### Housing Finance, Credit and Business Cycle in Chile



Carlos J. Garcia

**Professor in Economics** 

ILADES- Georgetown University and Universidad Alberto Hurtado

June 7, 2013

### Introduction

#### Stylized facts of the Chilean economy

- Institutions.
- Results .
- The Great recession 2008-2009 and the Chilean economy.
- Forecast.

#### Housing market

- Overview: The role of the private sector and the state in making houses.
- Demand and supply.
- Costs of building.
- Real prices: a bubble in the house sector?.

### Introduction

- Housing finance, credit and business cycle experience in Chile.
  - An Overview of Credit's Role in the Financing of Housing.
    - The role of the state in financing houses.
    - The role of the market in financing houses.
  - Housing finance, credit and business cycles.
    - Evidence
    - Econometric test

#### Conclusions

The key element in the Chilean experience: appropriate macro prudential policies and supervision.

- Economic institutions work:
  - Monetary Policy: Inflation Targeting Framework Central Bank of Chile focuses on keeping the average and expected CPI variation at around 3% annually.
  - Fiscal Policy: Fiscal Rule based on cyclically adjusted government revenues, i.e., potential GDP and the long-run price of copper.

- Economic institutions work:
  - Exchange Rate Policy: a floating exchange rate regime whereby the *Central Bank of Chile* intervenes only under exceptional circumstances
  - Bank regulation: There is a Superintendency of Banks and Financial Institutions that is an autonomous institution, with full legal capacity to regulate the banking industry.

- Economic institutions work:
  - Competition law and policy in Chile:
    - The Fiscalía Nacional Económica is an independent government competition agency whose main role is to detect, investigate and bring cases against antitrust violations.
    - The *Tribunal de Defensa de la Libre Competencia* is the independent judicial body with powers to decide in matters of antitrust law.

- Economic institutions work:
  - Pension system: Chile has a private administered pension fund system (AFP) since more than three decades.
  - Trade policies: open trade policy with a single tariff rate of 6% with a few exceptions. Moreover, Chile has many Regional Trade Agreements of which it has 21 in force with 57 trading partners.

- Economic institutions work:
  - Labor policies: Chile has an unemployment insurance through the use of savings accounts, managed by privates firms.
  - Poverty policy reduction: active education policies, health programs and cash transfers.

- Results :
  - Chile's "sound economic policies" maintained consistently since the 1980s, have contributed to steady economic growth in Chile and have more than halved poverty rates
  - The economy of <u>Chile</u> is ranked as an upper-middle income economy by the <u>World Bank</u>, and is one of <u>South America</u>'s most stable and prosperous nations, leading Latin American nations in <u>human</u> <u>development</u>, competitiveness, income per capita, globalization, economic freedom, and low perception of corruption.

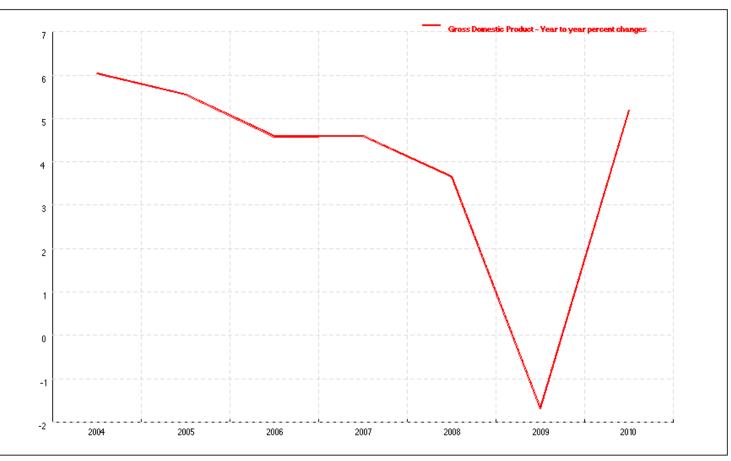
#### Results :

- So, GDP per capita: Chile has the highest rate in South America: US\$ 19.000, population of 16 millions of inhabitants, unemployment rate around 6% in 2013, saving rate of 22%, poverty has been reduced from 40% to 5% in the last twenty years. Only 5.3% of the population lives on less than US \$2 a day.
- The Ease of doing business index created by the World Bank lists Chile as 37th in the world that encompasses better, usually simpler, regulations for businesses and stronger protections of property rights.

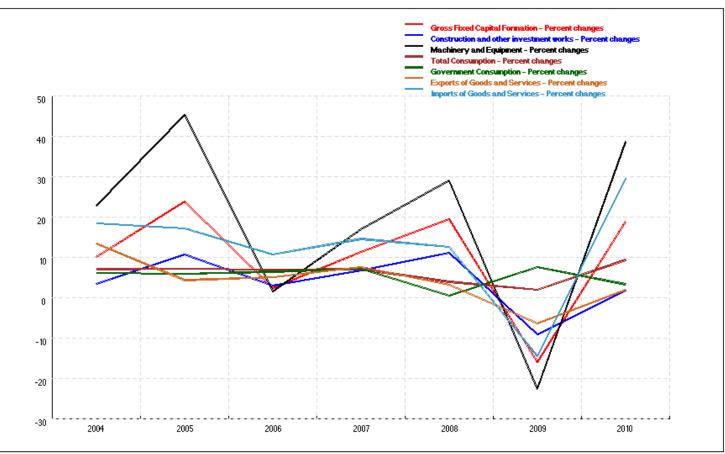
- Results :
  - Moreover, the <u>Global Competitiveness Report</u> for 2009–2010 ranks Chile as being the 30th most competitive country in the world and the first in Latin America, well above from Brazil (56th), Mexico (60th) and Argentina which ranks 85th
  - According to the <u>Heritage Foundation</u> <u>Index of</u> <u>Economic Freedom</u> in 2012, Chile has the strongest private property rights in Latin America, scoring 90 on a scale of 100

- Results :
  - <u>Chile maintains the best credit rating (S&P A+) in</u> <u>Latin America</u>
  - In May 2010 Chile became the first South American country to join the <u>OECD</u>.

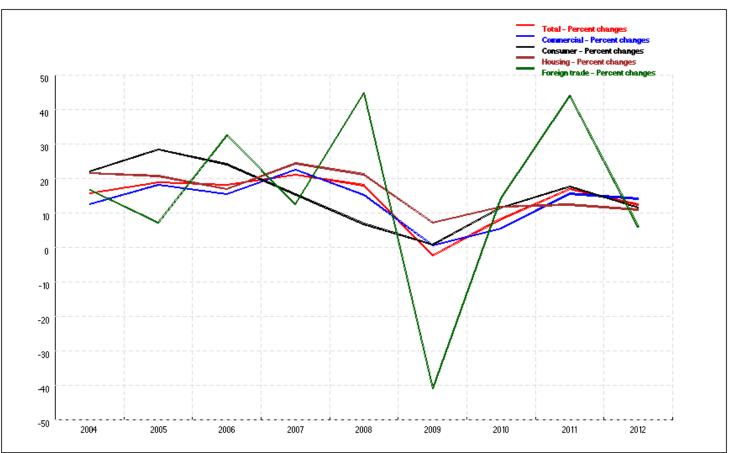
The Great Recession 2008 –2009 and the Chilean economy: economic growth



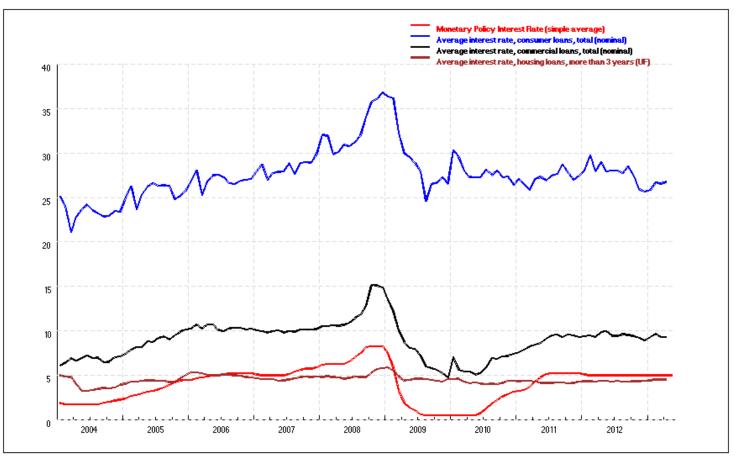
The Great Recession 2008 –2009 and the Chilean economy: Components of the GDP



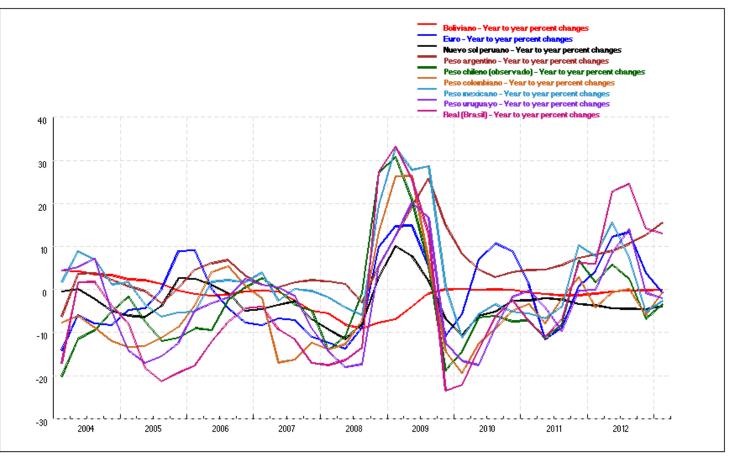
The Great Recession 2008 –2009 and the Chilean economy: Private Credit



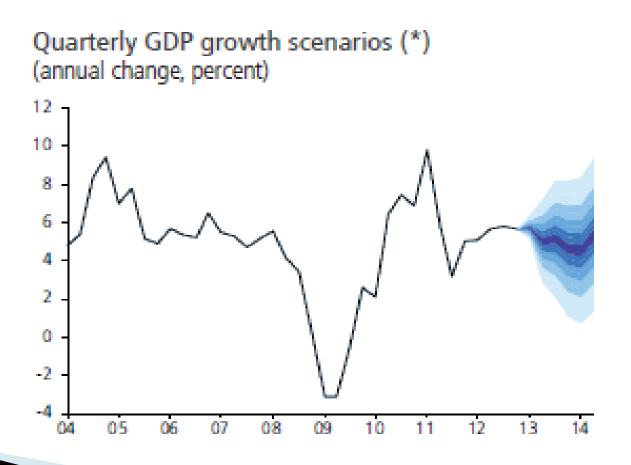
The Great Recession 2008 –2009 and the Chilean economy: interest Rates



The Great Recession 2008 –2009 and the Chilean economy: Exchange Rate



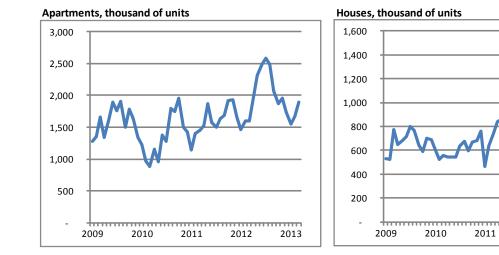
#### Forecast.



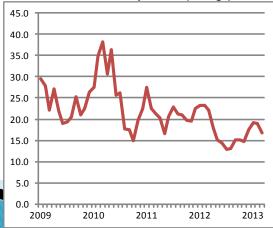
#### Overview: a market with excess of demand...

	Construction Investment								
					Forecast				Forecast
	2009	2010	2011	2012 <sup>e</sup>	2013	2010	2011	2012 <sup>e</sup>	2013 e
SECTOR	Millons of dollar					Anual change in %			
Housing	6504	7344	8924	9579	9978.5	12.9	21.5	7.3	4.2
Public	1449	1836	2206	2444	2609.3	26.7	20.2	10.8	6.8
Private	5055	5508	6718	7135	7369.2	9.0	22.0	6.2	3.3
Fiscal Subsidies	632	1256	1498	1591	1640.9	98.9	19.2	6.2	3.2
Bank Credit	4424	4252	5221	5544	5728.3	-3.9	22.8	6.2	3.3
INFRAESTRUCTURE	12713	14325	17681	20143	21971.1	12.7	23.4	13.9	9.1
Public	4624	4394	5596	6234	6797.0	-5.0	27.3	11.4	9.0
Public	3682	3471	4533	4976	5294.5	-5.7	30.6	9.8	6.4
Public Enterprises	725	426	367	536	769.8	-41.3	-13.7	46.0	43.6
infrastructure conssesions	218	498	696	722	732.7	128.7	39.8	3.7	1.5
Productive	8089	9931	12085	13909	15174.1	22.8	21.7	15.1	9.1
Public Enterprises	434	421	685	862	1079.6	-3.1	62.7	25.9	25.3
Private	7654	9510	11400	13047	14094.5	24.2	19.9	14.4	8.0
Construction Investment	56202	63172	77610	86720	93239.3	12.4	22.9	11.7	7.5

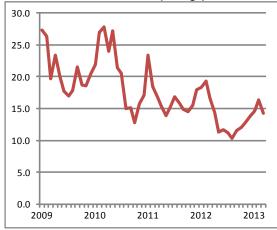
 Demand: increasing demand for new Houses and Apartments, Santiago Capital City.









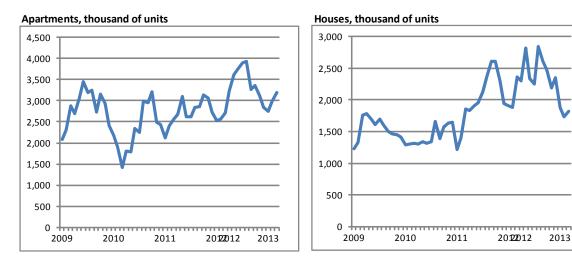


. . . . . . . . . . . . .

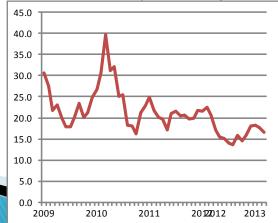
2013

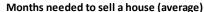
2012

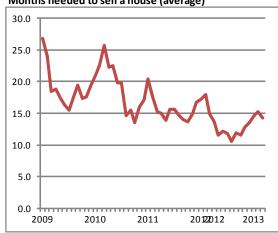
Demand: increasing demand for new Houses and Apartments at the country level.



Months needed to sell an apartment (average)

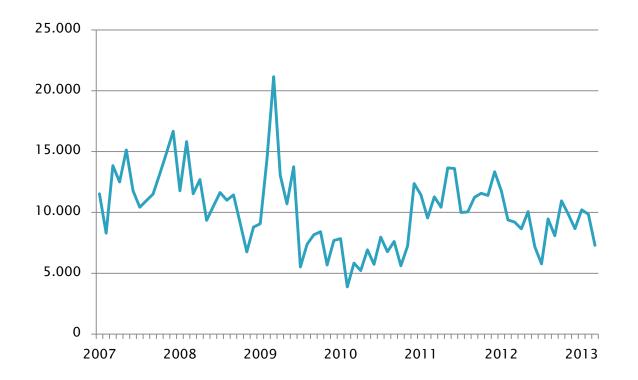




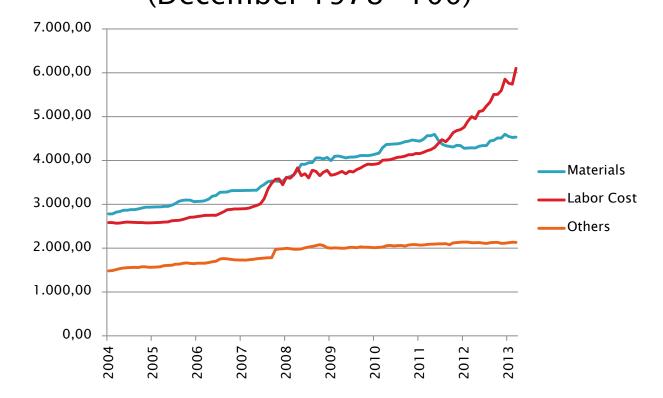


2013

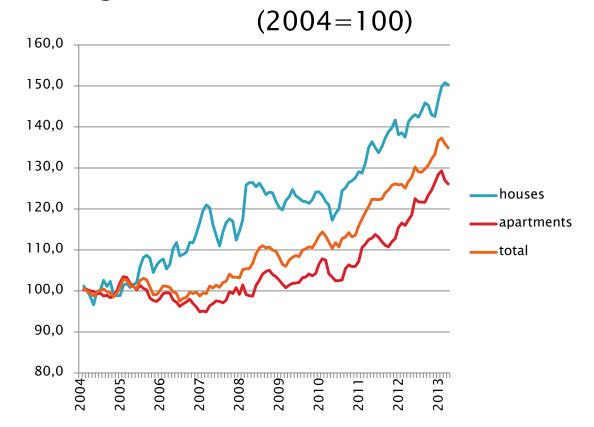
Supply : Steady number of approved new houses and apartments at the country level.



### Housing market Supply : increasing cost of building (December 1978=100)



Prices in real terms: Bubble in house sector? Or economic growth?.



### Housing finance, credit and business cycle

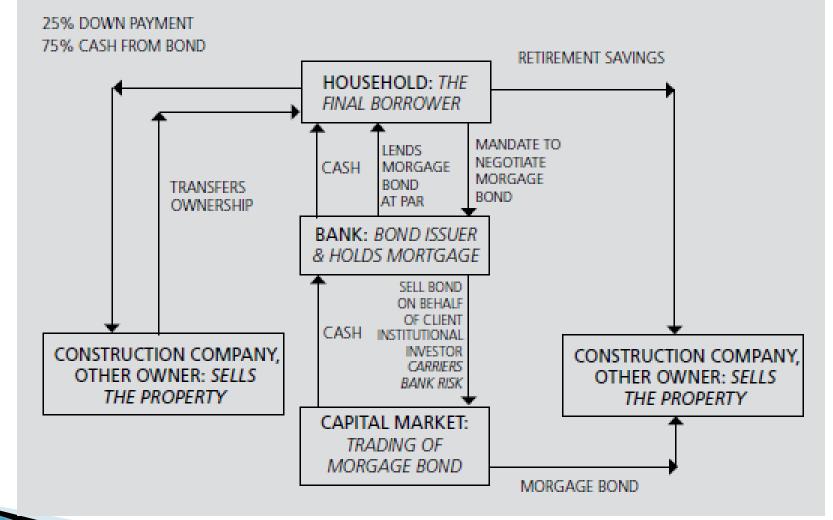
- An Overview of Credit's Role in the Financing of Housing
- The government:
  - Government housing policy actions are focused on improving the social protection net and its associated programs.
  - For example, government subsidies for homes purchased by Lower to Middle Income families year after year.
  - The Chilean experience shows that it is necessary to be realistic and accept that the poorest and most vulnerable segments of the population normally cannot afford long-term residential mortgages.
  - High Income families and most Middle income families must go to the market for the funds for purchasing a house or an apartment.

### Housing finance, credit and business cycle

- An Overview of Credit's Role in the Financing of Housing
- Market:

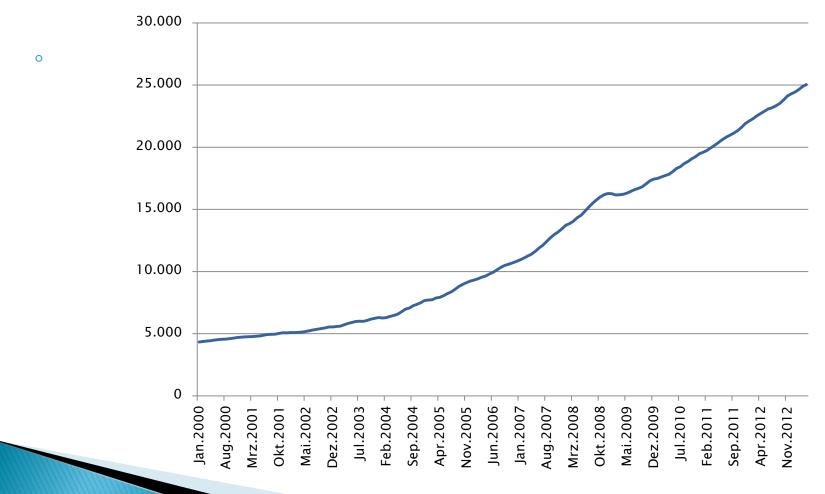
- Chile has a robust domestic long-term credit market supported by a dynamic capital market, specially private banks.
- Banks have a constant and robust stream of financial instruments supplied by residential mortgage originators.
- Nevertheless, family savings are an important contribution to the typical housing finance package for all income groups.
- Family savings almost always finance a portion of the down payment on a home, which in the case of Lower to Middle Income seeking a mortgage can be as high as 25 percent of the price of the dwelling.

### Housing finance, credit and business cycle An Overview of Credit's Role in the Financing of Housing



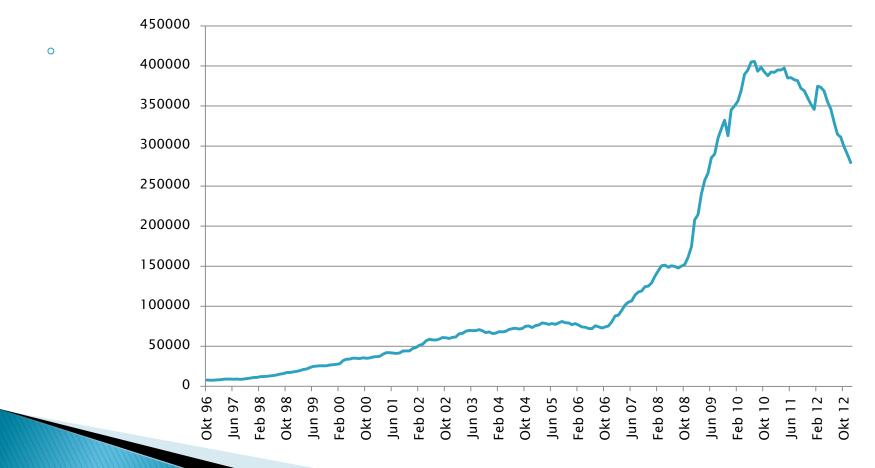
### Housing finance, credit and business cycle Credit and business cycle

 Is there an appropriate control to avoid excess of credit risk? Credit for housing (*thousand million of pesos*):



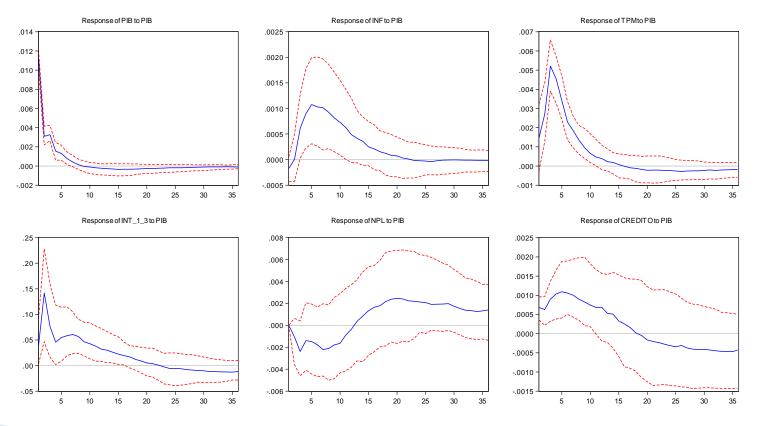
### Housing finance, credit and business cycle

- Credit and business cycle
  - Is there an appropriate control to avoid excess of credit risk? Non Performing Loans in housing sector (*thousand million of pesos*)



### Housing finance, credit and business cycle

 Econometric test: a positive GDP causes an increase in the credit for housing sector but does not cause an increases in the nonperforming loans to this sector after the shock vanished.



- In the case of Chile, there is significant agreement in that the regulatory and supervisory framework in place has made a positive contribution to financial stability over the course of the past 25 years.
- The main crisis episodes (i.e., the Asian crisis and the global financial crisis) have been overcome with no major setbacks.

- Authorities in Chile pay attention to certain elements that frequently characterize their financial systems: dollarization, currency mismatches in financial intermediaries and their corporate clients, foreign dependency for the funding of banks and firms, and the presence of foreign bank subsidiaries with a high stake in the domestic market.
- The Central Bank of Chile has an active role through the control of the interest rate to avoid an excess of optimism in credit markets.

- There are rules that allow raising the capital requirements to larger banks from 8% to 14%.
- There is also a long-standing tradition in the application of liquidity and currency matching rules.
- In respect to the presence of foreign banks, there are rules that reduce the probability of contagion from the parent company to the subsidiary.

- Chile has implemented also countercyclical instruments, including capital buffers like the ones recommended by Basel III, contingent convertible bonds (CoCo bonds) and dynamic provisions.
- In Chile, the bank supervisor made important contributions in the past to reduce systemic risk.

- For example, in the 1990s, it enacted regulations that required setting provisions for consumer credits taking into account the payment history of the customer not only in the institution involved but also in the banking system at large.
- In the early 2000s it set up guidelines telling banks to consider in their risk assessments and provision policies their customers' currency mismatches.

### **Questions?**

#### THANK YOU VERY MUCH FOR YOUR ATTENTION!

Carlos J. Garcia Professor in Economics ILADES- Georgetown University and Universidad Alberto Hurtado