



# Property Price Related Issues at the Fund

## Central Bank of the Republic of Turkey Workshop on Commercial Property Price Indices

Session 1 - Recent Developments in the Commercial Property Markets

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# Overview

- ▶ Financial stability and IMF surveillance
- ▶ Experiences from RPPI capacity development
- ▶ IMF and G-20 Data Gaps Initiative

# Financial stability and IMF surveillance



- Targeted use of sectoral macroprudential tools can help to address the build-up of systemic risk due to excess credit to the housing and commercial property sectors.
  - Tools at institutional and loan level
- A wide range of indicators, including price indexes, should be used to assess the need for, and the direction of, policy action
- IMF surveillance plays close attention to property markets – particularly residential property
  - During 2017 some 37 country reports included analysis of residential property markets, in the context of financial stability and macroprudential policies
  - Less attention to commercial property markets, perhaps reflecting the reduced availability of data



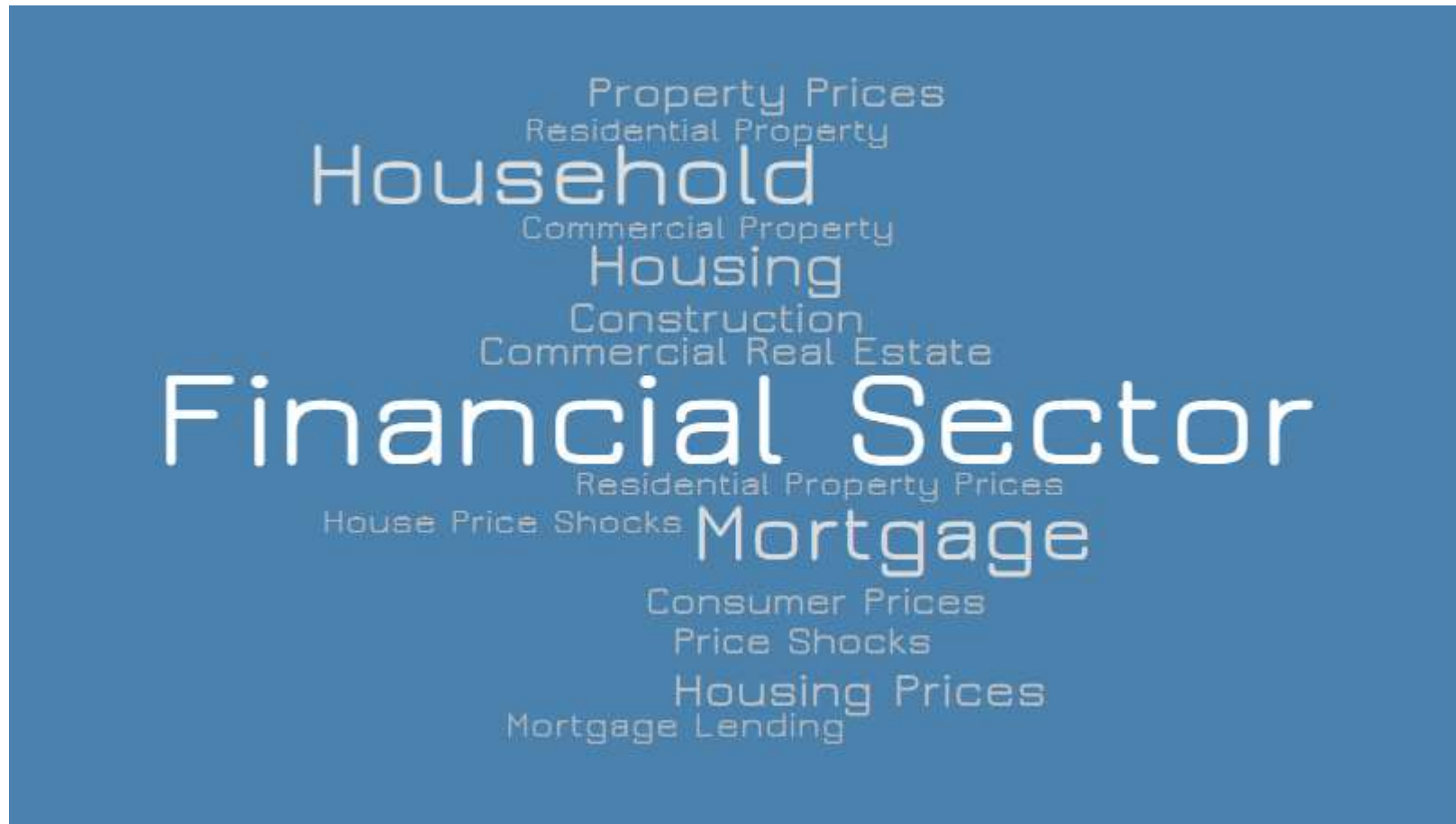


# IMF Article IVs 2017

Residential Property  
Financial Sector  
Housing  
Commercial Real Estate  
Mortgage Lending  
Household  
Mortgage  
Property Prices Commercial Property  
Housing Prices Consumer Prices  
Price Shock  
Residential Property Prices Construction



# IMF Financial Sector Assessment Program (FSAP) 2017



# IMF Article IV – Ireland 2017



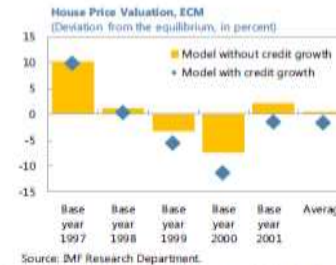
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- *Speed up loan restructuring of distressed, but viable, firms in the construction sector.* A stronger financial position for firms would improve the responsiveness of supply to price signals, especially given more stringent bank financing requirements.
- *Review the recent administrative measures to stabilize rents.* Rent controls may deter new construction, particularly given their wide coverage, and prove ineffective as landlords could pass on costs to tenants through other fees.
- *Better target the recently implemented Help-to-Buy (HTB) scheme,* which provides first time buyers (FTBs) of new properties a tax rebate until 2019. While limited in scope and time-bound, the relatively high property value threshold suggests that it also benefits FTBs that do not need government's support.

**Box 4. Residential Property Prices**

**Residential real estate prices have recovered from the trough in early 2013.** While prices remained well below pre-crisis levels, their rapid increase has raised questions about possible emergence of imbalances. Alternative methods to assess house valuation provide mixed results, reflecting in part the high volatility of the Irish property market in recent years, and structural factors such as the integration into the euro area and increased access to cheap funding, and the economy's structural transformation, which resulted in significantly increased household financial wealth.

**Non-parametric methods.** Ireland's house price-to-income and price-to-rent ratios in 2016Q3 were close to their long-term average (1990–2016), and 40 percent below their peaks, thus not suggesting current misalignment. Furthermore, strong house price appreciation was broadly in line with income growth and rent increases over the last two years.

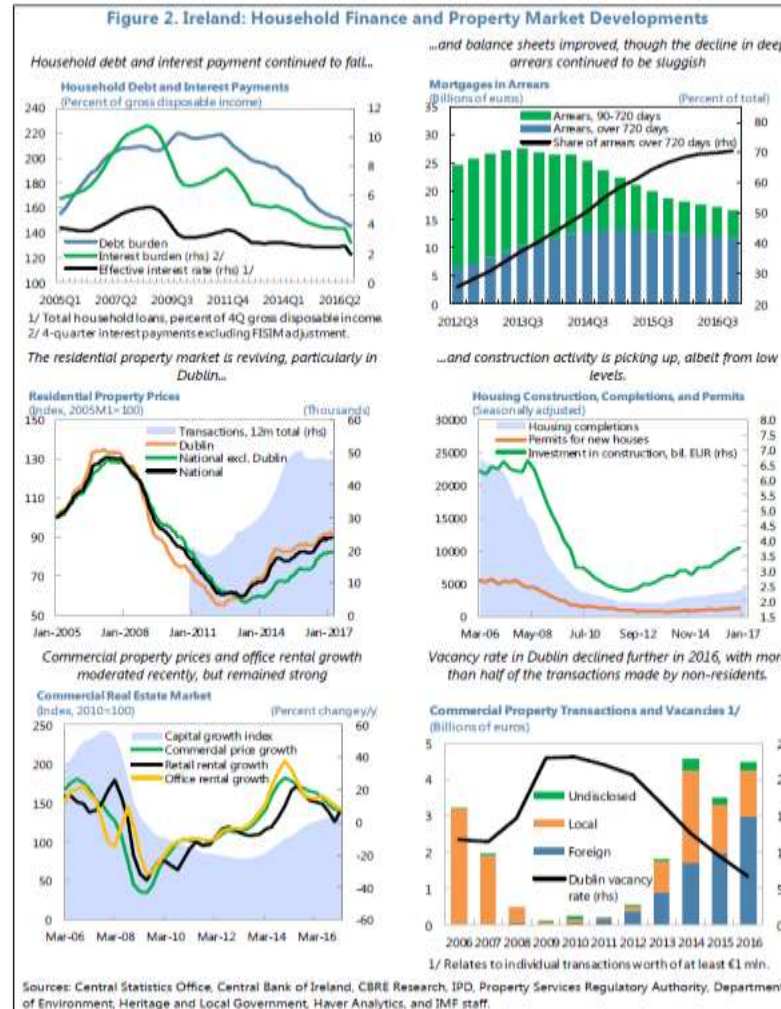


**Parametric methods.** Two models are used to assess house valuation: A reduced form model, including demand-side factors such as population at the household formation age (25–44), real mortgage rates, and employment; and an Error Correction Model (ECM, above) based on a cross-country sample and reflecting both supply and demand factors. While the results should be treated with caution, given model limitations in capturing supply-side dynamics important in the Irish context (first model) and Ireland-specific dynamics (second model), they do not suggest evidence of a price misalignment. Specifically, the first model estimates that, following a significant undervaluation (around 30 percent in 2013), prices remain undervalued by about 10 percent. The second model suggests prices in mid-2016 were close to their equilibrium level, though the results differ significantly based on model specification (with or without credit growth) and base year for which the estimated growth rates are applied.



# IMF Article IV – Ireland 2017

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# IMF Article IV – Ireland 2017

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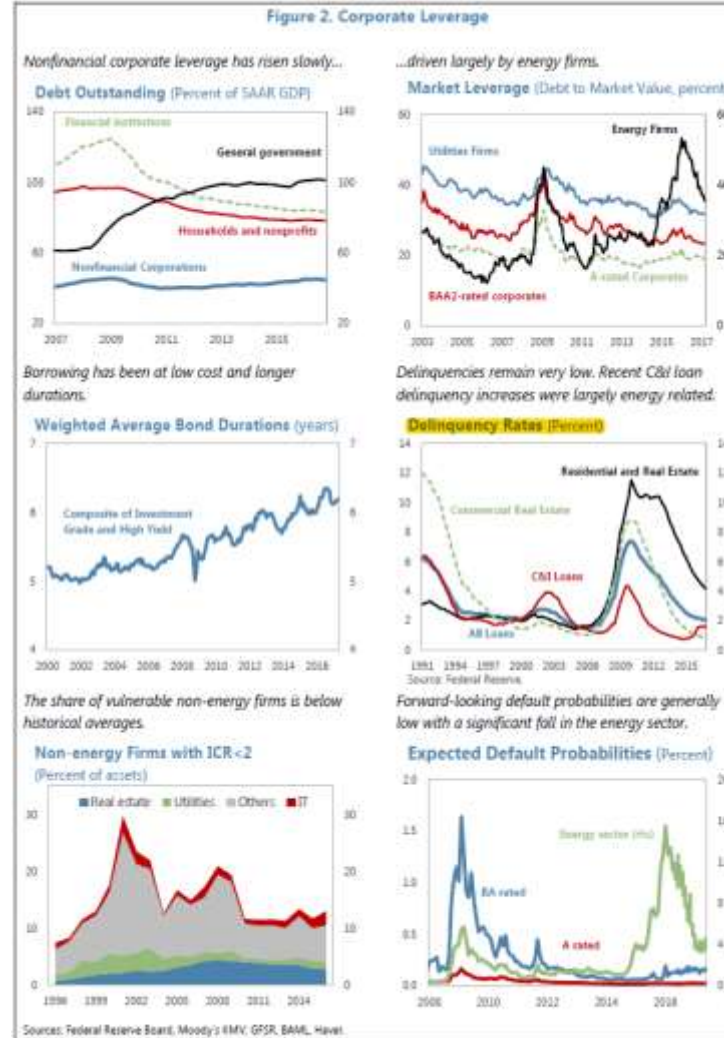
## Annex VIII: Status of FSAP Recommendations

Recommendations	Time <sup>2</sup>	Status
<b>Cross-cutting</b>		
Support independence of the central bank by continuing to demonstrate accountability to the Oireachtas (Parliament) and enhancing public transparency	On-going	<b>Ongoing.</b> "Communications and Accountability" was identified as a strategic enabler in the Central Bank of Ireland's 2016-18 Strategic Plan, and actions to increase transparency have been taken, including the publication of the discussions and decisions of the Central Bank Commission and the Macroeprudential Measures Committee on the central bank website; committee appearances at the Oireachtas; and publication of the Annual Performance Statement, which provides granular detail on the performance of the statutory regulatory functions.
Revise personnel policies to attract and retain experienced staff	NT	<b>Ongoing.</b> The organization review has concluded with actions taken to restructure divisions, size, roles, etc. Several actions have either concluded or are underway to enhance the central bank as a place to work.
<b>Stability Analysis</b>		
Further develop bank stress testing, including risks in UK operations	NT	<b>Ongoing.</b> Loan-loss forecasting models are being recalibrated and top-down stress test models will be operationalized. Supervisory Stress Testing at the end of 2016 and 2017 have focused on the UK.
Close data gaps on cross-border exposures, the nonbank financial sector, the commercial real estate market, and the non-financial corporate sector	NT	<b>Ongoing.</b> Data quality issues are being addressed, with substantial progress made. Balance sheet data and P&L information for Irish non-financial corporate sector was obtained. <b>Agreement between the central bank, NAMA and the CSO on establishment of commercial property statistical system will support the analysis of the potential vulnerabilities in this area.</b>
Build internal capacity that allows for regular stress testing of MMFs	NT	<b>Ongoing.</b> High quality third party data for debt securities was procured, and survey of the investment funds activity has been received and being processed in the coming months. Risk model and stress testing framework for investment and money market funds are being developed.
Improve data coverage and monitoring of all special purpose vehicles	NT	<b>Done.</b> Non-securitization data was improved and significant reclassifications undertaken within securitization data on foot of data quality checks carried out with reference to company accounts.
Develop better understanding of the use of investment fund portfolio leverage	NT	<b>Ongoing.</b> Next Macro Financial Review to include an analysis of financial leverage of investment funds, MMFs, FVCs and SPVs. Off-balance sheet leverage measures to be developed following improvements in EMIR data base.





# IMF Article IV – US 2017



# IMF Article IV – US 2017

**Table 4. United States: Core PSIs for Deposit Takers**  
*Percent unless stated otherwise*

	2010	2011	2012	2013	2014	2015	2016
<b>Regulatory Capital to Risk-Weighted Assets</b>	148	147	145	144	144	141	142
<b>Regulatory Tier 1 Capital to Risk-Weighted Assets</b>	115	116	117	118	121	121	122
<b>Capital to Assets</b>	127	122	120	118	117	117	116
<b>Non-performing Loans Net of Provisions to Capital</b>	200	176	157	117	88	72	66
<b>Non-performing Loans to Total Gross Loans</b>	4.4	3.8	3.3	2.5	1.9	1.5	1.3
<b>Sectoral Distribution of Total Loans: Residents</b>	966	956	955	952	956	958	961
Sectoral Distribution of Total Loans: Deposit-takers	60	60	60	59	41	36	38
Sectoral Distribution of Total Loans: Other financial corporations	3.2	3.8	4.4	5.2	6.7	6.7	6.7
Sectoral Distribution of Total Loans: General government	8.8	9.9	11	12	13	14	15
Sectoral Distribution of Total Loans: Non-financial corporations	325	318	321	333	342	350	355
Sectoral Distribution of Total Loans: Other domestic sector	542	531	519	505	498	481	485
<b>Sectoral Distribution of Total Loans: Nonresidents</b>	3.4	4.4	4.5	4.8	4.4	4.2	3.9
<b>Return on Assets</b>	0.2	0.3	0.3	0.4	0.3	0.4	0.4
<b>Return on Equity</b>	1.8	2.3	2.7	3.2	2.8	3.0	3.2
<b>Interest Margin to Gross Income</b>	69.6	65.2	60.8	61.5	63.7	61.4	61.1
<b>Non-Interest Expenses to Gross Income</b>	62.1	64.5	61.6	61.7	64.7	60.7	59.6
<b>Liquid Assets to Total Assets (Liquid Asset Ratio)</b>	10.8	12.7	11.4	14.3	14.5	13.2	12.8
<b>Liquid Assets to Short-Term Liabilities</b>	47.1	66.1	74.1	88.3	90.0	91.2	88.2
<b>Other Financial Corporations</b>							
Assets to Total Financial System Assets	37.7	37.1	37.2	36.8	35.4	34.7	34.6
Assets to Gross Domestic Product (GDP)	90.1	89.8	89.7	89.5	88.2	89.2	89.9
<b>Non-financial Corporations Sector</b>							
Total Debt to Equity	62.2	61.8	62.6	58.2	58.9	57.2	54.6
Return on Equity	7.7	7.9	7.9	7.1	7.3	6.3	5.8
<b>Market Liquidity</b>							
Average Bid-Ask Spread in the Securities Market	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Average Daily Turnover Ratio in the Securities Market	5.0	3.8	3.4	3.4	3.1	2.7	3.0
<b>Real Estate Markets</b>							
Residential Real Estate Prices	-0.4	-0.9	0.9	0.2	0.0	0.8	0.1
Commercial Real Estate Prices	12.2	9.3	5.9	15.5	20.6	9.8	5.9
Residential Real Estate Loans to Total Loans	35.5	35.0	34.8	31.0	32.1	31.8	31.0
Commercial Real Estate Loans to Total Loans	12.5	12.9	12.2	12.5	12.3	10.1	10.4

Source: IMF staff estimates.

# Financial Stability Indicators (FSIs)

- Provide insights into the resilience of the financial sector to potential vulnerabilities and the buildup of systemic risks that are important for macroprudential analysis
  - Appropriate macroprudential tools to mitigate risks
  - Serve as a useful indication where a deeper review of financial sector issues is required
  - FSIs for nonfinancial sectors, including real estate markets potentially can identify vulnerabilities before they are evident in the FSIs for the financial sector
- IMF's FSIs initiative was launched in the early 2000s and currently 126 countries report
- Of the total of 40 core and encouraged FSIs, 4 "encouraged FSIs" relate to the property market
  - Residential real estate prices (Percentage change/last 12 months)
  - Commercial real estate prices (Percentage change/last 12 months)
  - Residential real estate loans to total gross loans
  - Commercial real estate loans to total gross loans

# IMF is building capacity for property price indexes



- Regional workshops to identify country needs and take stock of country readiness for technical assistance (largely determined by the availability of source data), in addition to introducing compilation and demonstrating methods
  - Over 80 countries + 2 more regions by end 2018
- Ongoing bilateral technical assistance
- Flexibility required for different
  - Markets (intergeneration, informal)
  - Data availability (big, administrative, composite) (proxy price)
  - Institutional capacity and arrangements
- Practical compilation guidance, to supplement the existing Handbook; the idea being to
  - A continuum of methods to account for the wide variation across countries in respect of access to suitable data sources and to recognize that these data sources can improve over time.



## 2018 RPPI/CPPI Thematic Workshop



- Co-organized by the BIS, Eurostat, IMF, and the OECD
- Hosted by INDEC, Argentina during January 29-30, 2018
  - 50<sup>th</sup> anniversary celebration of INDEC
- About 80 participants from 17 G-20 economies and two non-G-20 FSB jurisdiction along with representatives from relevant international organizations
- Focus on both RPPI and CPPI



# Agenda

- Reporting and ongoing developments of RPPI, including the RPPI template
  - Presentations by international organizations (BIS and OECD)
- Exchange of country experience on RPPI development and its use for policy
  - Presentations by Germany, India, Indonesia, Netherlands, Turkey, UK
- Reporting and guidance on CPPI
  - Presentations by international organizations (BIS, Eurostat, ECB)
- Exchange of country and international organizations experience on CPPI compilation and its use for policy
  - Presentations by Indonesia, Japan, Netherlands, Saudi Arabia, Turkey, US; the ECB
- Panel discussion on financial stability policy perspectives and uses of RPPI and CPPI

# Key Outcomes

## RPPI

- Good progress in the compilation and dissemination of the RPPI: BIS RPPI statistics covers 19 G20 economies
- The RPPI template for reporting residential property prices and related indicators was been endorsed by the participants
- Practices across participating economies vary in terms of: coverage; which agency compiles the index; source of data; quality adjustments; length of timeseries; availability of aggregated data
- Key challenges include availability of transaction prices; time lag between actual transaction and its recording
- Strong demand for RPPI data for policy use (e.g., monetary policy, monitoring economic performance, including at regional level, forecasts) and for financial stability (e.g., early warning system for financial system)
- **Fund surveillance: Article IVs; Financial Soundness Indicators; Financial Sector Assessment Programs**

# Key Outcomes

## CPPI

- Compilation of CPPI remains very challenging, with a reduced number of G-20 economies compiling such data
- Key challenges include:
  - Limited availability of information on transactions
  - Definition and classification of commercial properties
  - Aggregation and weighting issues
  - Scarce expertise
  - Who owns the data?
  - High volatility of CPPI (more than RPPI)
  - Lack of metadata
- Given the shortcomings, the way forward should be pragmatic, data-oriented, and take account of available private source data



# Key Outcomes

## Common takeaways

- Users' feedback is important while advancing work in these areas
- Use of Big Data to compile real estate price statistics is trending (Indonesia, Netherlands)
- Inter-agency cooperation, including access to administrative data, is key to facilitate progress
- Comparability of RPPI data and more particularly CPPI data was seen as a long-term project

# Next Steps

## RPPI

- Use of the endorsed RPPI template
- A few economies to start compilation/reporting to BIS
- Continuous improvement of indexes (new source data, improved compilation methods, etc.) by the economies that already compile/report
- Capacity building activities

## CPPI

- International Conference on Real Estate Statistics in February 2019, organized by Eurostat
- Next steps to be clarified with the participating economies