



Collecting and disseminating globally comparable property price statistics

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The views expressed are those of the author and do not necessarily reflect those of the BIS

Overview





The BIS property price statistics

2007-2009

2009-2015

2015-2021

2021-ongoing

Great Financial Crisis

DGI-1

DGI-2

DGI-3

Before the Great Financial Crisis (2007-2009)

- Fragmented data
- Property price not systematically monitored
- Limited coverage
- Limited cross-country comparability

After the GFC

- **DGI 1**
 - Disseminate public **residential and commercial** real estate price data
- **DGI 2**
 - Compile and publish **residential** property price indices
 - Provide **commercial** property price indicators (CPPI)

What we collect and disseminate

Residential property prices

Detailed data set

Data differ across countries

- 300+ series
- ~60 countries
- Various frequencies, property type, vintage ...
- National and subnational data for capital / biggest city

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Selected data set

One indicator for jurisdiction

- BIS-calculated
- Quarterly
- Whole country
- All property types
- Growth rates & levels
- Nominal & real data
- Historical coverage

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Commercial property prices

Data differ across countries

- 26 countries
- Various frequencies, property type, covered area...
- Offices
- Retail premises
- Industrial properties

How we disseminate property price data



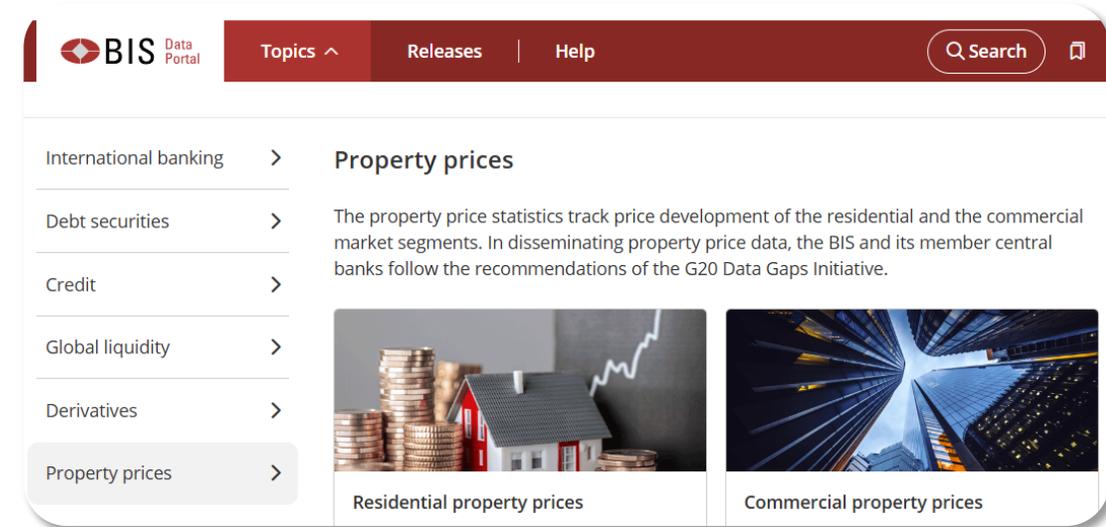
BIS Data Portal

A screenshot of the BIS Data Portal website. The top navigation bar is dark red with the BIS Data Portal logo on the left, and links for 'Topics', 'Releases', and 'Help' in the center. A search bar is on the right. A left-hand menu lists various categories: 'International banking', 'Debt securities', 'Credit', 'Global liquidity', 'Derivatives', and 'Property prices'. The 'Property prices' category is selected and highlighted. The main content area is titled 'Property prices' and contains a paragraph: 'The property price statistics track price development of the residential and the commercial market segments. In disseminating property price data, the BIS and its member central banks follow the recommendations of the G20 Data Gaps Initiative.' Below the text are two image-based links: 'Residential property prices' (showing stacks of coins and a house) and 'Commercial property prices' (showing a modern skyscraper at night).

How we disseminate property price data



BIS Data Portal



Interactive dashboards

How we disseminate property price data



BIS Data Portal



BIS SDMX API

BIS Data Portal

Topics ^ Releases Help Search

International banking > Property prices

Debt securities > The property price statistics track price development of the residential and the commercial market segments. In disseminating property price data, the BIS and its member central banks follow the recommendations of the G20 Data Gaps Initiative.

Credit >

Global liquidity >

Derivatives >

Property prices >

Residential property prices

Commercial property prices

Interactive dashboards

Servers

https://stats.bis.org/api/v2 - BIS Stats API (v2)

Data queries

GET /data/{context}/{agencyID}/{resourceID}/{version}/{key} Data queries

GET /availability/{context}/{agencyID}/{resourceID}/{version}/{key}/{componentID} Data availability queries

GET /schema/{context}/{agencyID}/{resourceID}/{version} Data validity queries

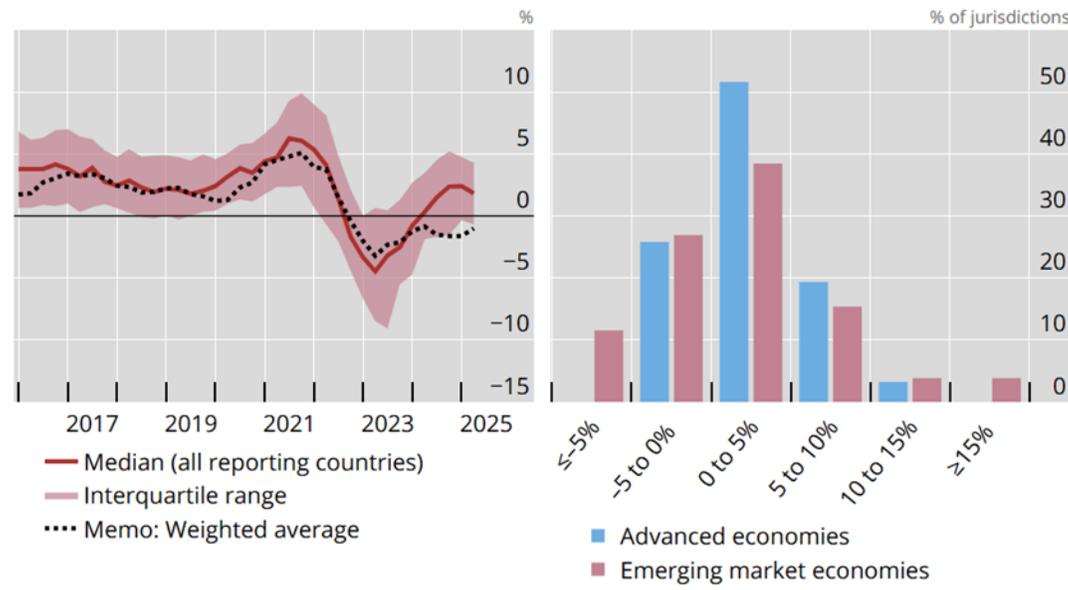
Structure queries

GET /structure/{structureType}/{agencyID}/{resourceID}/{version} Structure queries

BIS quarterly statistical release with selected property prices

Selected data set

A. Developments over time



Although real global residential property prices decreased in aggregate, country-level data show growth in most jurisdictions in Q1 2025,² with a median yoy increase of 1.8% ([Graph 2.A](#)). Indeed, prices increased significantly in the large majority of economies (over two thirds of AEs and half of EMEs).

House price inflation was relatively stable in AEs, with no jurisdictions observing price changes below -5% or above 15% ([Graph 2.B](#)). In contrast, prices in EMEs were more volatile, with jurisdictions there recording both the steepest declines (-8% in Hong Kong, -7% in China and -6% in Türkiye) and highest growth (18% in North Macedonia) ([Graph 3](#)).

Global data structure definition for property prices

Who: BIS, Eurostat, IMF, OECD

What:

- Global SDMX data structure definition (DSD)
- Residential and commercial property prices
- Data collection and dissemination

Why it matters:

- Internationally agreed classification
- Lower reporting burden through data sharing
- Common language for exploring and comparing data

Status and next steps:

- Draft DSD (<https://registry.sdmx.io/data/datastructure.html>)
- Currently being refined following review by statistical working group

Impact of COVID-19 on property prices: commercial vs residential

- Did COVID-19 affect property prices?
- Did residential and commercial segments behave differently during COVID?
- And after COVID?
- The detailed data set can help us answering
 - Comparable CPPI and RPPI
 - Starting in 2020 or earlier
 - ✓ 23 countries

Impact of COVID-19 on property prices: commercial vs residential

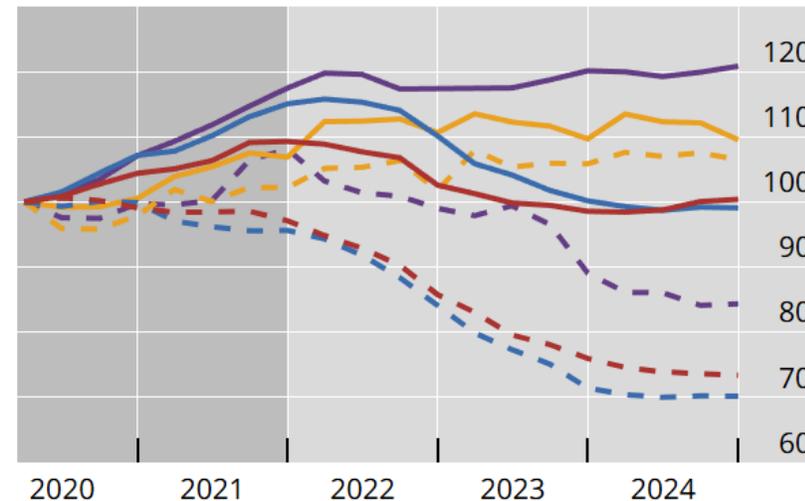
Since covid:

- Real RPPI grew
- Real CPPI declined
- Divergence did not revert post-COVID
- Divergence appears more evident in AEs

Real commercial property price and residential property price indicators in Advanced and Emerging Market Economies

Q1 2020 = 100

Advanced Economies



RPPI

— Euro Area

— Germany

— Japan

— United States

CPPI

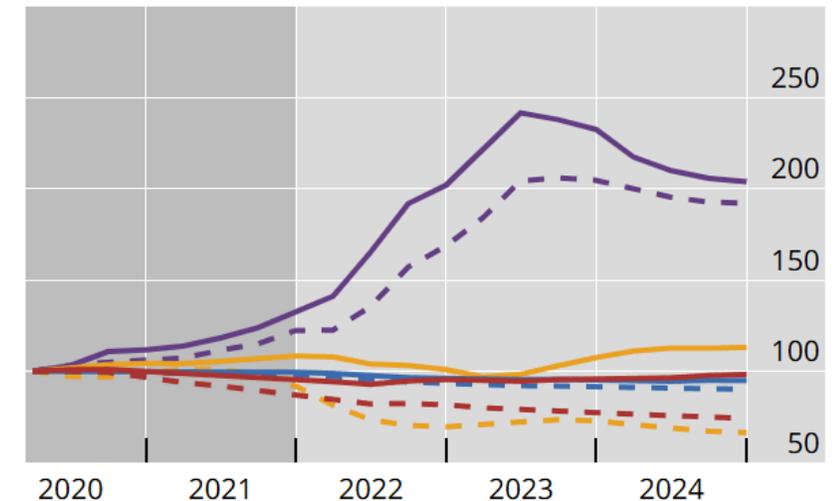
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Emerging Market Economies



RPPI

— Brazil

— Indonesia

— Poland

— Türkiye

CPPI

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Based on quarterly averages: CPI deflated

Source: BIS property price data sets

Impact of COVID-19 on property prices: commercial vs residential

Objective

- Analyze the effect of COVID-19 on **commercial** and **residential property prices**

Steps

- Log of real (CPI-adjusted) quarterly price indices
- Dummy variables to indicate:
 - **COVID** period (Q1 2020 – Q4 2021)
 - **Post-COVID period**
 - **Property type** (residential / commercial)
- Estimate a panel fixed-effect regression including
 - COVID and post-COVID indicators
 - Interaction terms with the property type dummy
 - Country fixed effects

Impact of COVID-19 on property prices: commercial vs residential

Compared to the baseline (pre-COVID RPP):

● Pre-COVID

- Commercial properties have higher prices than RPP

● During COVID

- Residential prices increased significantly
- Commercial prices increased less than residential

● Post-COVID

- Residential prices continued to rise
- Commercial prices declined relative to residential prices

Variable	Coefficient	t-stat	p-val
Commercial (pre-COVID)	0.064	2.406	**
COVID period (residential)	0.148	4.353	***
Post-COVID (residential)	0.173	3.878	***
Commercial x COVID	-0.086	-2.574	**
Commercial x post-COVID	-0.154	-2.948	***

Model information			
Country fixed effects	Yes	Observations	3,160
Countries	23	Estimator	Panel OLS
Time periods	79	Standard errors	Clustered by country

Impact of COVID-19 on property prices: commercial segments

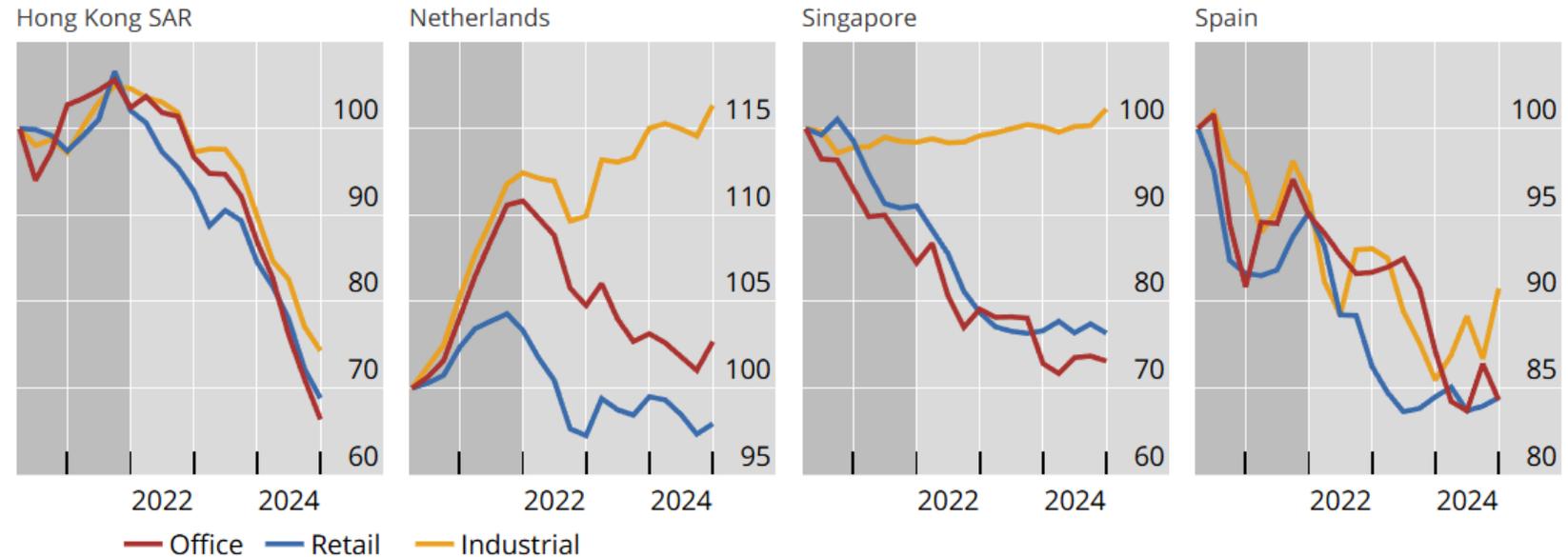
- Did COVID-19 affect commercial segments in different ways?
- Did changes revert after COVID?
- The commercial data set can help us answering
 - Comparable office, retail and industrial price data
 - Starting in 2020 or earlier
 - ✓ Full segment coverage only for 4 countries
 - ✓ Partial data (at least two segments) for 12 countries

Impact of COVID-19 on property prices: commercial segments

- Fewer countries have data
- Country-specific patterns emerge
- Retail sector negatively impacted by covid
- Industrial segment more resilient

Real commercial property price indicators by sector

Q1 2020 = 100



Based on quarterly averages: CPI deflated

Source: BIS Property price data sets

Impact of COVID-19 on property prices: commercial segments

Compared to the baseline (pre-COVID office):

- **Pre- COVID**
 - Retail prices grew faster than offices
 - No clear difference between office and industrial
- **During COVID**
 - Retail underperformed offices
- **Post-COVID**
 - Retail continues lagging behind

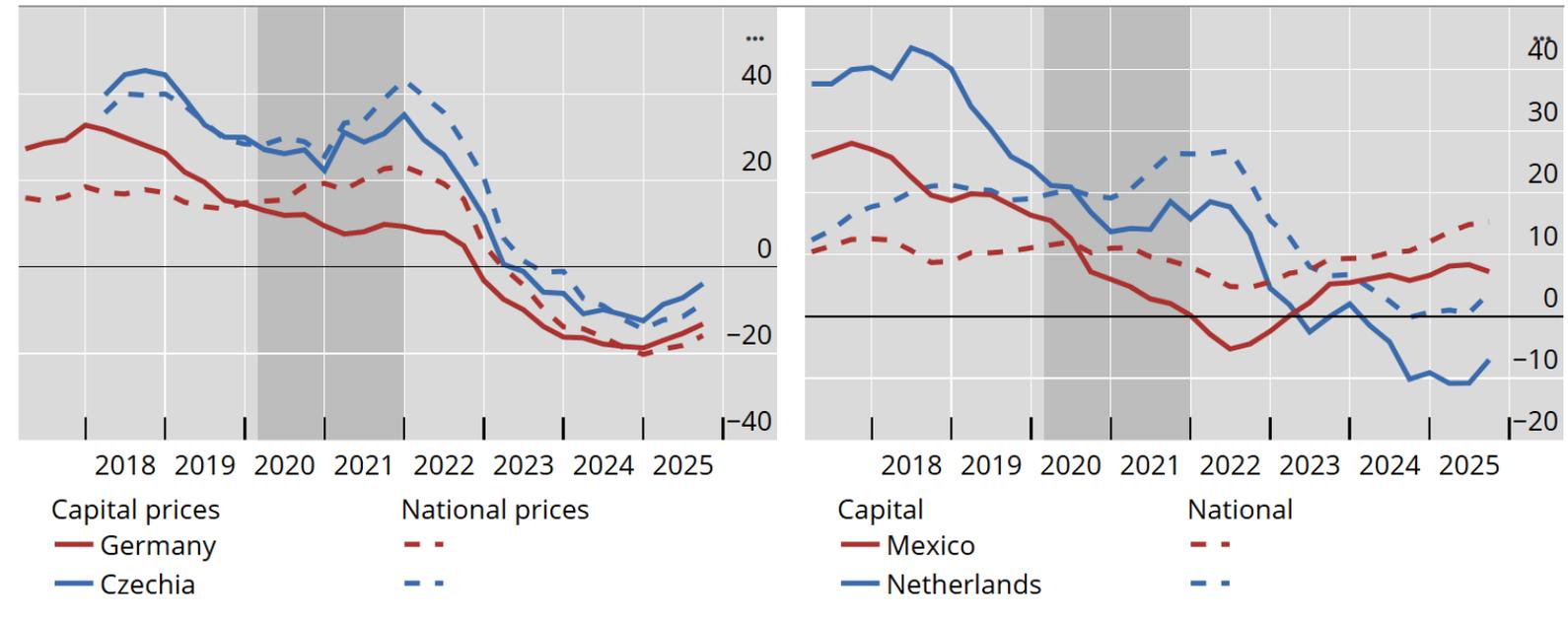
Variable	Coefficient	t-stat	p-val
Retail (pre-COVID)	0.085	2.191	**
Industrial (pre-COVID)	-0.041	-0.693	
COVID (office)	0.021	0.517	
Post-COVID (office)	-0.014	-0.205	
Retail x COVID	-0.073	-1.776	*
Industrial x COVID	0.085	1.094	
Retail x post-COVID	-0.094	-1.937	*
Industrial x post-COVID	0.104	1.215	

Model information			
Country fixed effects	Yes	Observations	1,699
Countries	12	Estimator	Panel OLS
Time periods	79	Standard errors	Clustered by country

Residential property prices during COVID-19: capital cities vs national market

- Before COVID-19, residential price growth in **capital cities often outpaced national markets**
- During and after COVID-19, this pattern **diverged across countries**
- In some cases, capital cities underperformed national markets, while in others both declined

Real residential property price growth at national level and in the capital city or main financial centre
Year on year



Impact of COVID-19 on RPPi: capital cities vs national market

- RPP increased during COVID
- Capital cities (or main financial centres) underperformed national markets during and after COVID
- These differences persist after controlling for GDP growth and unemployment rate
- High unemployment is associated with weaker HPI growth

Variable	Coefficient	t-stat	p-val
Capital/financial centre (pre-COVID)	-0.033	0.013	**
COVID (nationwide)	0.163	0.024	***
Post-COVID (nationwide)	0.156	0.028	***
GDP	-0.001	0.001	
Unemployment rate	-0.027	0.003	***
COVID x capital/fin.centre	0.027	0.013	**
Post-COVID x capital/fin.centre	0.001	0.018	

Model information			
Country fixed effects	Yes	Observations	5,972
Countries	48	Estimator	Panel OLS
Time periods	75	Standard errors	Clustered by country

Way forward: understanding the results

- Continue expanding the coverage of the BIS data sets
- Include more macroeconomic control variables: interest rate, size of the economy, population density...
- Introduce dummy variables for macroprudential policies to measure their impact on price growth



Thank you

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- **Data:** [BIS Data Portal](#)