

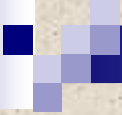
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The World Bank
Financial and Private Sector Development

Mortgage Covered Bonds Benefits and Issues in Emerging Economies

Case Study: Chile

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Covered Bonds in emerging economies: an emerging trend?

- A tool only well known in 2 regions until recently:
 - Latin America: Chile, Argentina, Colombia, Paraguay etc.
 - Eastern Europe
- Frequent discrepancy between the existence of a legal framework and market practice (Ex.: Argentina, Paraguay, Lithuania)
- But several countries have been looking at CBs: law passed in Turkey and Egypt (broad framework for mortgage related securities), being prepared in Mexico
- New reasons for interest may be found in the current crisis - following the US example

CBs benefits

- A double deck security mechanism
- Quality norms of the underlying loans
- Quality control arrangements
- Simple instrument: standardized debt instrument (vs securitization standardized loans approach) →
 - Easy valuation
 - Higher liquidity
 - Suited to capital market actors still in a learning curve

All these features: of special value in the current crisis

Impediments and Challenges

- Lesser ALM flexibility than securitization- except for Dk or Chile models
- Adjustment of bankruptcy law generally needed
- Small volumes & diseconomies of scale
- Market acceptance (little familiarity among investors)
- A growing issue: should CB issuance by commercial banks be limited?
 - Sometime a strong legal rationale: priority of depositors in case of bankruptcy (Australia, Pakistan) explicitly stated by law
 - Economic rationale disputable:
 - CBs comfort banks' overall soundness
 - Securitization has the same impact (assets out of reach of depositors)
 - Many other instances of secured debt (repos, derivatives collaterals, payment systems, etc.)
 - CB funded assets should require less capital buffer (highly protected creditors) → More capital economically available for depositors 4

World Bank Approach

- Involvement in CBs framework in Poland, Egypt, Turkey, Mexico
- A variation of CBs often seems more appropriate than the straightforward instrument: mortgage liquidity facilities
 - Pooling of funding requirements , scale effect, more suited to underdeveloped capital markets
 - As simple as CBs, easier to understand (no legal change required)
 - More flexibility offered to users (short term support, tap issues...)
 - 3 Credit enhancement layers – additional level through cooperative structure or government involvement, at least in a ramp up phase
 - Catalytic impact on primary lending
- Ex.: Cagamas (Malaysia), JMRC (Jordan), SRH (Algeria), EMRC (Egypt), PMHC (Wets Bank & Gaza)

On going projects in several countries/regions



Mortgage covered Bonds in Chile

- 16.5 millions inhabitants
- GDP per capita: 10,000 \$ (2007)
- Fastest growing LAC economy in the last 15 years
- Poverty rate: 18%
- Gini index: 54.9
- Residential mortgage loans outstanding (end 07): US\$ 25 Billion, 15.2% GDP

Chilean Covered Bonds - Genesis

- 1855: Establishing of a mortgage bank framework (German, French influence)
 - Letras de Credito Hipotecario = original Pfandbrief /lettre de gage model
 - Mostly for agriculture
 - Creation of a Government sponsored National mortgage Bank
 - Legal provision for private mortgage banks and mortgage sections of commercial banks
- 1930s: financial crisis → disappearance of long term instruments, incl. LCH
- 1960: Development of a Savings & Loans system (SINAPS)
 - Based on some privileges (in particular monopoly of indexed savings account)
 - quickly the largest provider of housing finance in the private sector
- 1976-77: collapse of the S&L
 - Fall of long term mortgage lending due to hyper inflation, reorientation as RE developers, sudden deregulation of savings accounts
- 1977: Reactivation of LCH, with indexation
- 1978- 1980: The Central Bank acts as the main LCH investor
- 1980: Creation of fully funded pension funds (not allowed to invest in stocks until 1985)

Chilean LCH – Main features

- Legal & structural characteristics:
 - LTV < 75%
 - DTI < 25% (on going basis) for properties up to +/- US\$ 120,000
 - Loan granted through the delivery of LCH, to be sold on the market → pipeline risk born by the borrower (but possible subsidy up to \$3000, and advance price setting allowed since 2002)
 - Multiple series (allow for interest rate fluctuations during the origination year)
 - Pass through securities (in particular prepayments)
- Protection against insolvency
 - Segregation of residential and “general purpose” LCH
 - In case of bankruptcy, portfolio to be sold and debt obligations transferred
 - If price < 90% face value, bondholders may elect to be part of the general bankruptcy estate
- Market characteristics
 - Up to 20 years very early, 30 or even 40 years available now
 - Fixed real rate (denominated in Unidad de Fomento-UF), but floating rate or Peso possible

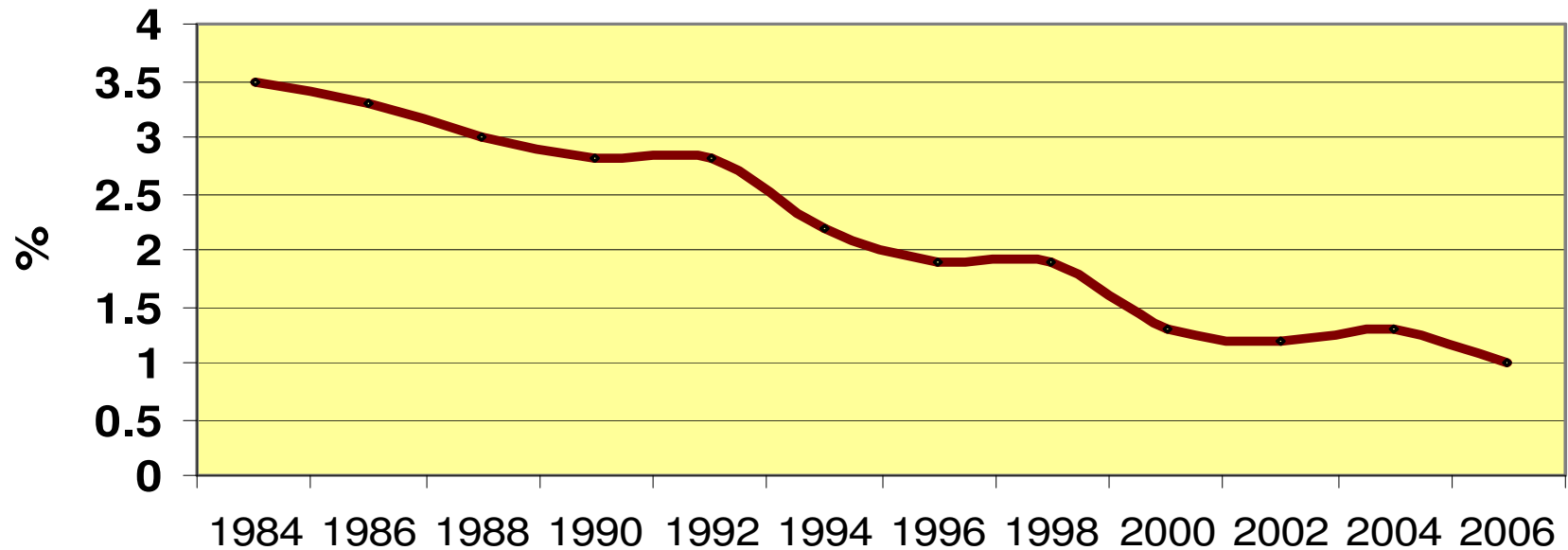
LCH Market Development :

Efficiency progress and competitive pressure →

Decline of intermediation cost (banking commissions added to bond coupons, in real terms)

Banking Commission on LCH

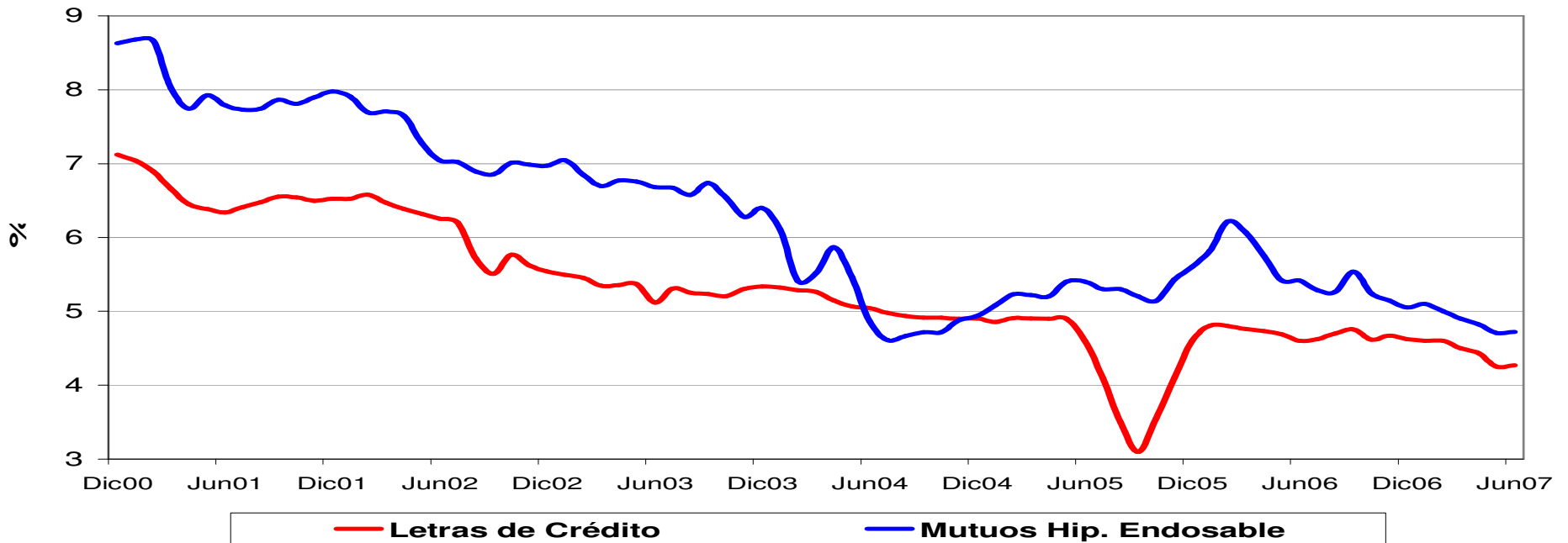
(source: SBIF, Martabid)



LCH Market Development: Decrease of Interest Rates

- Steady decline (real terms)
- Wave of prepayments since 2004 (option paid for, but not exercised before)
- Surge of refinancing

Tasa de Interés Letras de Crédito y Mutuo Hipotecario Endosable para Vivienda
(promedio anual, créditos 12 a 20 años)



Strong growth of mortgages on own resources

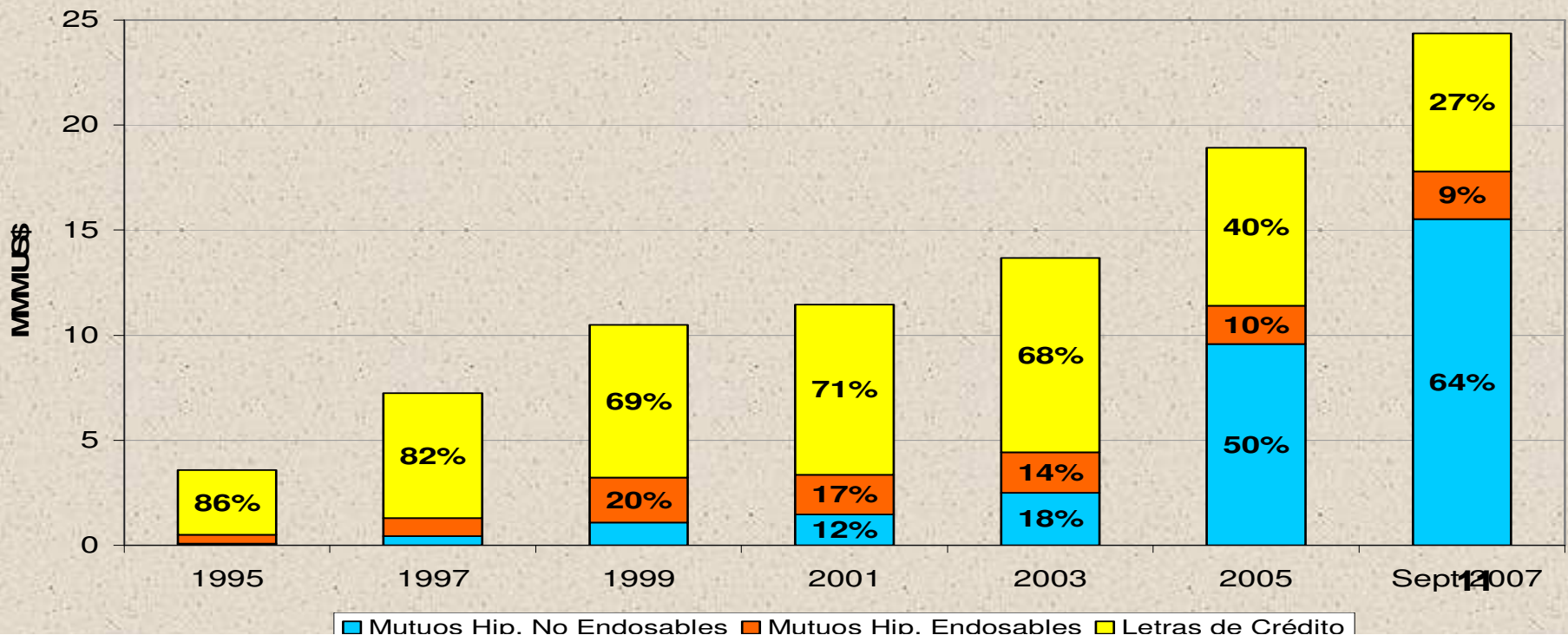
(Mutuos Hipotecarios Non Endosables)

- More flexible features, can be used for refinancing purposes
- Cannot be funded by LCH
- Development of hedging instruments
- Diversification of institutional portfolios

Source: BancoEstado:

Composición del Financiamiento Habitacional

(evolución por tipo de producto, en MMM US\$ de septiembre 2007)



Chilean Covered Bond System - Assessment

- Despite technical limitations...
 - Cash flow guarantee by the lender, more than lender's credit enhancement
 - As a consequence: limited rating upgrade (+ 1 notch at best, 1/2 cases)
- ...Huge impact on the housing finance market development
 - Exceptional affordability boost
 - Without jeopardizing financial stability:
 - No hedging instruments available before recently
 - Investors' capital protected...
 - Without jeopardizing borrowers repayment capacity
- Key role of environment factors
 - synchronization of reforms (secured instrument/indexation/ pension funds)
 - good macro-economic policy (floating FX rate, fall of inflation, real wage increase)
 - Strong and competitive banking system (after the 1982-1986 crisis- 16 institutions or 20% of the system, wound down for a cost of 10.6% GDP)
- Food for thoughts re. the deposits / capital market funding combination