Financial sector accounts: The Chilean experience in their use for financial stability monitoring

Pablo García Silva  
*Member of the Board, Central Bank of Chile*

Josué Pérez Toledo  
*National Accounts Department, Central Bank of Chile*

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Introduction

• One ingredient of financial stability is the monitoring and oversight of leverage and asset holdings by different agents

• Who holds the liabilities of whom is an important element, and can be extended to derivative positions

• The international comparison is also a key benchmark for the assessment
Introduction

• In this presentation we show how the use of financial sector accounts is used in this benchmarking exercise for the case of Chile
• OECD database provides an important source for the international comparison
• However data gaps remain to make a complete assessment
• Some of these challenges are discussed
There is a significant cross country dispersion of household indebtedness, and it is persistent over time.

Source: Organisation for Economic Co-operation and Development (OECD).
Chilean households do not appear overly indebted according to this metric

Households: Debt to GDP (percent)

Source: Organisation for Economic Co-operation and Development (OECD).
Other measures of household leverage paint a similar picture.

Households: Debt to Financial Assets (percent)

Source: Organisation for Economic Co-operation and Development (OECD).
The ratio of household debt to financial assets shows more clearly the deleveraging in several advanced economies.

Source: Organisation for Economic Co-operation and Development (OECD).
Households in Chile have a significant share of their assets in reserves: a reflection of social security arrangements

Household Sector Balance Sheet 2008
(percent)

Source: Organisation for Economic Co-operation and Development (OECD).
Households in Chile have a significant share of their assets in reserves: a reflection of social security arrangements

Household Sector Balance Sheet 2013
(percent)

Source: Organisation for Economic Co-operation and Development (OECD).
The General Government has a very low level of gross debt

Source: Organisation for Economic Co-operation and Development (OECD).
Most economies have experienced an increase in government debt after the 2008-2009 crisis.

General Government: Debt to GDP (percent)

Source: Organisation for Economic Co-operation and Development (OECD).
Unlike most economies, the ratio of debt to financial assets has decreased in Chile since 2008.

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Source: Organisation for Economic Co-operation and Development (OECD).
A sovereign wealth fund holds a significant fraction of Chile’s public financial assets

General Government: Net financial assets to GDP (percent)

Source: Organisation for Economic Co-operation and Development (OECD).
Which explains the composition of the General Government’s assets

General Government Sector Balance Sheet 2008

(percent)

CHILE
UNITED STATES
JAPAN
SPAIN
GREECE
NORWAY
IRELAND
FINLAND
PORTUGAL
CANADA
ESTONIA
DENMARK
SWEDEN
HUNGARY
LUXEMBOURG
CZECH REPUBLIC
SLOVENIA
GERMANY
FRANCE
POLAND
AUSTRIA
SLOVAK REPUBLIC
BELGIUM
UNITED KINGDOM
NETHERLANDS
ITALY
ICELAND

HIGH Similarity
MEDIUM Similarity
LOW Similarity

Currency and deposits

Securities other than shares

Loans

Shares and other equity

Other accounts receivable

Source: Organisation for Economic Co-operation and Development (OECD).
Which explains the composition of the General Government’s assets

General Government Sector Balance Sheet 2013
(percent)

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<tr>
<th>Country</th>
<th>Currency and deposits</th>
<th>Securities other than shares</th>
<th>Loans</th>
<th>Shares and other equity</th>
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Source: Organisation for Economic Co-operation and Development (OECD).
Most economies have seen a deterioration of their net financial asset position

General Government: Net financial assets to GDP (percent)

Source: Organisation for Economic Co-operation and Development (OECD).
The loan to deposit ratio is usually a determinant of funding condition for the banking system.

Source: Organisation for Economic Co-operation and Development (OECD).
The Chilean system has a relatively high, and persistent, loan to deposit ratio due to structural factors.

Source: Organisation for Economic Co-operation and Development (OECD).
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Source: Organisation for Economic Co-operation and Development (OECD).
Non Financial corporations represent a significant share of total liabilities

Chile: Sectoral Balance Sheets 2008
(percent of GDP)

Source: Organisation for Economic Co-operation and Development (OECD).
Non Financial corporations represent a significant share of total liabilities

Chile: Sectoral Balance Sheets 2013
(percent of GDP)

Source: Organisation for Economic Co-operation and Development (OECD).
The structure of the NFC sector has remained broadly stable

Chile: Non-financial Corporations Balance Sheet (percent)

Source: Organisation for Economic Co-operation and Development (OECD).
NFC liabilities have an important component of external debt. FSA accounts could have coverage on this issue.

Derivative positions are also significant, both in financial and non-financial corporations

Source: Organisation for Economic Co-operation and Development (OECD).
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Source: Organisation for Economic Co-operation and Development (OECD).
Gross positions are much larger than net positions, particularly in Eurozone economies

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Non Banks Derivatives – Gross position (2013) (*)
(percent)

(*) Non banks include: Other financial intermediaries, financial auxiliaries, insurance corporation and pension funds.
Source: Organisation for Economic Co-operation and Development (OECD).
Gross positions are much larger than net positions, particularly in Eurozone economies

Net derivatives position Bank, Non Banks and Non-Financial Corporations (NFC) to GDP (2013) (*)

(*) Non banks include: Other financial intermediaries, financial auxiliaries, insurance corporation and pension funds.

Source: Organisation for Economic Co-operation and Development (OECD).
It is not evident how these positions are structured, in particular between agents and across borders.

Net derivatives position Bank and Non Banks to GDP (2013) (*)

(percent)

(* Non banks include: Other financial intermediaries, financial auxiliaries, insurance corporation and pension funds.
Source: Organisation for Economic Co-operation and Development (OECD).
This is an issue that the BCCh monitors and it would be useful to have cross border comparability.

Net forex position (Spot and NDF) and Exchange Rate
(US$ billions; CLP-US$)
This is an issue that the BCCh monitors and it would be useful to have cross border comparability.

**Carry-to-Risk ratio and non-resident NDF position**

(US$ billions; ratio)

Source: Central Bank of Chile
Future Challenges

• Timely information on who-to-whom holdings would improve the quality of assessments for financial stability would complement gross and net measures in the sectoral financial accounts

• Increased granularity in derivative exposures also would help fine-tune the analysis of, for instance, foreign exchange exposures

• Better measuring the accounts of non-listed and non-regulated NFC remains a key factor
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