



EUROPEAN CENTRAL BANK

EUROSYSTEM

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# Real Estate Markets and Macroprudential Policy in Europe

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Panel on “Lessons Learnt and Implications for Policy” at the Fed Dallas/IMF/Journal of Money, Credit and Banking conference on “Housing, Stability and the Macroeconomy”

**Disclaimer:** Any views expressed are only the speaker’s own and should not necessarily be regarded as views of the ECB or the Eurosystem.

# Introduction

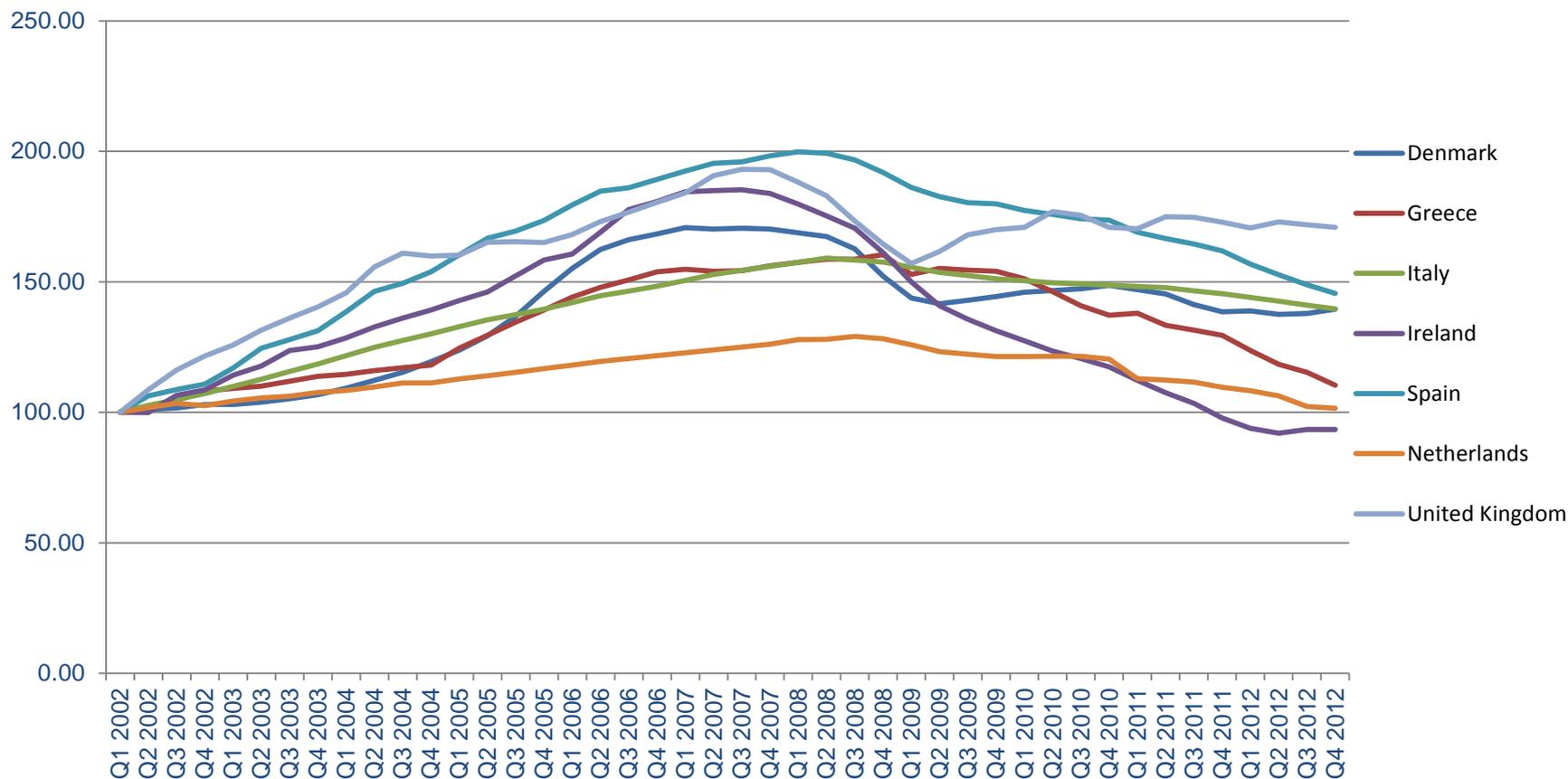
- **Lesson from economic history (current crisis “refresher”)**
- **Housing bubbles or imbalances in real estate markets often preceded systemic financial crises (overview Crowe et al. 2013)**
- **Potential reasons (not so well researched!?)**
  - Asset that many agents in the economy possess → systemic, potentially large real effects
  - Credit financed through leveraged lenders → worse crises and downturns
  - Sluggish supply, slow price discovery and high transaction costs lead to long large swings in property prices (“illusions” in upturns)
  - Indivisibility weighs further on prices in downturns
- **Area of primary attention for macroprudential policy**
- **Additional challenge: Social and tax policies fostering home ownership and debt/credit may go in the opposite direction**

# Outline

- **Real estate price developments before and during the crisis**
- **Macroprudential regulatory instruments against real estate bubbles**
- **Concluding remarks**
- **Annex**

# EU residential property price developments: "Boom-bust" countries (7)

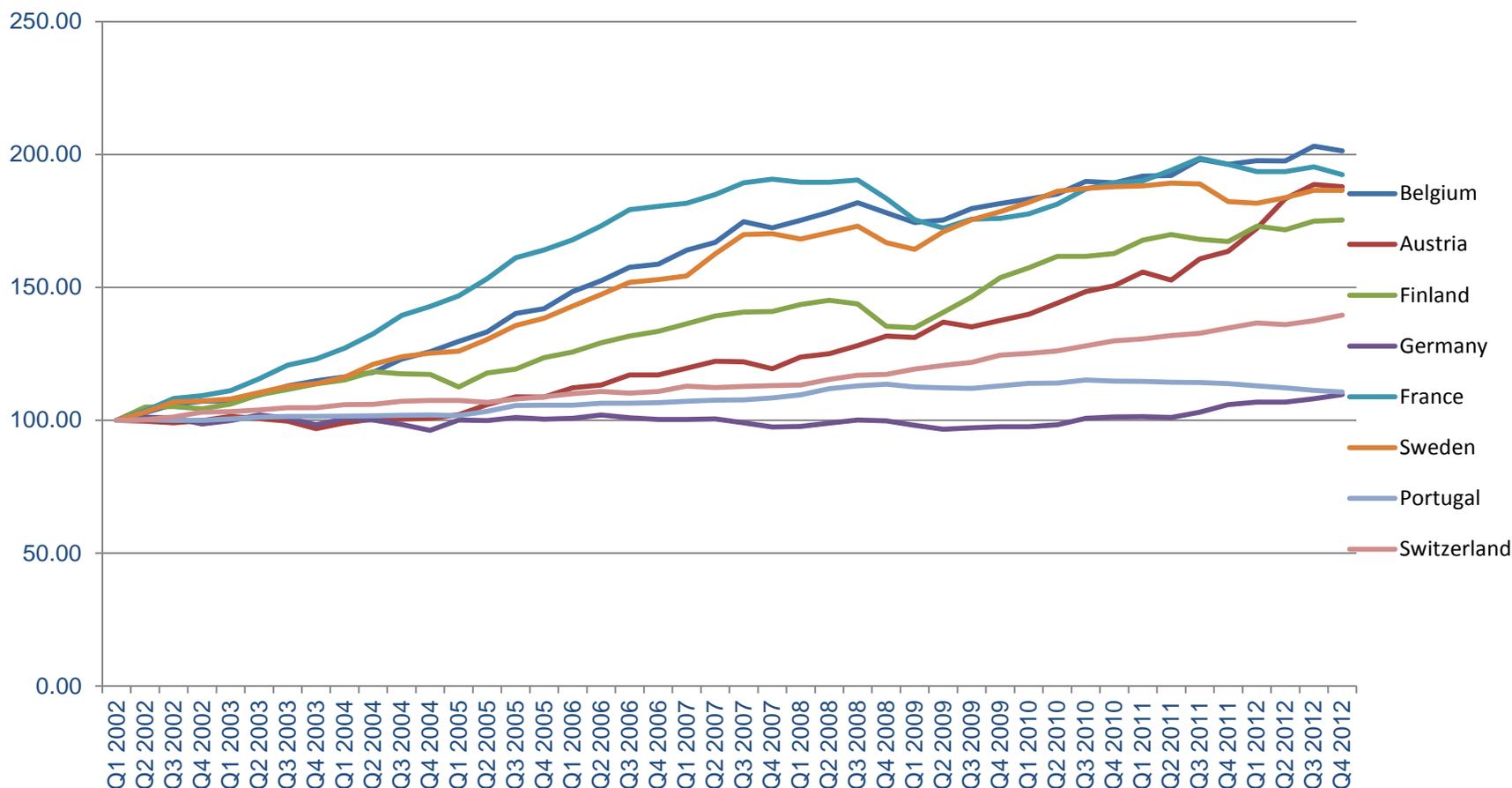
Levels normalised to 100 for Q1 2002



Source: ECB calculations and DataStream

# EU residential property price developments: Other countries (8)

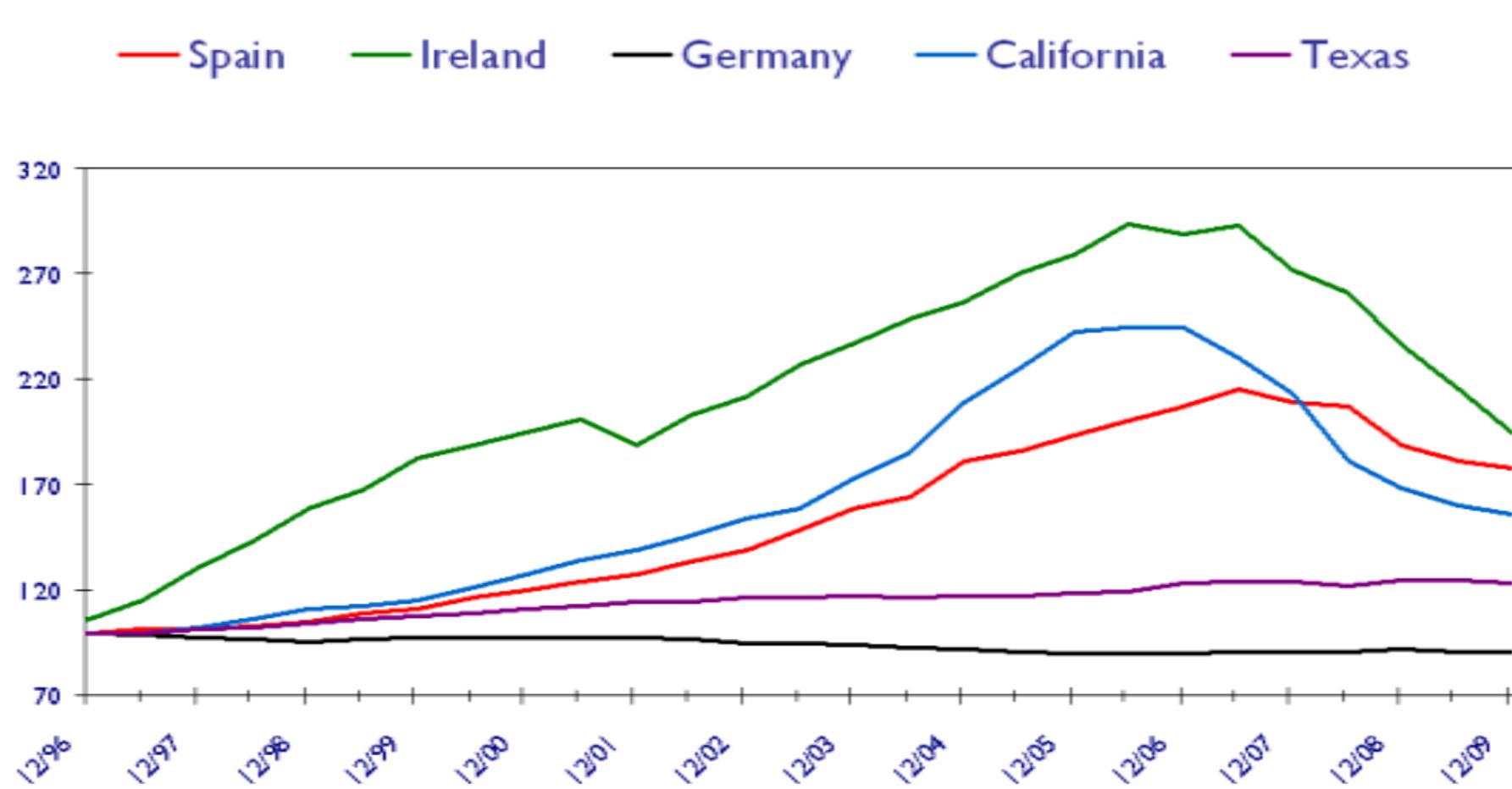
Levels normalised to 100 for Q1 2002



Source: ECB calculations and DataStream

# Comparison of EU and US residential property price developments: Selected countries and states

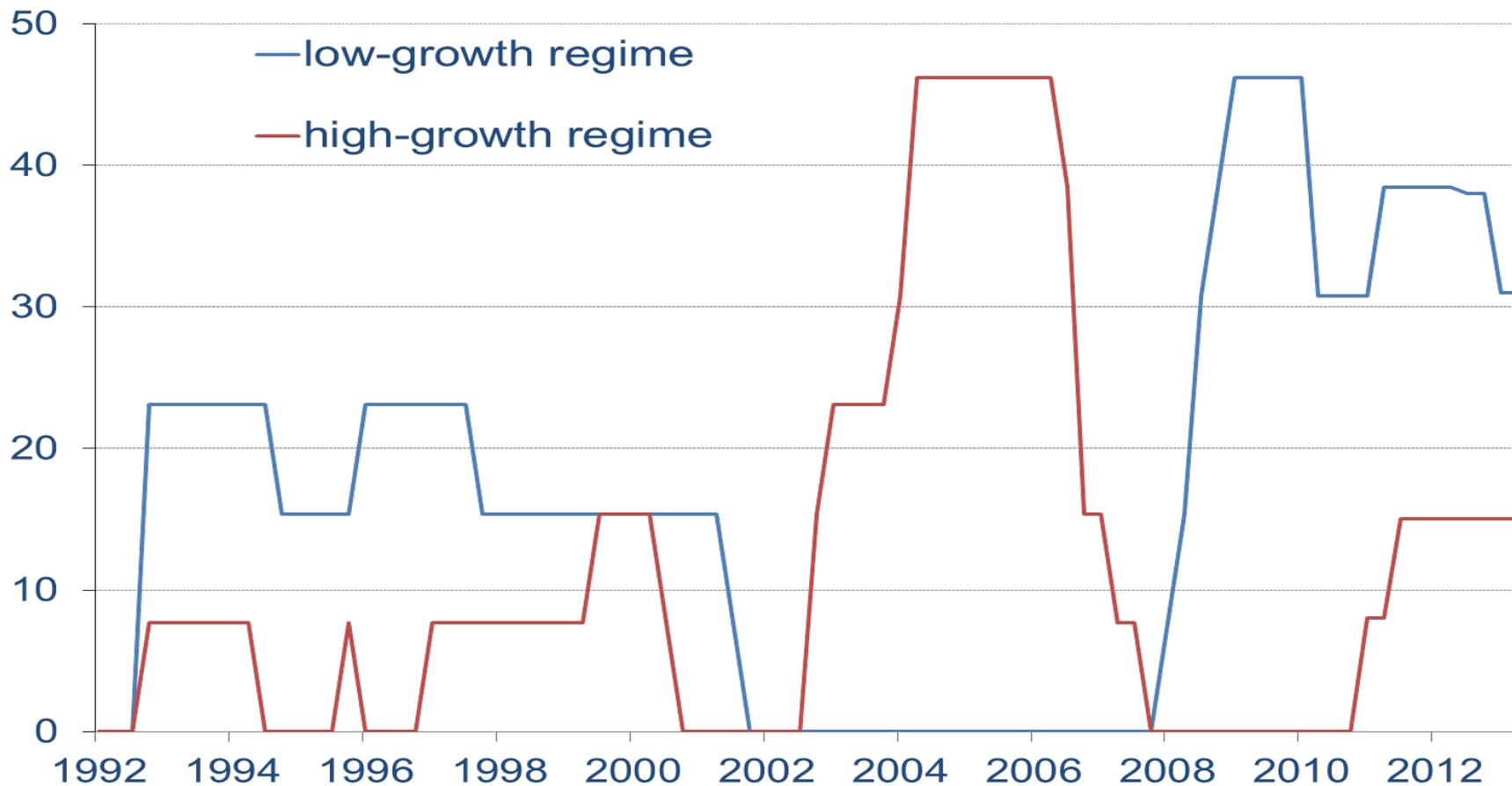
Normalised to 100 for December 1996



Source: ECB calculations and DataStream

# Share of European countries in a high- or low-growth residential property price regime

Percentage of total number of countries (13)



Source: ECB calculations, based on Corradin and Fontana (2013)

# Macroprudential regulatory instruments for addressing problems in real-estate markets

- **Systemic Risk (ECB 2009)**

- Risk that financial instability becomes so widespread that it impairs the functioning of a financial system to the point where growth and welfare suffer materially

- **Macroprudential policy**

- Supervision: Public oversight that aims at identifying and containing systemic risks
- Regulation: Public regulations that aim at maintaining systemic stability

- **Instruments against widespread imbalances in real-estate markets**

- Targeting banks: **Sectoral capital requirements**
  - Direct: Pillar 1 – Systemic risk buffer, subsidiarity case for own funds; Pillar 2
  - Indirect: Pillar 1 or 2 – higher risk weights (RWs) or higher loss given default (LGDs)

# Macroprudential regulatory instruments for addressing problems in real-estate markets (cont.)

- **Instruments against widespread imbalances in real-estate markets (cont.)**
  - Targeting borrowers:
    - **Loan-to-value limits (LTVs)**
    - **Loan-to-income (LTIs), debt-to-income limits (DTIs) or debt-service-to-income limits (DTSIs)**
- **Memorandum item: Broader instruments against the build-up of widespread financial imbalances**
  - Countercyclical capital buffer
  - Dynamic provisioning
  - Leverage ratio
  - Sectoral concentration limits
  - Balanced accounting approaches
  - Influence compensation practices
  - Maximum loan amortisation period (sectoral) risk weights

# Allocation of policy competencies for macroprudential real-estate instruments in Europe

- **EU legislation (all countries)**

- Capital Requirements Directive (CRDIV) and Capital Requirements Regulation (CRR)
- Sectoral capital requirements, RWs, LGDs
- Applied by the **competent or designated national supervisory authority**
- **Single Supervisory Mechanism (SSM)**; first leg of Banking Union) at the ECB can make those measures more restrictive (but not relax them)

- **National legislation (countries that have it; highly “distributive”)**

- LTVs (16 countries)
- DTIs (6 countries), LTIs (2 countries) or payment to income limits (PTIs, 3 countries)
- Primary purpose can also be consumer protection (3 countries), bank solvency requirements (4 countries) or link between loan and funding instrument (2 countries) → not actively changeable by macropru authority
- **Policy issues:** Active time variation (Mendicino 2012) and cross-country coordination (see common

# Policy effectiveness of macroprudential real-estate instruments

- **General problem: Limited experience about macroprudential effectiveness or unintended side effects**
- **Sectoral capital requirements**
  - More bank resilience, less “leaning”
  - Circumvention possible through unregulated or foreign institutions, reduction of other activities and off-balance sheet activities etc.
  - Less effective when capital in excess of regulatory minimum
  - Experience: Mixed – some effective, some ineffective cases
- **LTVs, LTIs, DTIs, DSTIs**
  - Direct limits to real-estate lending demand, household leverage and bank risks
  - Circumvention possible through splitting of loans or under-reporting etc.
  - Socially charged (noticeable effect on less wealthy, no borrower differentiation), sometimes governments in charge not supervisors
  - Experience: A number of effective cases, but effects can vanish over time

## Concluding remarks

- **Historical importance of real-estate markets for systemic crises**
- **Surveillance systems in place at the ECB (see e.g. FSR)**
- **New institutional framework for macroprudential policy in Europe is also taking shape**
- **Substantial work by the European Systemic Risk Board about policy instruments**
- **Some evidence of effectiveness, but experiences still limited**
  - Are instruments strong enough? How bad are negative side effects?
  - Will they be used to “lean” (“distributive” effects, role of governments)?
  - Can/should LTVs/DTIs be made dynamic and coordinated across Europe?
- **Role of monetary policy? Other policies?**
- **At present the priority in the (whole) EU is to recover from the crisis**
- **But a few countries already have high or rising property prices**

# References 1

- **Campbell, Ramadorai and Ranish (2012), How do regulators influence mortgage risk? Evidence from an emerging market, mimeo., Harvard University**
- **Corradin and Fontana (2013), House price cycles in Europe, forthcoming ECB Working Paper**
- **Crowe, Dell’Ariccia, Igan and Rabal (2013), How to deal with real estate booms: Lessons from country experiences, *Journal of Financial Stability***
- **Duca, Muellbauer and Murphy (2011), House prices and credit constraints: Making sense of the U.S. experience, *Economic Journal***
- **European Central Bank (2009), The concept of systemic risk, Financial Stability Review, December**
- **Hall, Psadarakis and Sola (1997), Switching error-correction models for house prices in the United Kingdom, *Economic Modelling***

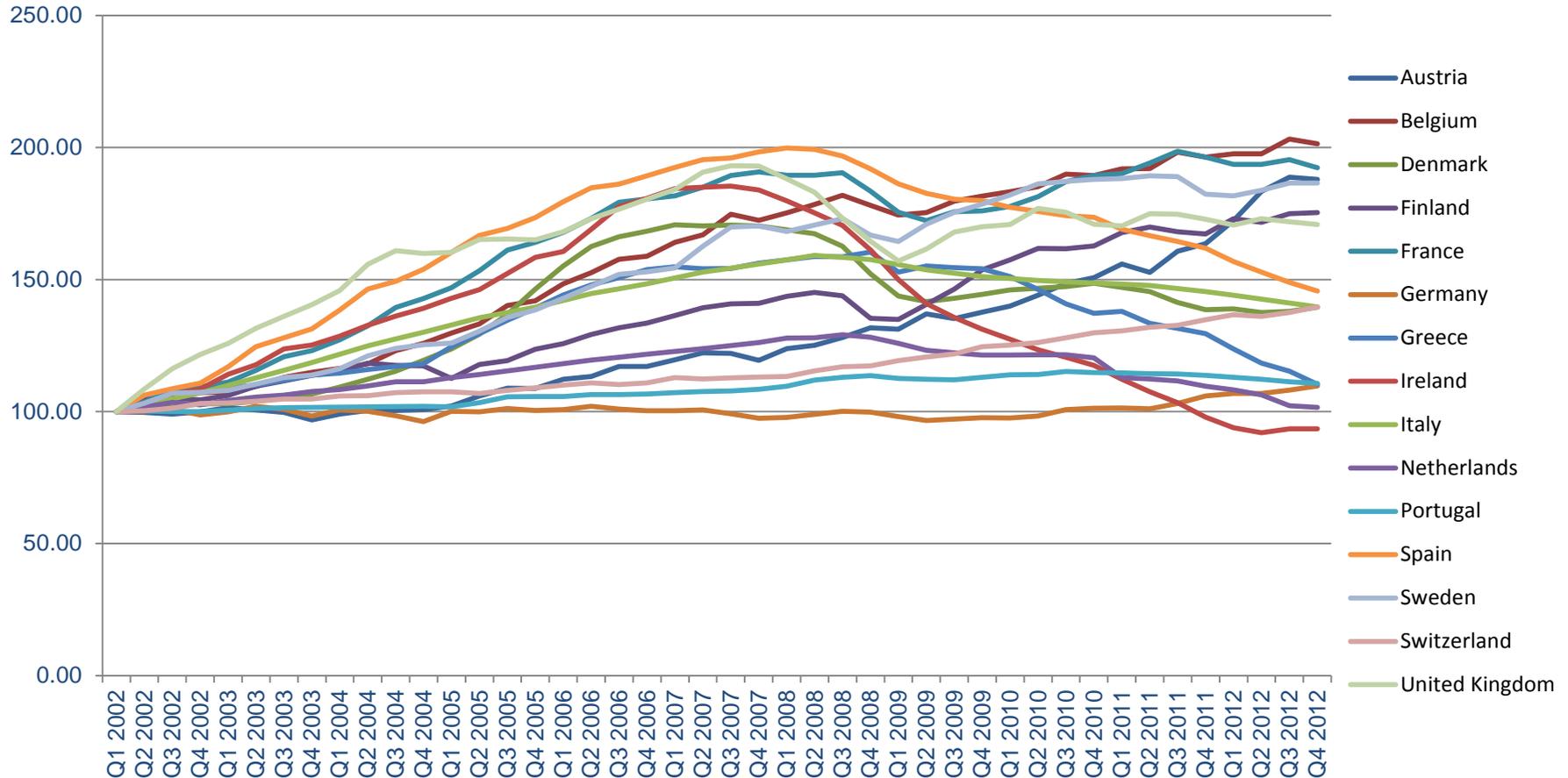
## References 2

- **Mendicino (2012), Collateral requirements: Macroeconomic fluctuations and macroprudential policy, Banco de Portugal Working paper, no. 1211**
- **Oxford Economics (2009), Developing analytical methods for the identification of imbalances and risks in the EU housing markets, Final Report, September**

# Annex

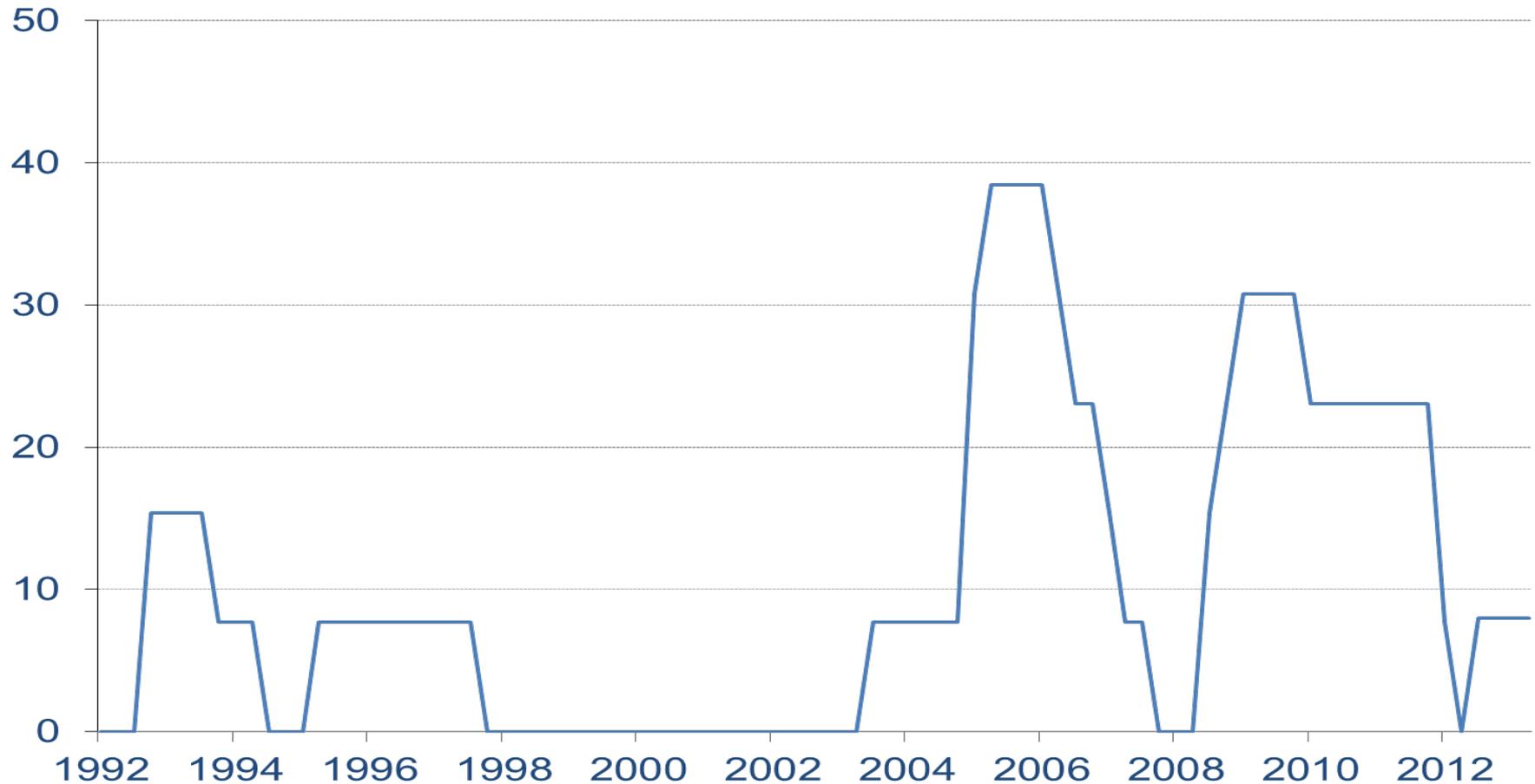
# EU residential property price developments: All countries in the sample (15)

Levels rates normalised to 100 for Q1 2002



# Share of European countries with house prices persistently above fundamental-based values

Percentage of total number of countries (13)



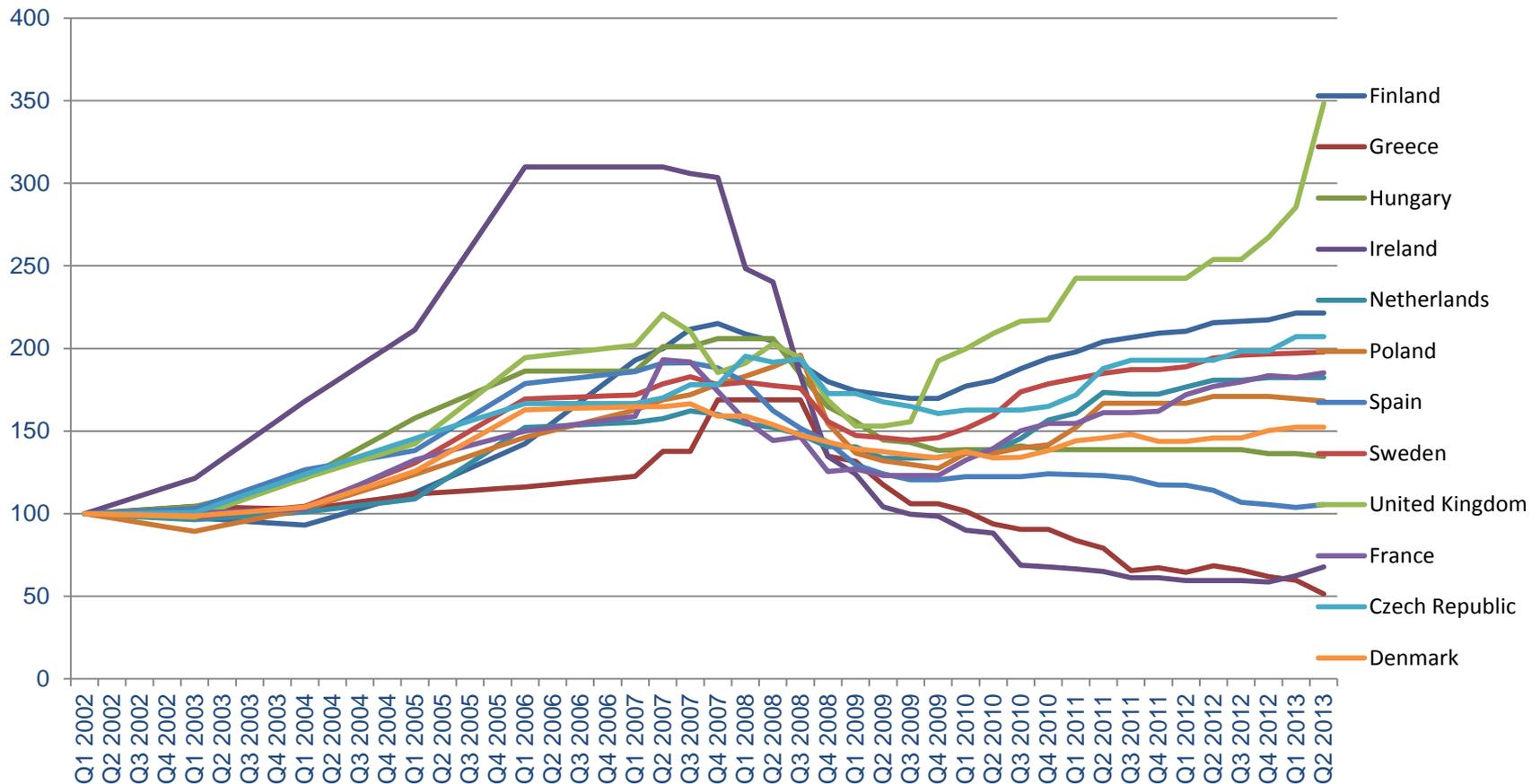
Source: ECB calculations, based on Corradin and Fontana (2013)





# EU commercial property price developments: "Boom-bust" countries (12)

Levels rates normalised to 100 for Q1 2002





# Likely designated macroprudential authorities in EU countries and their real-estate instruments 1

		Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	Estonia	Finland
(Likely) Designated authority (main one)		Financial Market Authority	National Bank of Belgium	Bulgarian National Bank	New macroprudential body	N.A.	Czech National Bank	The Minister of Business and Growth	Eesti Pank	Financial Supervisory Authority
Instruments	European legislation	Sectoral capital requirements, risk weights, losses given default								
	National legislation	None	Government responsible for LTV, DTI	To be defined	To be defined	N.A.	Any useful instrument	None	To be defined (maybe LTV, LTI, maximum amortisation period for loans)	To be defined (maybe LTV)

Source: Unpublished results of ESRB survey on macroprudential instruments (August 2013)

# Likely designated macroprudential authorities in EU countries and their real-estate instruments 2

France Germany Greece Hungary Ireland Italy Latvia Lithuania Luxembourg Malta

		France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta
(Likely) Designated authority (main one)		Haut Conseil de Stabilité Financière	Federal Financial Supervisory Authority	Bank of Greece	Magyar Nemzeti Bank	Central Bank of Ireland	Banca di Italia	To be defined	Bank of Lithuania	Systemic Risk Council*	To be defined
Instruments	European legislation	Sectoral capital requirements risk weights, losses given default									
	National legislation	LTV, LTI/DTI, loan rates and maturity	None	Any useful instrument	LTV, PTI, deposit coverage ratio, balance-sheet coverage ratio, FX funding adequacy ratio	To be defined	To be defined	To be defined	LTV, DTI and LTD	Any useful instrument	To be defined

\* composed of the Ministry of Finance, BCL, CSSF and the Commissariat aux Assurances

Source: Unpublished results of ESRB survey on macroprudential instruments (August 2013)

# Likely designated macroprudential authorities in EU countries and their real-estate instruments 3

		Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
(Likely) Designated authority (main one)		De Nederlandsche Bank	Systemic Risk Board*	Banco de Portugal	To be defined	National Bank of Slovakia	Committee of Financial Stability	Financial Stability Council**	To be defined	Bank of England Financial Policy Committee
Instruments	European legislation	Sectoral capital requirements, risk weights, losses given default								
	National legislation	None	None	Any useful instrument	To be defined	Any useful instrument	To be defined	To be defined	To be defined	FPC may make recommendations on any measure to enhance the resilience of the UK financial system

\* composed of NBP, Minister of Finance, FSA, Bank Guarantee Fund, the Prime Minister and the Central Statistic Office

\*\* composed of Bank of Spain, CNMV, General Directorate for Insurance and Pension Funds, the Government

Source: Unpublished results of ESRB survey on macroprudential instruments (August 2013)

# National macroprudential real-estate instruments in the European Union 1

Austria    Belgium    Bulgaria    Croatia    Cyprus    Czech Republic    Denmark    Estonia    Finland

		Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	Estonia	Finland
Instruments	Available	None	LTV, DTI	LTV, DTI	Recommendation to banks for a ceiling on customers' loan indebtedness	N.A.	None	LTV for loans by mortgage credit banks and for covered bonds issued by universal banks	None	None
	Used	None	None	LTV, DTI	None	N.A.	None	LTV (see above)	None	None

Source: Unpublished results of ESRB survey on macroprudential instruments (August 2013)

# National macroprudential real-estate instruments in the European Union 2

France      Germany      Greece      Hungary      Ireland      Italy      Latvia      Lithuania      Lux.      Malta

		France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Lux.	Malta
Instruments	Available	LTV, LTI,DTI, controls on loan rates and maturities (presently non-binding)	None	Payment-to-income ratio (PTI, guideline)	LTV, PTI, Income-limit for FX loans	LTV, LTI	LTV	LTV (for consumer protection)	LTV, DTI	None	None
	Used	LTV, LTI,DTI, controls on loan rates and maturities (see above)	None	PTI	LTV, Income-limit for FX loans	None	None	None	LTV, DTI	None	None

Source: Unpublished results of ESRB survey on macroprudential instruments (August 2013)

# National macroprudential real-estate instruments in the European Union 3

Netherlands Poland Portugal Romania Slovakia Slovenia Spain Sweden United Kingdom

		Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Instruments	Available	LTV, DTI	LTV, DTI, (both non-binding) Increased risk weight for FX loans (binding)	LTV, LTI, DTI	LTV	LTV	None	LTV, dynamic provisioning	LTV, risk weight floor under pillar 2	Capital requirements
	Used	LTV, DTI	LTV, DTI, risk weights (see above)	None	LTV	LTV	None	Dynamic provisioning	LTV, risk weight floor (see above)	None

Source: Unpublished results of ESRB survey on macroprudential instruments (August 2013)