



**IFC Workshop on Financial Inclusion Indicators**  
**Co-hosted by Bank Negara Malaysia**  
**5 – 6 Nov 2012, Sasana Kijang, Kuala Lumpur**

**Measuring the evolution of monetary and financial services in Portugal<sup>1</sup>**

João Cadete de Matos, Bank of Portugal

---

<sup>1</sup> This presentation was prepared for the workshop. The views expressed are those of the author and do not necessarily reflect the views of the BIS or the central banks and other institutions represented at the workshop.

---

Irving Fisher Committee on Central Bank Statistics / Bank Negara Malaysia

## Workshop on Financial Inclusion Indicators

Sasana Kijang, Kuala Lumpur, 5-6 November 2012

# Measuring the Evolution of Monetary and Financial Services in Portugal



*Banco de Portugal*

EUROSYSTEM

**João Cadete de Matos**  
*Director, Statistics Department,  
Banco de Portugal*



## The *Banco de Portugal*

- Provides for the **stability of the national financial system**, performing for the purpose the function of lender of last resort
- Carries out the **prudential supervision of credit institutions and financial companies**
- Is responsible for supervising the conduct of institutions in their relations with customers – the so-called **banking conduct supervision** – to ensure that institutions act with due diligence, neutrality, loyalty, discretion and respect in their relations with customers, aimed at promoting a careful assessment of their commitments and the risks they may incur
- Regulates, oversees and promotes the smooth operation of **payment systems**, namely within the scope of its participation in the ESCB
- Provides **services to financial institutions** and the public at large via e.g. the *Central Credit Register (CCR)* and the *Central Balance Sheet Database (CBSD)*
- Compiles, analyses and disseminates **monetary, financial, exchange and balance of payments statistics**: instrumental to decision-making; influential to the financial services activities in the economy



## Central Credit Register

- The Central credit register (CCR) is a database managed by Banco de Portugal that compiles information supplied by reporting institutions (institutions that grant loans) concerning the credit liabilities of their clients (individuals and organizations)
- The main purpose of the CCR is to support credit institutions when evaluating the risk of granting credit to the economic agents, allowing them to obtain information on the aggregated indebtedness of their clients or any individual or organization asking for a loan.



## Hamurabi code (1700 BC)

**280 clauses**

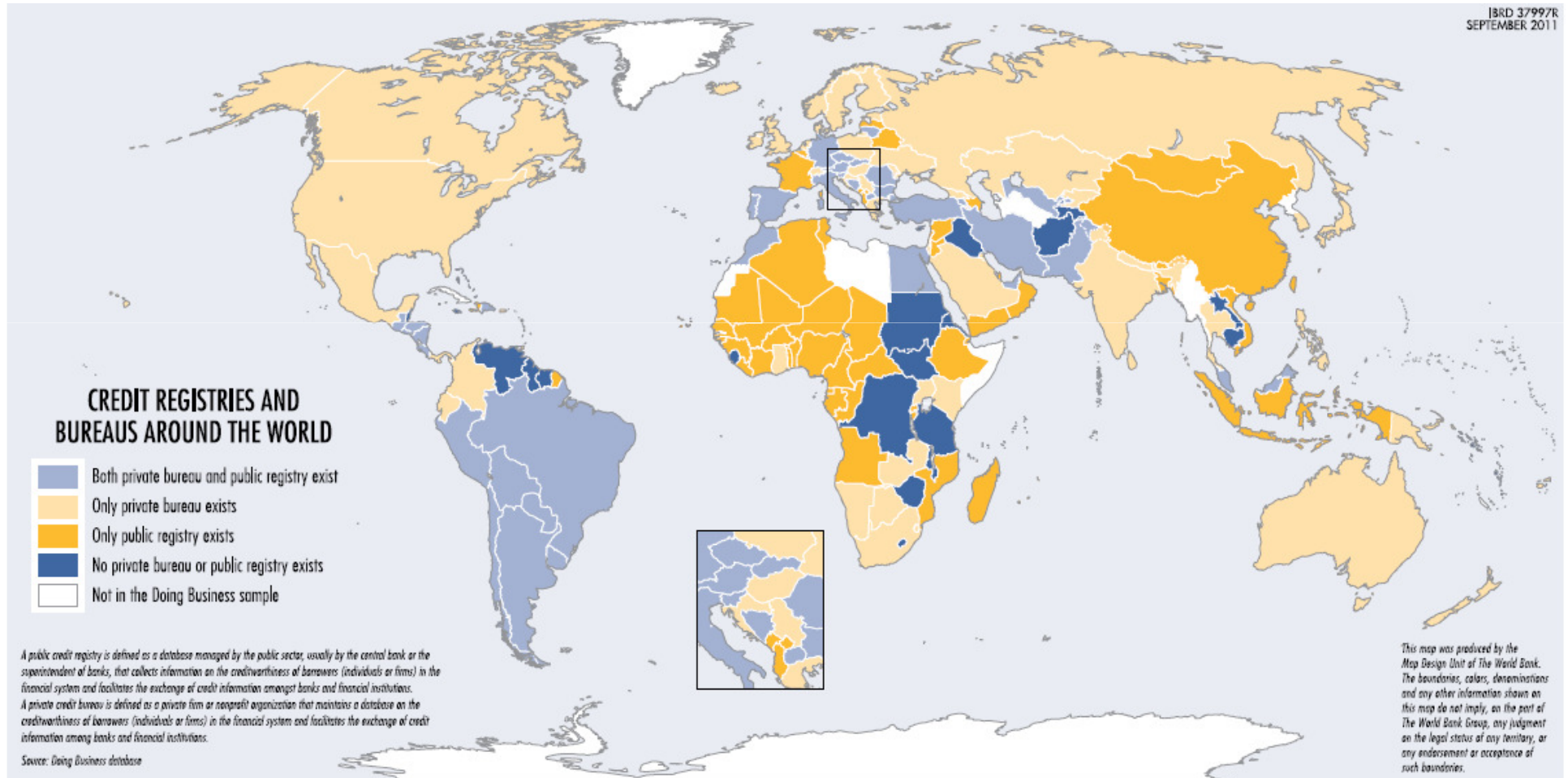
48. If anyone owes a debt for a loan, and a storm prostrates the grain, or the harvest fails, or the grain does not grow for lack of water; in that year he needs not give his creditor any grain, he washes his debt-tablet in water and pays no rent for that year



Workshop on Financial Inclusion Indicators, Kuala Lumpur, 5-6 November 2012

## Measuring the Evolution of Monetary and Financial Services in Portugal

### Countries with public credit registers or private credit bureaus

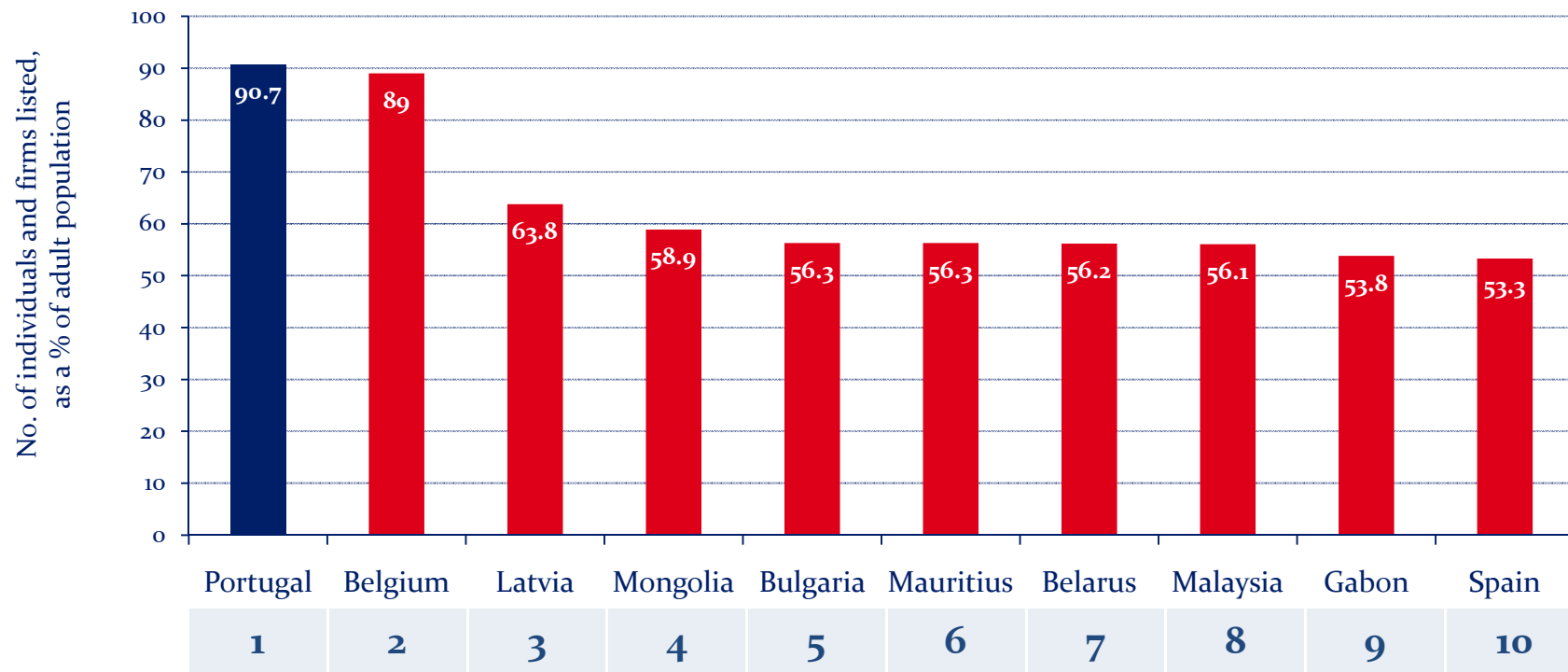




- Data reported include, *inter alia*: loans outstanding granted to households and corporations by type and purpose; potential loans and securitised loans; type and value of collateral or guarantee; original and residual maturity; credit defaults and the number of days the loan is past due; country where the loan was granted
- Some noteworthy figures concerning the CCR:
  - threshold: > EUR 50
  - 5.6 million private individuals registered
  - over 280 thousand corporations registered
  - more than 200 participants
  - 15 types of financial products
  - 23.4 million monthly records (2012 average)
  - 280 million annual movements



## Public Credit Registry Coverage Indicator Ranking – Top 10



Source: "Doing Business 2013", World Bank / International Finance Corporation





## The statistical analysis of CCR data in Banco de Portugal

The use of CCR data for statistical purposes is explicitly allowed in the Decree-law that regulates the Central credit register.

The CCR, like other micro-data repositories (individual data) has a huge potential as a source of information for statistics and to be used in analytical studies or research papers.

The decision to allocate the management of the CCR to the Statistics department, in 1999, in addition to the deep reformulation of the reporting model and the information system, concluded in 2009, were decisive steps to enlarge the potential of this database as a source of new and detailed statistics on the credit to the economy.



Workshop on Financial Inclusion Indicators, Kuala Lumpur, 5-6 November 2012

## *Measuring the Evolution of Monetary and Financial Services in Portugal*

### The statistical analysis of CCR data in Banco de Portugal

Several statistics based in CCR data are presently published, in the Statistical bulletin and Bpstat on-line system, with the following frequency:

Monthly : A.11 – Main indicators – Loans granted by the financial sector  
(loans to companies and households)

Quarterly: Statistical bulletin - Chapter B9 – Several tables concerning loans  
granted and indicators on overdue loans:

Non financial companies – with a breakdown by branch of activity, region  
of residence and by bracket of credit amount;

Households – breakdown by purpose of the loan (Housing; Consumption  
and other purposes) and region of residence.

*These statistics are published five weeks after the end of each month*



## Use case: Supporting measures to prevent over-indebtedness

- Complete and reliable credit records;
- Mandatory consultation of indebtedness information;
- Fixation of maximum interest rates in credit operations;
- Action against illicit ways of credit granting;
- Transparency in the description of financial instruments;
- Promotion of financial literacy;
- Balanced and flexible management of payment delays.



## Services related to the payment systems

- Monitoring the payment systems
- Assessing compliance with the “*Core Principles for Systemically Important Payment Systems*”
- Issuing regulations
- Exercising moral suasion
- Providing settlement services for banks or payment and clearing systems: catalyst role in developing these systems and promoting coordination among the relevant parties



## Substantial increase in the use of technological innovations:

- Creation of **SIBS – Forward Payment Solutions**, a single payment platform that meets banks' needs, while developing their facilities and technology, and extending their international scope. SIBS processes well over 2 billion transactions per year and manages more than 14 thousand ATM, around 270 thousand POS and about 18 million cards. SIBS handles:
  - Transactions originating across various channels – from ATM and POS networks, Internet and mobile phones to onboard units for vehicles, contactless payments, etc.
  - All sort of payment instruments – *e.g.*, cards, direct debits, credit transfers, cheques, ...
  - Interbank clearing of cheques, credit transfers and direct debits
- **Teleprocessing networks** within the larger banks and/or through interbank links



## *Multibanco*

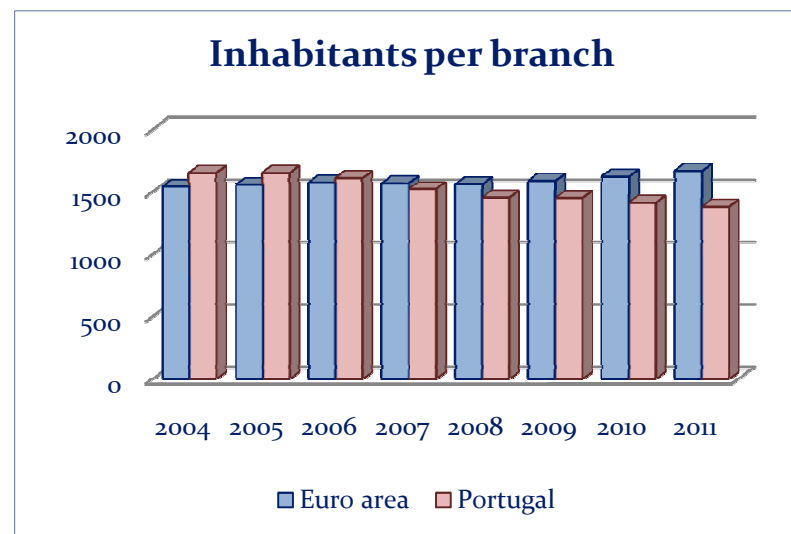
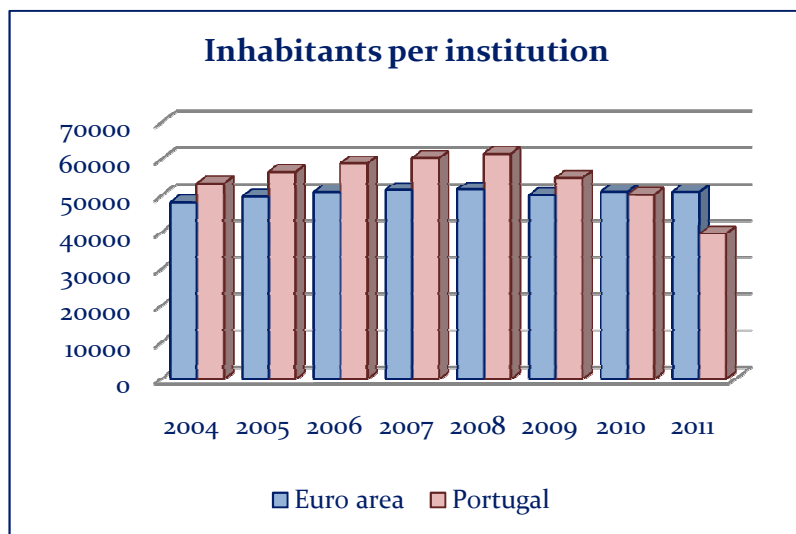
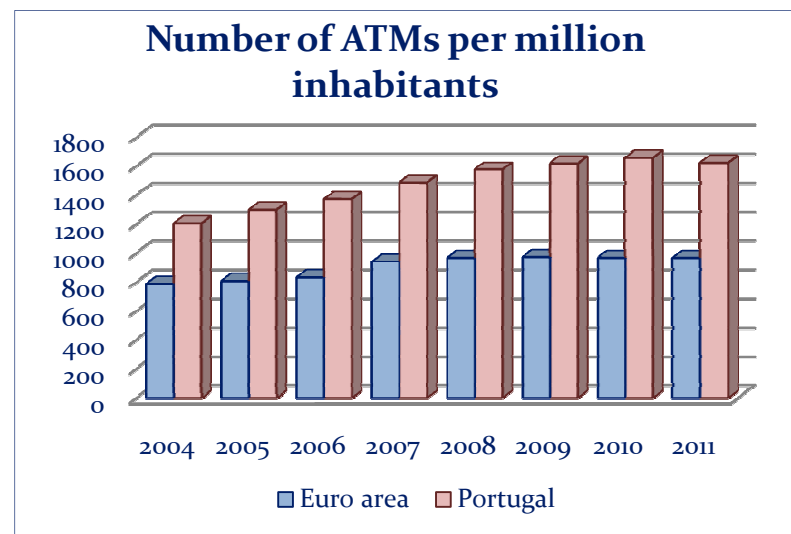
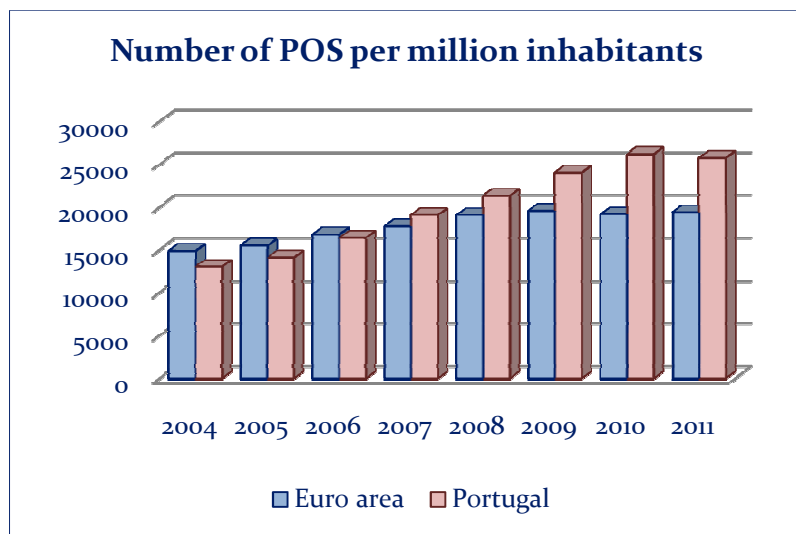
- A sophisticated network shared by every bank operating in the economy that fully integrates ATMs and EFTPOS
- In addition to cash operations, it offers a wide range of more than 60 different services (e.g., money transfers, payments for utilities bills, payments to the State and the Social Security, mobile phone top-ups, transport ticketing, event booking and ticketing, ...)

*“A survey (...) looked at the availability and use of non-cash functions at cash machines in other countries. Of survey respondents, the Portuguese were the leaders in cash machine functionality.”*

*APACS (The UK Payments Association) Report UK Cash & Cash Machines, May 2008*



## Measuring the Evolution of Monetary and Financial Services in Portugal





## Use of Payment Instruments in Portugal

(Quantities in millions and %)

	1991		2001		2011	
	Quantity	As a %	Quantity	As a %	Quantity	As a %
Cheques	231,4	73.0	307,9	28.7	106,7	6.0
Payment cards <sup>1</sup>	43,9	13.8	578,7	54.0	1237,5	69.0
Credit transfers	24,0	7.6	60,2	5.6	202,0	11.3
Direct debits	17,7	5.6	119,1	11.1	243,0	13.6
Other <sup>2</sup>	0,0	0.0	6,2	0.6	2,6	0.1

<sup>1</sup> Not including cash withdrawals; <sup>2</sup> Includes bills of exchange and e-money purchase transactions.





## Home banking and mobile banking

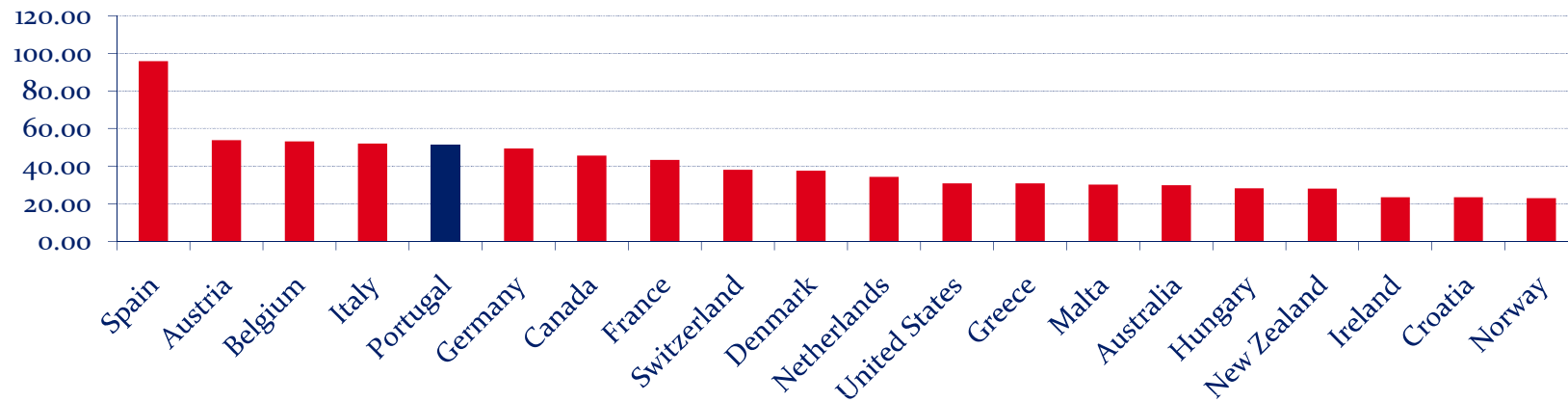
- Third preferred channel to get in touch with a bank – next to ATMs and to face-to-face contact with the bank teller
- The rising number of Portuguese households that have at least one computer at home and access to a broadband Internet connection will likely strengthen the use of home-banking
- Banks get information to their customers no matter where they are and at reduced costs (*e.g.*, access from home, mobile device, hotspots)
- Continuous expansion of **Internet banking** and **m-banking** in Portugal: **improved access to financial services**
  - **Services more affordable and more suited to the prospective customers, particularly the “marginally banked”** – *i.e.*, people with a deposit account that has no electronic payment facilities and no payment card or cheque book, including those that have a bank account but rarely use the related electronic payment facilities and cards



**Measuring the Evolution of Monetary and Financial Services in Portugal**

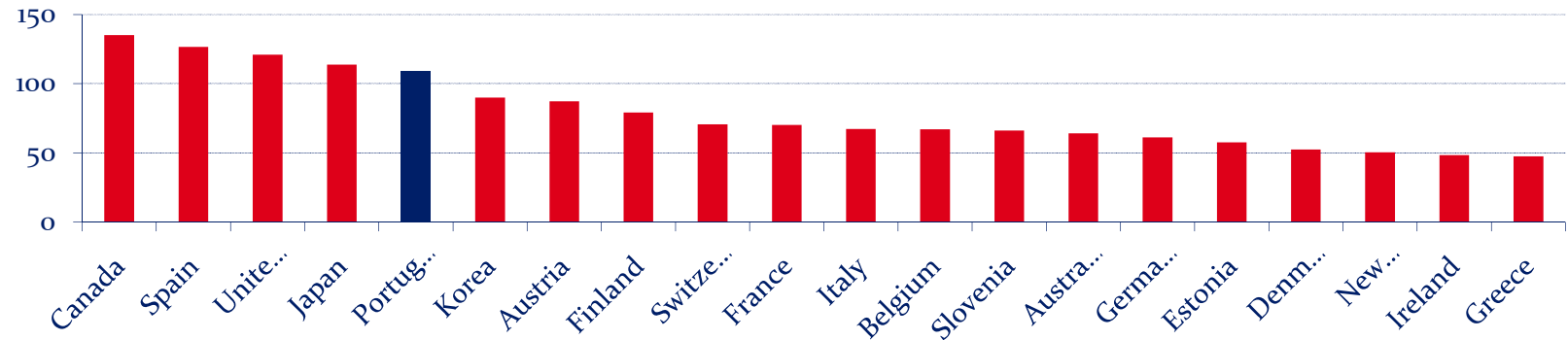
**Demographic branch penetration across countries**

No. of branches per 100,000 people



**Demographic ATMs penetration across countries**

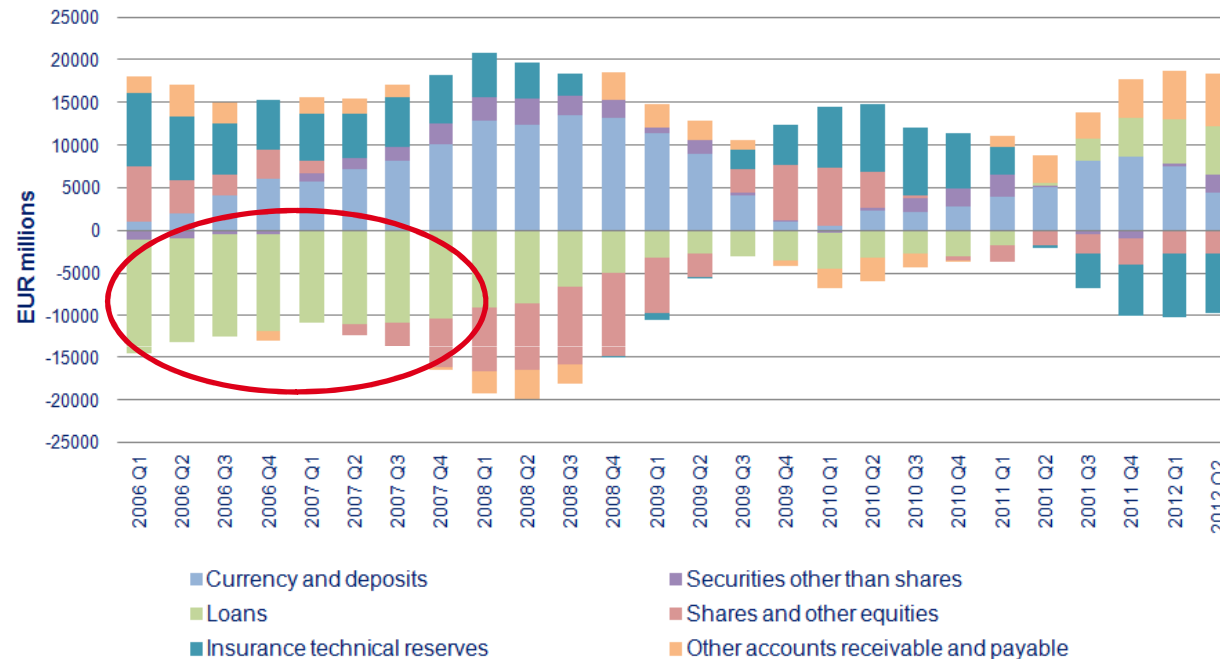
No. of ATMs per 100,000 people



Source: Beck, Demircuc-Kunt & Martinez Peria, "Reaching out: Access to and use of banking services across countries", World Bank, 2005



## Changes in households' portfolio composition (consolidated transactions, cumulative four-quarters)

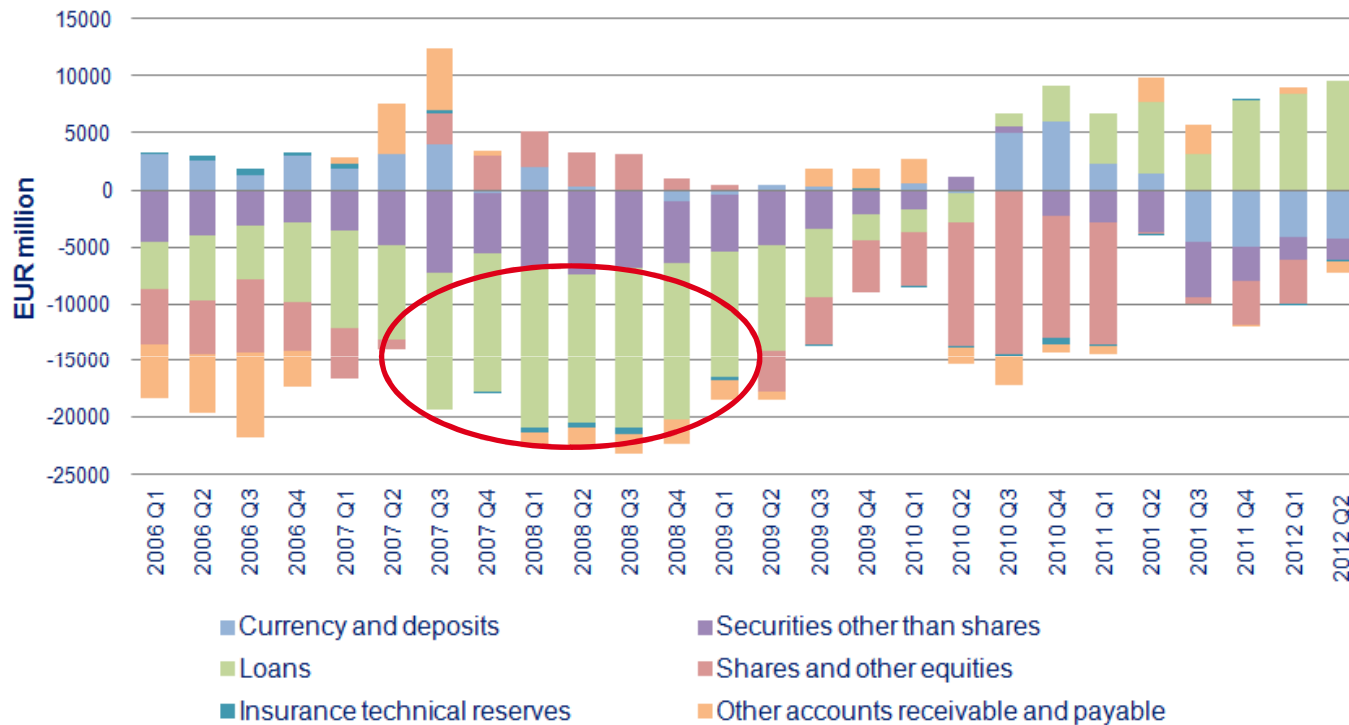


### Financial Accounts data:

- Composition of assets and liabilities by type of instrument
- On the asset side, mostly deposits
- On the liability side mostly loans (2006-2007 when credit expanded)



## Changes in NFC' portfolio composition (consolidated transactions, cumulative four-quarters)

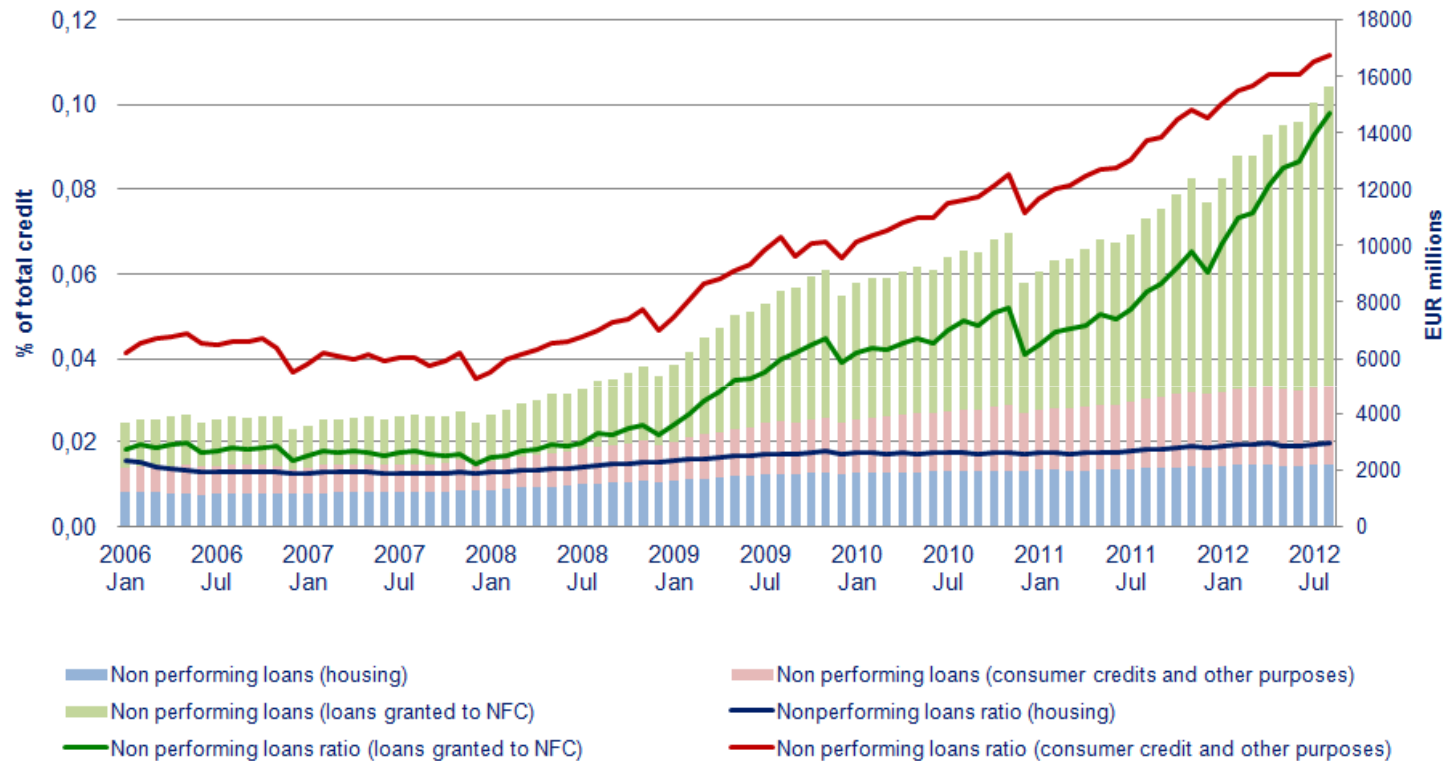


### Financial Accounts data:

- Composition of assets and liabilities by type of instrument
- On the asset side, composition changes overtime
- On the liability side mostly loans (2007-2008)



## Non-performing loans evolution



### Money and banking statistics, CCR:

- Allow focusing on non-performing loans
- Granular data useful for delineating financial policies (Planning Financial Assistance to households)



## Indebtedness Ratios

(as a percentage of GDP, non-consolidated figures)

	Dec-08	Dec-09	Dec-10	Dec-11	Mar-12	Jun-12
<b>Total-non-financial sector indebtedness</b>	366,2	391,6	402,2	420,5	422,3	432,2
<b>Financed by:</b>						
<b>General Government</b>	9,8	9,8	12,9	16,7	17,9	19,4
<b>Resident Financial sector</b>	185,1	196,8	205,3	204,4	207,3	208,8
<b>Corporations</b>	65,1	67,9	68,2	68,7	67,1	68,1
<b>Private individuals</b>	24,8	25,6	24,2	23,1	22,8	23,2
<b>External</b>	81,4	91,5	91,6	107,6	107,2	112,7

The recently published chapter k of the Statistical Bulletin (non-financial sector indebtedness) provides an integrated overview of the total financing of the economy by institutional sector



## Final remarks

Micro-databases managed by the Statistics Department of the *Banco de Portugal*: **Central Credit Register; Securities Statistics Integrated System; Central Balance Sheet Database; and Balance of Payments data**

- Granular micro-data are tools that allow monitoring the financing needs of the economy (example: highly exploited for the purpose of the EU/IMF Financial Assistance Programme )
- Publishing new and integrated statistics offer a new insight
  - Analysing indebtedness ratios
  - Constructing indicators to support the financial sector
  - Delineating financial assistance programmes for households and corporations



Workshop on Financial Inclusion Indicators, Kuala Lumpur, 5-6 November 2012

*Measuring the Evolution of Monetary and Financial Services in Portugal*

**Obrigado pela vossa atenção**

**Thank you for your attention**

**Terima kasih atas perhatian anda**