

Pablo García, Central Bank of Chile

The changing face of housing finance in Chile



The views expressed here do not necessarily represent those of the Central Bank or its Board.



### Main trends

- Resilience of supply and demand in spite of changing macroeconomic conditions.
- High (but not torrid) mortgage growth in the last three years.
- Steady increase in share of GDP, from 7% in 1995 up to 18% in 2007.
- Prepayment boom of traditional instruments and development of new types of mortgage loans, entry of new participants.
- Low rates of default.



Mortgage credit growth has fluctuated between 5% and 25% in real terms over varying macroeconomic and financial conditions.







### Letras hipotecarias

- The traditional product: Mortgage bill ("letras").
  - A decades-old product born from the financial liberalization of the mid seventies
  - Standardized contract regulated by the Central Bank
  - fixed interest rate,
  - expressed in indexed units (UF), and
  - ceiling on loan-to-value ratio (75%) and dividend to income (25% in case of properties of <3000 UF - USD100k).</li>
  - Originator retains credit risk but transfers interest rate risk to investors
  - High traditional demand from institutional investors to match liabilities (pension funds and insurance companies)
  - Accepted as collateral by the Central Bank for liquidity provision and monetary policy implementation

Mortgage rates fell sharply and to historic lows in 2003-2004... February 2008

% ; Real terms 10 9 8 7 6 5 4 Dec-00 Dec-03 Dec-05 Dec-06 Dec-01 Dec-02 Dec-04

Low global interest rates

Monetary policy easing following sluggish growth in 2001-2002.

Continued fiscal and quasi-fiscal consolidation led to public debt reduction



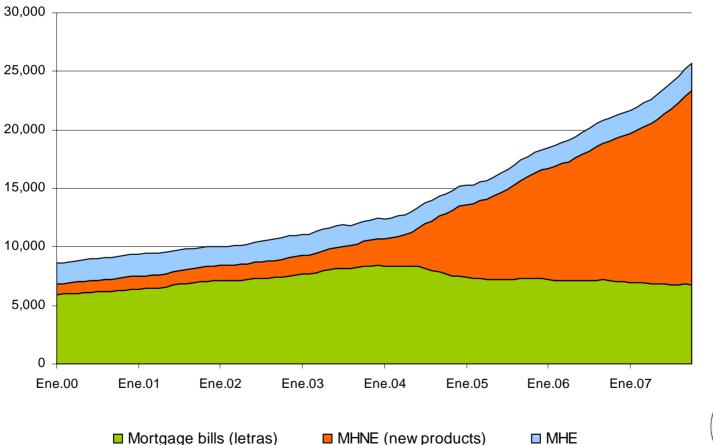
# ...leading to a wave of prepayments of mortgage bills ("letras") in 2005, affecting institutional investors.

Prepayment of mortgage bills (1) (percent of initial stock) Life insurance companies 12 Pension funds (2) Mutual funds (3) 10 8 6 4 2 0 03 Ш 05 Ш Ш IV 04 IV Ш (1) Quarterly prepayments over the initial stock of mortgage bills in each period.

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### Source: Financial Stability Report 2005.2

A significant shift of mortgage products towards "new" products and away from *letras* since 2002 (in USD mill, CLP at \$500).



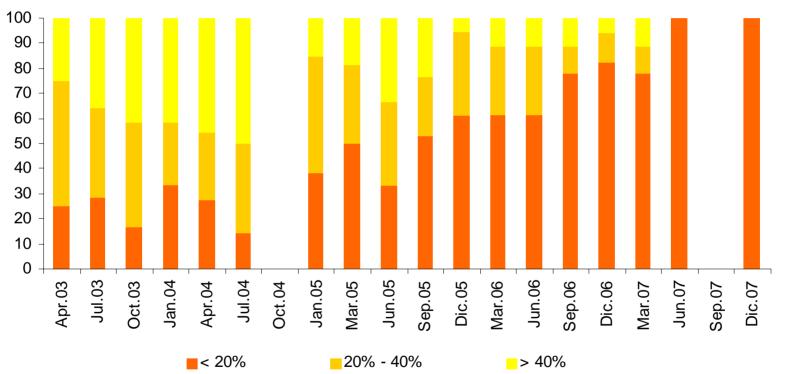




### New products

- Intense attractiveness of Mutuos hipotecarios no endosables.
  - Conditions freely determined between the parties regarding:
  - Loan to value (up to 100%)
  - Insurance
  - Fees
  - Periods of grace
  - Flexible interest and possibility of interest ceilings
  - Nominal as well as indexed
  - Kept on-balance by banks
  - Funded through longer dated deposits and subordinated bonds: participation of AFPs and other institutionals.

A significant share of the existing stock of mortgage loans was refinanced in 2003-2005



Shows the breakdown responses from loan officers to the question of which share of existing mortgages was being refinanced at each period. Source: Quarterly survey of banks credit conditions, Central Bank of Chile.



More recently, the shift towards variable rate mortgages has eased...

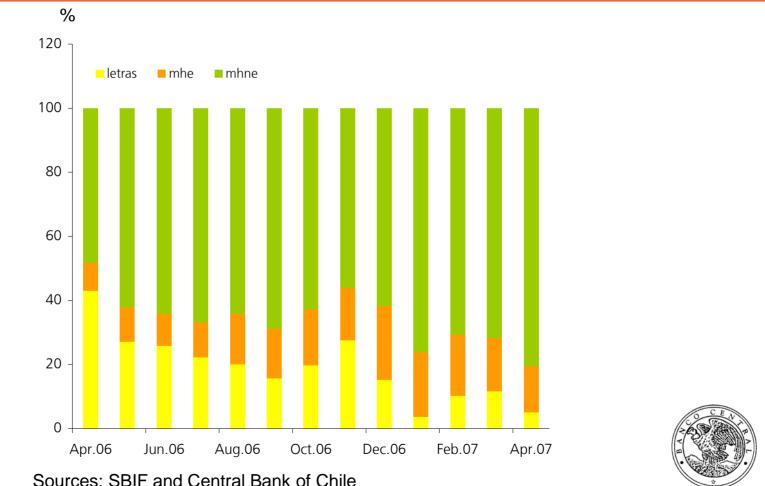
#### percentage of total credits 120 variable or mixed rate fixed rate 100 80 60 40 20 0 Jun.06 Aug.06 Oct.06 Dec.06 Feb.07 Apr.06 Apr.07

Currently stands slightly over 10% of the flow of new mortgages, compared to close to 1/3 in early 2006 and likely higher in 2005.



#### Sources: SBIF and Central Bank of Chile

But the decline in the attractiveness of bills ("letras") seems here to stay.

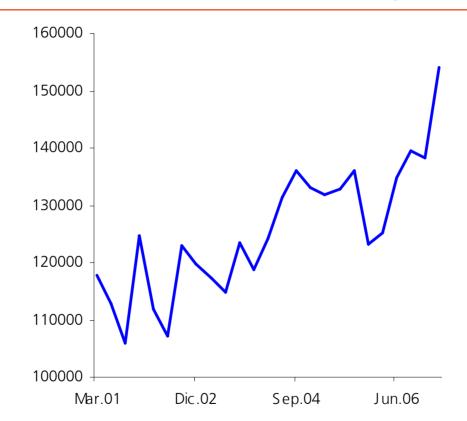




## Household debt and housing prices

- Household debt has been systematically growing faster than disposable income since 1999.
- The ratio of total household debt to disposable income reached 60% in 2007.
- House prices remained constant since June 2004, but started to increase steadily since March 2006.

### House prices have increased 4% annually in this decade February 2008

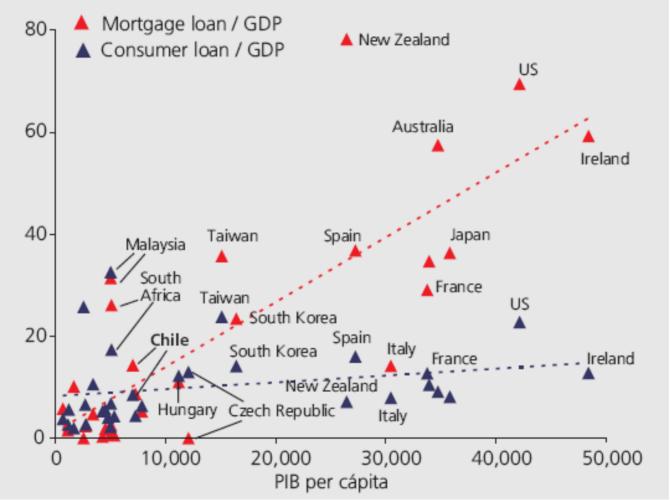


Source: Central Bank of Chile, measured in constant USD dollars and adjusted for local inflation. Indicator constructed from the median of transactions recorded in Santiago. See Financial Stability Report 2005.2



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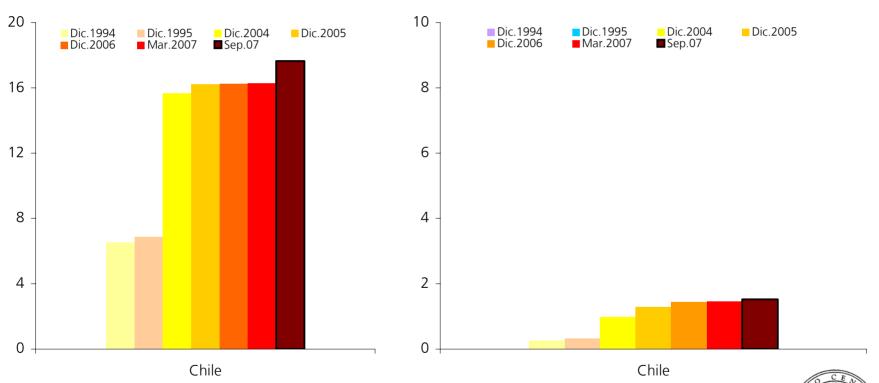
There is scope for further growth in mortgage credit as the economy grows, but not so much with consumer credit.



Source: Financial Stability Report 2006.1

### Mortgage Debt

As a percentage of GDP







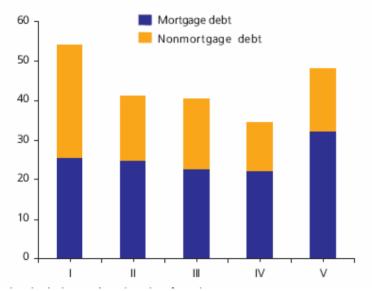
Borrowers' considerations

- Half of the total loans are below USD 15.000, but they represent only 11% of the total *mortgage* debt issued by banks, from 18% in 2004.
- 24% of total loans between USD 33.000 and USD 100.000 represent 44% of total amount.

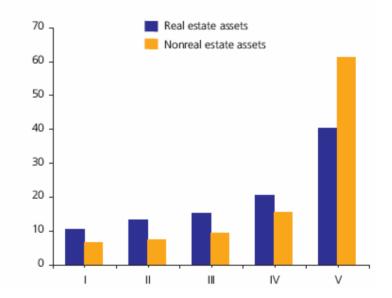


### Although debt to income ratios is somewhat evenly distributed across income quintiles, real estate assets are highly concentrated.

Debt-to-income ratio, by household income quintile (households with debt; percent)



Assets by household income quintile (percent of corresponding asset)



Source: Financial Stability Report 2006.2



## Challenges ahead – the medium run

- Changes in pension fund regulations have significantly increased the scope for their investments abroad
- Some limit should result for local banks tapping traditional wholesale sources of funding for on-balance sheet mortgage positions. Caveats:
  - Capitalization processes in several banks over 2007 went smoothly
  - New regulations in 2007 authorize the issuance of structured notes to institutional investors
  - Sharp growth of sight deposits and retail time deposits

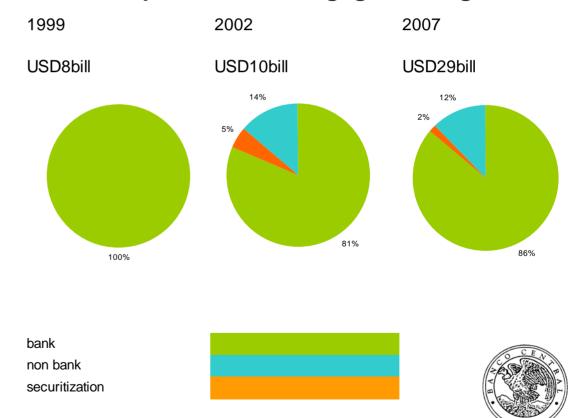


### Banks remain dominant, but competition is here to stay

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•Competition under shifting market conditions led to rapid innovation

A cultural shift has occurred on both sides of the market, driven by the prepayment/reprogramming boom in 2004-2005



Composition of mortgage lending

## Challenges ahead – the medium run

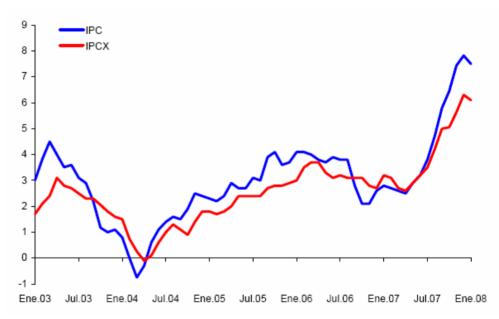
- A larger role of capital markets could be expected going forward:
  - As off today: Central Bank constrains banks selling protection through credit derivatives, structure of *letras* remains rigid
  - Improvements in market infraestructure in securities settlement and payment through legal initiatives aiming at the establishment of central counterparties and/or clearing houses
  - Although capital gains and withholding taxes have been lifted for non resident investors in equities, they remain applicable to fixed income investors





### Challenges ahead – the short run

- Inflation has risen well above the Central Bank target of 3% +/- 1 due to supply shocks
- Increase in policy rates initiated in mid 2007: monetary policy rate stands at 6.25%
- Further hikes cannot be ruled out
- Long term inflation prospects are benign
- Moderate economic growth and the dampening effect of peso appreciation limits upside risks to inflation
- Higher inflation has kept yields on indexed instruments (including mortgage instruments) in low levels, similar to the ones observed a year ago.





## Challenges ahead – the short run

- Global worst case scenarios would in any case affect the economy:
  - Growth reached 2-4% in 2001-2003, export prices plummeted
- Financial resilience has however improved
  - Fiscal surplus in 2007 reached 8,7% of GDP, current account surplus at 3,8% of GDP.
  - Ongoing process of capitalization of the Central Bank
  - Consolidated government and country as a whole post positive net foreign assets
- Sound supervision and regulation of financial intermediaries



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