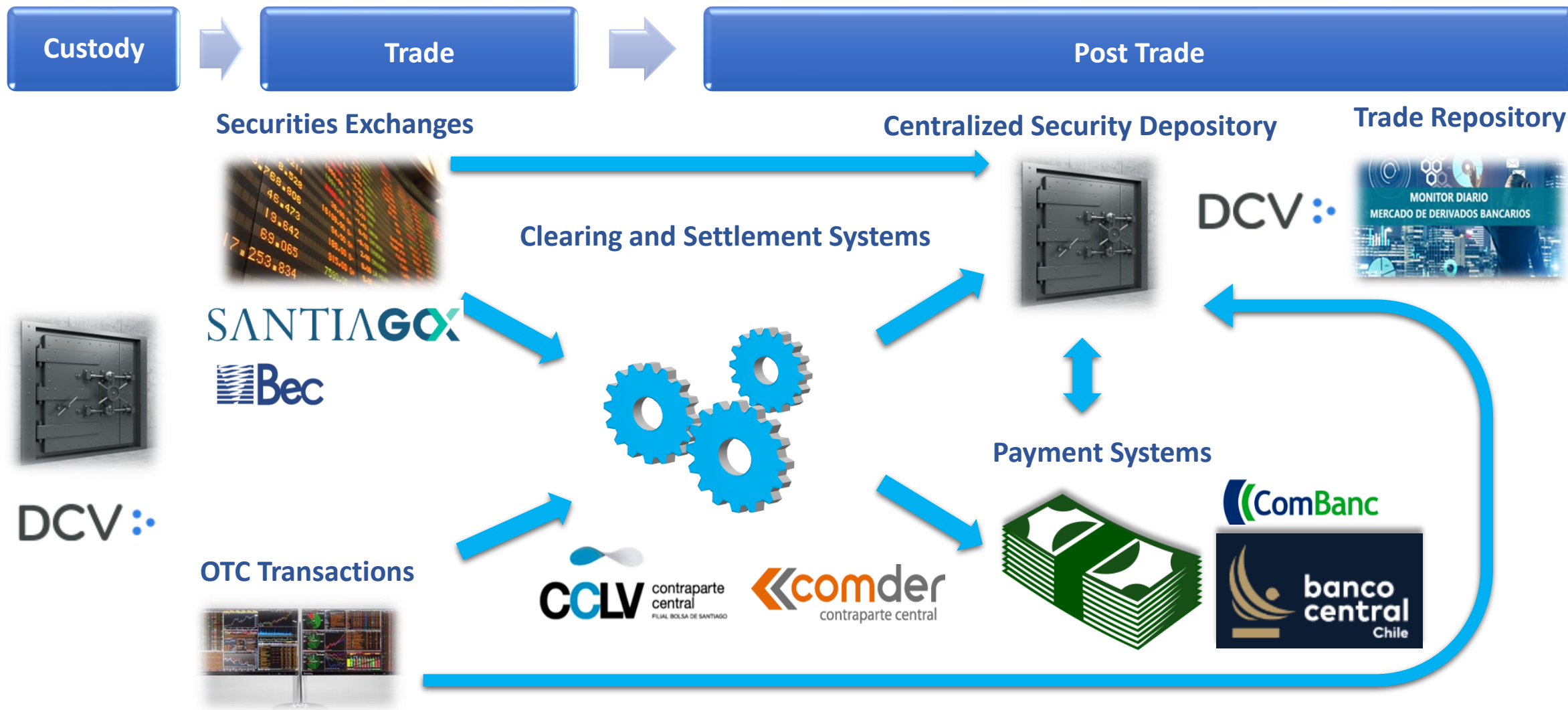


**“FINANCIAL MARKET INFRASTRUCTURE:
INNOVATION FOR A BETTER FUTURE”
Chile Day London**

Solange Berstein Jáuregui
Chairwoman
Financial Market Commission

September 2023

Financial Market Infrastructures in Chile



How do you see Chile´s Financial Market Infrastructures strengths and potential contribute to the country´s future progress and economic growth?

- In Chile we have a very well developed financial sector and a key feature are financial market infrastructures, which are critical for the operation of this sector.
- Trade and post trade activities are carried out by sophisticated and highly regulated entities.
- We have a long history!

The journey for financial market infrastructure in Chile...

- **Securities Exchange in Chile exist since 1893, with more than 300 listed companies mainly on the mining sector.**
- **Stock exchanges started electronic trading more than 30 years ago, with a clearinghouse that started in 2010 as a Central Counterparty for securities.**
- **Central Securities Depository 30 years ago; RTGS system 2004, and the High-Value Payment System (Combanc) 2005.**
- **For derivatives there is Centralized Clearing, with a Central Counterparty in the case of OTC, since 2015.**
- **In 2022 the Central Bank started the operation of a Trade Repository, so we completed the whole set of FMI recommended by CPMI.**

The Regulatory Journey....

- **Stock exchange** and **Central Depository** regulation was enhanced and their activity increased in tandem with the growth of the **pension funds** and changes in investment alternatives for these institutional investors.
- **Insurance companies** and **mutual funds** grew their market participation, adding deepness to the market in Chile. In this context FMI are critical for the market to operate efficiently and secure.
- In the case of CCPs Regulation issued in 2009-2010, in parallel with our **participation in the CPMI-IOSCO Principles draft (Steering Group)**.
- Since 2020, **all institutional investors can participate in CCPs**
- IMF TA on **Central Bank Services** – recommendations for FMI – this is part of the Financial Resilience Law that is being discussed in Congress.

Recent developments from the private sector...

- **Market integration**

- Interconnection of stock exchanges in Chile working since August 2023.
- Integration of stock exchanges in Chile, Peru and Colombia formalized on August 31st

- **Innovations**

- Scale X start up and medium size companies
- Short Sales and Securities Lending with DLT (Bolsa de Santiago).
- NASDAQ – DCV Evolución. Second stage: DLT.
- Commodities exchange (Bolsa de Productos de Chile). DLT-based borrowing trading.
- COMDER is incorporating Artificial Intelligence (AI) and automatization of process to mitigate operational risks and gain efficiency

Do you think that Chile has a proper FMI for the future? Do you see any possible consolidation of all these separate entities?

- Globally, there is **no evidence** that the industry is settling on one **particular structure**.
- The international experience has been diverse:
 - Initial domestic horizontal integration (Germany, Switzerland)
 - International integration (Euronext, Euroclear)
 - Vertical and international integration (Switzerland, UK, Germany)
 - Some integrations did not materialize or lasted for some years, whereas others have been enduring.
- Factors that have **driven to changes**:
 - Globalization and the demand for multicurrency clearing and settlement
 - Response to the 2007–09 financial crisis
 - Public policy initiatives aimed at harmonization of the regulatory environment
 - Technological progress

Benefits and risks of vertical or horizontal integration

Benefits:

- **Lower operational costs** because of **network effects, economies of scale and scope, which would allow increase resilience**
- Easier to **monitor and control** participants risks for better **counterparty risk management**
- Harmonize **rules and procedures** enhancing best practices, reducing operational risks
- **Promote innovation** for better services and market development
- **Avoid strategic complementarity that drives to competition** between FMI that aim to capture market share by aggressively marketing new services that are not sufficiently robust, and would in turn undermine the robustness of the system as a whole.

Industry organization and future challenges...

- There is **no evidence** of a **preferred industrial organization**. Specific organizations of this industry may create specific risks and amplify interdependencies between systems and markets.
 - As potential risks not necessarily materialize it is difficult to assess systemic risk that might arise from a specific industrial organizations.
 - Market power might imply double marginalization (Tirole, 1988), but vertical or horizontal integration, might also imply less access to FMI, higher costs, predatory pricing or foreclosure, or no incentives to innovate.
 - Market or services covered by individual FMIs might potentially amplifying the “too big to fail” problem.
 - There might be incentives to take excessive risks in one service relying on the group’s financial resources.
 - Common facilities, systems and staff, may concentrate and amplify operational risk
- Beyond organizational and ownership structures, the key is that FMIs should have a strong governance and risk management system to fulfil their market role efficiently and safely.

Why does the CMF think the approval Resilience Bill is relevant for Chile? What benefits it may provide to the strength and safeness of Chile´s Capital Market?

This bill will **enhance institutional arrangements** available for Financial Market Infrastructures, between others:

- **Recognition of international** Central Clearing Counterparties (CCPs).
- Further development of the **Repo market in Chile**.
- Possibility of Centralized Security Depository (CSD) to manage **clearing systems**.
- Central Bank **Liquidity access** for CCPs and in exceptional cases also to Pension Funds, Insurance Companies and Mutual Funds.
- **Circuit breaker** for the stock exchange.

More resilient financial sector, for which financial market infrastructures play a critical role.

Final thoughts and remarks

- Sufficient scale of operations (network effect), FMI need to have enough capacity to support operational volumes and ensure interoperability.
- Market structure in hand with new technology might evolve.
- There is no evidence that there is one structure better done other, but technology and innovation challenges current arrangements.
- Design should be also made carefully, to avoid unintended consequences on security or resilience. It is relevant, therefore, to identify the real bottlenecks in our pre-trade, trade and post-trade systems to check where new technologies can be more useful.
- Cyber resilience has become increasingly relevant for FMIs.



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Recent developments and CCPs and Clearing in an international Context

ESMA CCP Regulatory Equivalence under EMIR, granted in 2022 - Comder Qualified CCP

Steering Group of CPMI-IOSCO – continuous assessments run by the IMSG.

Further observations of ROSC became part of our supervisory review

A draft Law aims to give access to CB liquidity assistance to CCP

Reinforce the procedure to recognise international CCPs

Further development of repo market and possible CCP to operate

Chile's interest in joining CLS bank

- Draft Law will simplify the process to obtain a Tax Identification Number
- Operational challenges (time zone)
- The arising alternative of CBDC for cross-border payments

Legal, Regulatory and Supervisory context

- [Law No. 20345](#)
- [Circular No. 1939](#) – Operational Risk Management
- [Circular No. 2020](#) – Operational Incidents Management and Monitoring
- [General Rule No. 256](#) – Participants' requirements
- [General Rule No. 258](#) – Credit and Liquidity Risk Management
- [General Rule No. 259](#) – Authorisation process
- [General Rule No. 438](#) – Allows Institutional investors to participate in clearing & settlement systems
- CPMI-IOSCO PFMI and Cyber Resilience guidance
- ISO 27001 and ISO 27032 (IT); ISO 22301 on Business Continuity
- Cybersecurity Framework: NIST. Other standards: COBIT - CIS

The supervisory and regulatory journey of FMs in Chile

Initially developed in 2009-2010.

Adoption of CPMI-IOSCO Principles since the beginning.

Feedback from ROSC 2016: liquidity access from the Central Bank (draft Law).

Feedback from CPMI-IOSCO Level 1 Assessment: Circular No.2237

Recent developments: new infrastructures and regulations

- Low-value payment clearinghouses and Trade Repositories
- Fintech Law

Technological challenges: Cybersecurity and DLT.

Recent developments- New infrastructures and regulations

- **Low-value payment clearinghouses:** new infrastructures. The General Rule No. 489, issued in 2022, regulates low-value payment clearinghouse administrators and includes requirements on Operational Risk, Cybersecurity, Business Continuity, Information Security and Third-party services risk management.
- **Fintech Law:** many principles from the FMI are relevant for Fintech, as the report on **Stablecoins from CPMI-IOSCO evidenced**. The recent consultative report on **Crypto and Digital Assets Markets** also mentioned CPMI-IOSCO Principles as part of the mapping upon which the recommendations were built.

TABLA IV.1 INFRAESTRUCTURAS DEL MERCADO FINANCIERO EN CHILE

Nombre	Sistema LBTR	ComBanc	ComDer	CCLV	CCLV	DCV	SIID-TR
Tipo IMF	SPAV (LBTR)	SPAV (Liquidación Neta diferida)	ECC	ECC	SCLV	DCV	TR
Operador	BCCh	ComBanc S.A.	ComDer S.A.	CCLV S.A.	CCLV S.A.	DCV S.A.	BCCh
Participantes	Bancos - ECC - SCLV	Bancos	Bancos	Corredores de Bolsa	Corredores de Bolsa	Sistema Financiero	Bancos - AFP - Cías. De Seguro - AGF - Corporativos
Operaciones	Pagos	Pagos	Derivados OTC	Renta Variable - Derivados Bursátiles	Renta Fija y Op. Simultáneas	Valores públicos y privados	Derivados
Regulación	BCCh	BCCh	CMF	CMF	CMF	CMF	BCCh
Supervisión	BCCh	CMF	CMF	CMF	CMF	CMF	BCCh
Inicio de Operaciones	2004	2004	2015	2010	2010	1993	2022 (*)

(*) Se encuentra en marcha blanca desde 2019, pero tiene planificado su lanzamiento oficial para el segundo semestre de 2022.

Fuente: BCCh.

Should CCP design for emerging markets be different from those in developed markets? Can the emerging markets' CCPs not simply transplant the CCP designs from developed markets?

- We are working on a **new rule on Operational Risk** (Resilience*) for Securities Markets' entities. Our Strategic Plan 2023-2026 also includes the development of a rule of **Integral Risk Management and Risk Management for all securities markets' entities**, establishing requirements on:
 - Operational Risk
 - Cybersecurity
 - Business Continuity
 - Information Security
 - Third-party risk management.

Question a

How do you see Chile´s Financial Market Infrastructures strengths and potential contribute to the country´s future progress and economic growth?

- Infrastructures in Chile have become increasingly international
 - DCV – International Custody (Euroclear, DTCC, etc.)
 - MILA and new Integration of stock exchanges in Chile, Peru and Colombia
- In a constantly changing environment, cooperation has been vital to fostering innovation and entrepreneurship
 - ScaleX (Chilean economic development agency and Bolsa de Santiago) – startups and medium enterprises
 - AUNA – consortium (DCV/BCS/GTD)

Regulatory Challenges have evolved along with innovation and technology

From Operational Risk to Operational Resilience.

- The emergence of Decentralized Finance
- The CMF has closely monitored the implementation of:
 - DLT-based Short Sales and Securities Lending (Bolsa de Santiago).
 - Interconnection of Stock Exchanges in Chile.
 - NASDAQ – DCV Evolución. Second stage (forthcoming): DLT.
- Regulatory advancements:
 - New infrastructures, e.g., low-value payment clearinghouses
 - Proposal of Corporate Governance, Risk Management and Operational Risk regulations for FMIs.

FMI and modern technology

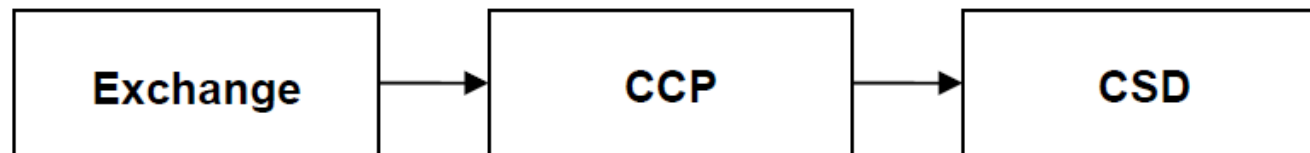
Benefits of DeFi

- Efficiency gains [Nota 1]
- Cost reduction [Nota 2]
- Benefits for Operational and Credit Risk management [Nota 3]

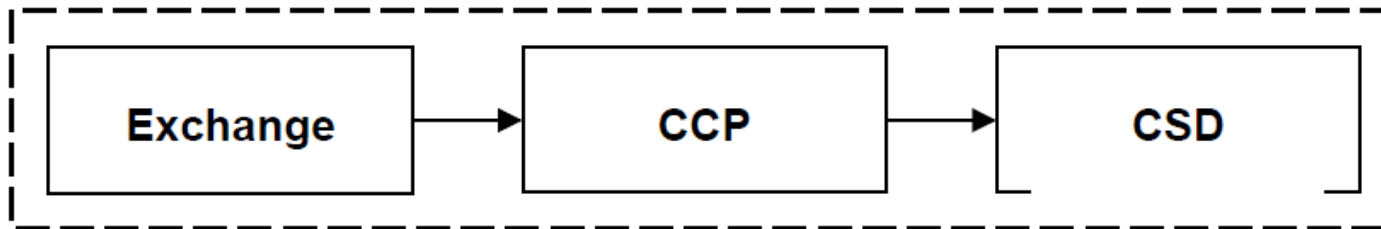
Risks of DeFi

- A potential threat? [Nota 4]
- Scalability and interoperability [Nota 5]
- Impact in liquidity and operational risk [Nota 6]

Chile



Vertical Integration



Horizontal Integration

