



BANK FOR INTERNATIONAL SETTLEMENTS

Commercial property prices collection and usages at the BIS

Christian DEMBIERMONT
Head of Data Bank Services,
Bank for International Settlements

ISI 2015 Invited Paper Session (IPS018)

Commercial Property Price Indices and their Place in Official Statistics

Rio de Janeiro, 27 July 2015

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



Outline:

1. Background
2. Country coverage and sources
3. Database usage and references
4. Shortcomings
5. Way forward
6. Annex charts

Background:

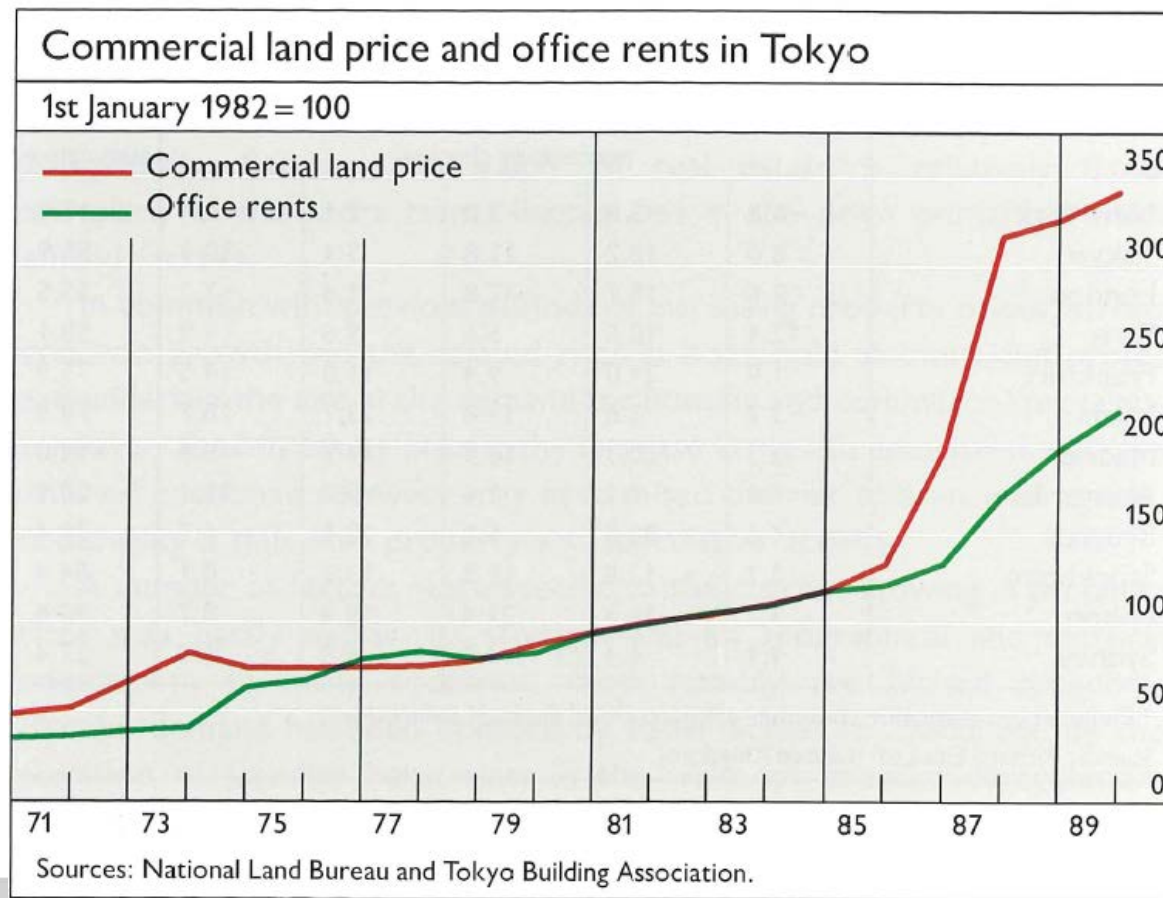
Interest in commercial property values has been on the rise since the crisis, three main reasons:

- Commercial property often serves as collateral for loans issued by financial institutions
- Its value is used as input in the valuation of securitized assets
- Potentially useful in the formulation of monetary policy

The BIS has been promoting the use and analysis of **both** residential and commercial property prices for financial stability purposes.

Background:

In **1989** the BIS Annual Report showed for the first time commercial property price indices. In particular for the case of Japan, these values proved very important in the building up of imbalances in corporate balance sheets.



Background:

Since then further efforts have been made in order to fill the gap existing in property price statistics

First comprehensive dataset: C E V Borio, N Kennedy and S D Prowse (1994): "*Exploring aggregate asset price fluctuations across countries: measurement, determinants and monetary policy implications*", BIS Economic Papers, no 40, April.
Data far back as 1970-1971 for 13 countries



Commercial property prices were used together with equity and residential property prices to construct an aggregate asset price index

Background:

In order to be able to analyse **turning points** and **medium-term cycles** in property markets we needed long time series

Owing to lack of consistent statistics in this area we had to mix different data sources:

- Central banks
- Commercial sources (IPD, JLL)
- Trade associations (NCREIF)
- Academic studies

Country coverage and sources: an **historical internal database**

Commercial property prices, internal database				
Country	Frequency	Start date	Source	Coverage
Australia	Quarterly	1968:Q1	IPD	Office
	Annual	1983	JLL	Sydney
Austria	Annual	2003	IPD	Office
Belgium	Annual	1980	IPD	Office
	Annual	1970	JLL	Brussels
Canada	Quarterly	1985 Q1	IPD	Office
	Annual	1984	JLL	Toronto
Denmark	Annual	1999	IPD	Office
	Annual (disc)	1982	Sadolin	Copenhagen
	Quarterly	1992	NSO	Denmark (all business properties)
Finland	Annual	1997	IPD	Office
	Annual (disc)	1971-2009	Yuoneistomarkkinointi	Helsinki Central Business District
France	Annual	1985	IPD	Office
	Annual (disc)	1980	JLL	Paris
Germany	Annual	1985	IPD	Office
	Annual (disc)	1980	JLL	Frankfurt
	Quarterly	2004	VDP	Germany
Hong Kong SAR	Quarterly (disc)	1983 Q1	NSO	Office
	Monthly	2000-12	NSO	Mixed
Ireland	Quarterly	1995 Q1	IPD	Office
	Annual	1983	IPD	



Country coverage and sources: an **historical internal database**

Commercial property prices, internal database (cont.)				
Country	Frequency	Start date	Source	Coverage
Italy	Annual	2002	IPD	Office (Rome)
	Annual	1983	JLL	Milan
Japan	Semi-annual	1955 H1	Japan real estate institute	Land prices
Netherlands	Annual	1994	IPD	Office
	Annual (disc)	1980	JLL	Amsterdam
New Zealand	Semi-annual	1980 H1	via DBS	Overall index
	Semi-annual	1990 H1	JLL	Auckland
Norway	Quarterly (disc)	Q4 2006	IPD	Office
	Annual	1999	IPD	
	Annual	1980/90	OPAK	Oslo
Portugal	Annual	1999	IPD	Office
South Africa	Annual	1994	IPD	Office
Spain	Annual	2000	IPD	Office
	Annual	1980	JLL	Madrid
Sweden	Annual	1983	IPD	Office
	Annual (disc)	1980	JLL	Amsterdam
Switzerland	Quarterly	1970	Wuest&Partner (DBS)	Office
	Quarterly (disc)	1983	Wuest&Partner	
United Kingdom	Monthly	1986/12	IPD	
	Quarterly	2000Q1	IPD	Office
	Annual	1970	IPD	
	Annual(disc)	1974	JLL	London
United States	Quarterly	1977 Q4	NCREIF	Office
	Semi-annual	19802HY	JLL	New York City

Country coverage and sources :

In addition to the internal database, we receive data from the following countries and are **available on our website**:

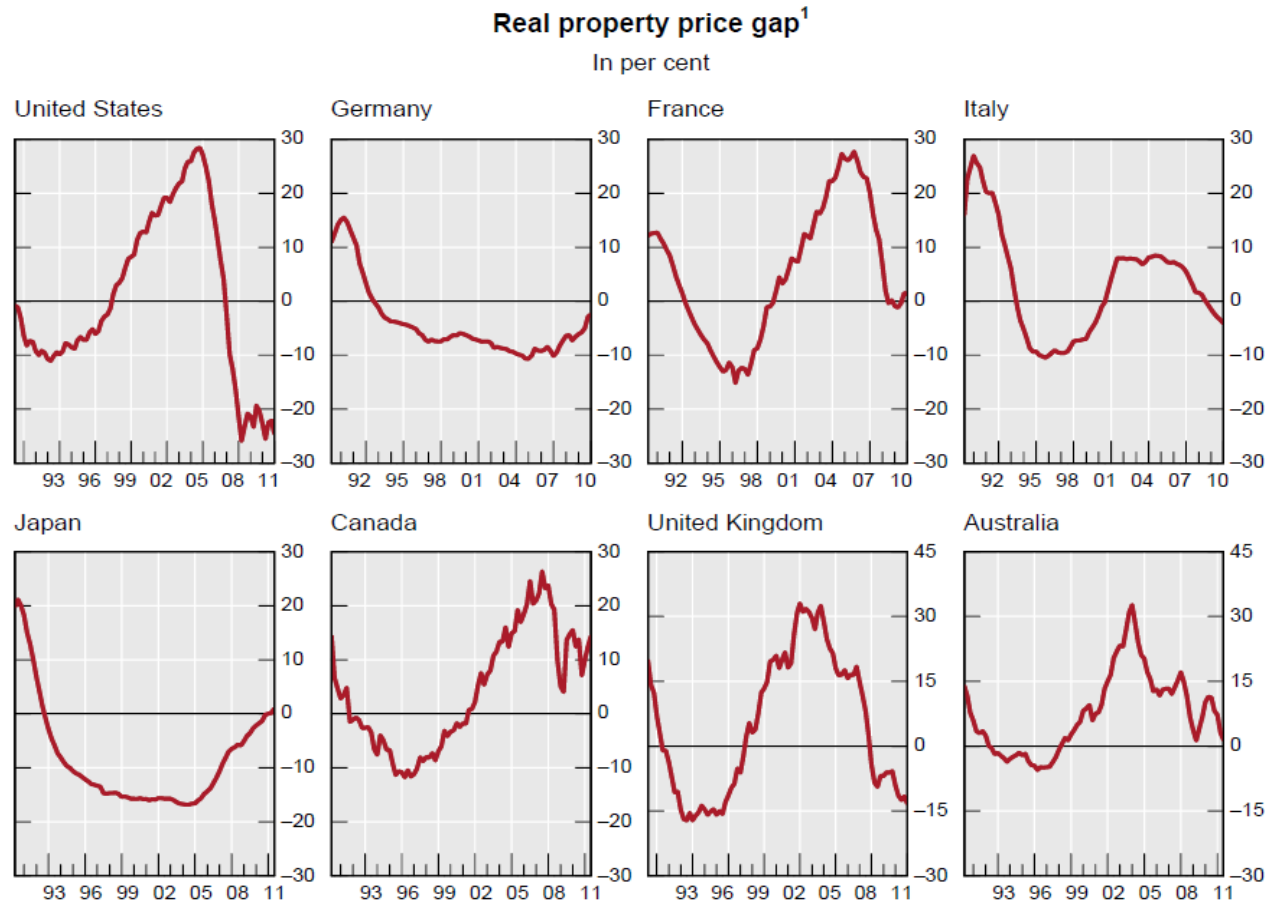
Country	Freq.	Coverage	Type of property	Source
Switzerland	Q	Whole country	Office premises	Private sector
	Q	Whole country	Retail premises	Private sector
China	M	Capital city	Mixed (residential and non-residential)	NSO
Germany	A	Urban areas	Office premises	Private sector
	A	Urban areas	Retail premises	Private sector
	A	Urban areas	Industrial properties	Private sector
	A	Urban areas	Mixed (residential and non-residential)	Private sector
Denmark	Q	Whole country	Commercial property	NSO
	Q	Whole country	Industrial properties	NSO
	Q	Whole country	Agricultural properties	NSO
Hong Kong SA	M	Whole country	Commercial property - office premises	NSO
	M	Whole country	Commercial property - retail premises	NSO
Indonesia	Q	Capital city and subur	Commercial property - office premises	Central bank
Japan	Q	Capital city and subur	Land for commercial	Public corporations
	Q	Big cities	Land for commercial	Public corporations
	Q	Urban areas	Land for commercial	Public corporations
Luxembourg	A	Whole country	Mixed (residential and non-residential) propert	NSO
Philippines	Q	Capital city	Land for commercial	Private sector
Singapore	Q	Whole country	Commercial property - office premises	General Government
	Q	Whole country	Commercial property - retail premises	General Government
	Q	Whole country	Industrial properties	General Government

Database usage and references:

Where are commercial property price series useful?

- Monitoring, regular publication in the Annual report and background information for governors
- Aggregate asset price indicator, C E V Borio, N Kennedy and S D Prowse (1994): "*Exploring aggregate asset price fluctuations across countries: measurement, determinants and monetary policy implications*", BIS Economic Papers, no 40, April
- Signals for future crises, C E V Borio, M Drehmann: "Assessing the risk of banking crises – revisited", BIS Quarterly Review, March 2009
- Davis E P and Zhu H (2005) - "Commercial property prices and bank performance" - BIS Working Paper No 175 and Quarterly Review of Economics and Finance, 49, 1341-1359

Database usage and references: the gaps



¹ Weighted average of **real residential and commercial property prices** with weights corresponding to estimates of their share in overall property wealth; gaps are estimated using a one-sided rolling Hodrick-Prescott filter with lambda set to 400,000; in percentage points as deviations from trend.

Sources: Various real estate associations; national data; BIS calculations.

Database shortcomings:

Available data suffer of a number of inconsistencies

- Mix of definitions, transaction-based indices are available only for a few countries, the majority of the data is based on **valuation models**
- **Frequencies** are mostly annual
- We focus on **offices** as we observed that these were the most widely available data however it is not clear if this is the “ideal” choice
- Still far from global **coverage**, “official” data are scarce in both advanced and emerging market economies

Way forward:

Further steps:

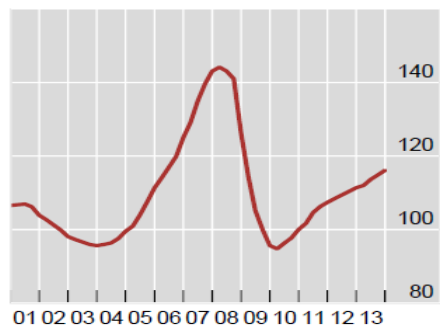
- Improving what already exists:
 - Understanding the methodology of the valuation-based indices
 - Revising the weights used in the aggregate assets price indices

- For the time being, no further efforts in the collection of commercial values, priority has been assigned to the residential property prices

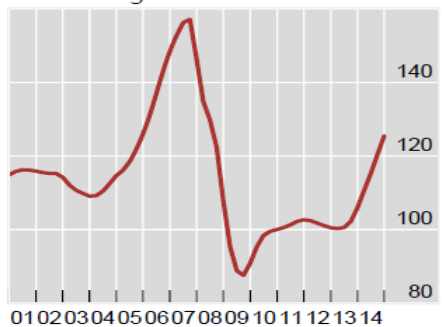
Annex: nominal commercial property prices 2010 = 100

Selected advanced economies

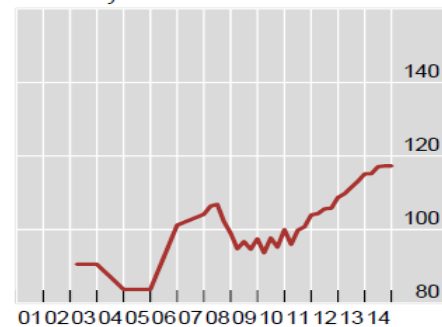
United States



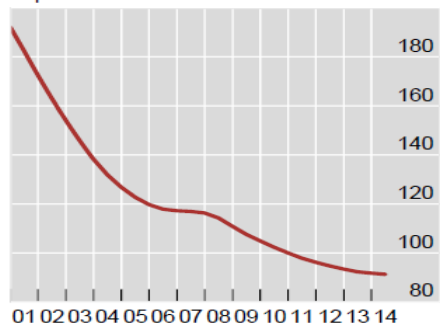
United Kingdom



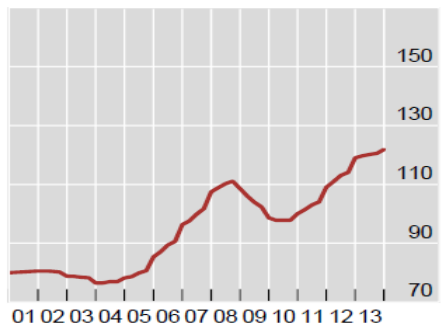
Germany



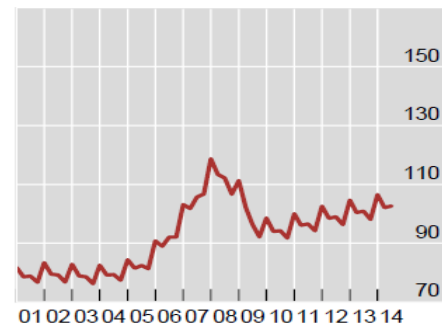
Japan



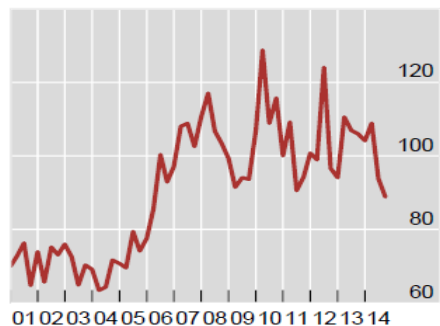
Canada



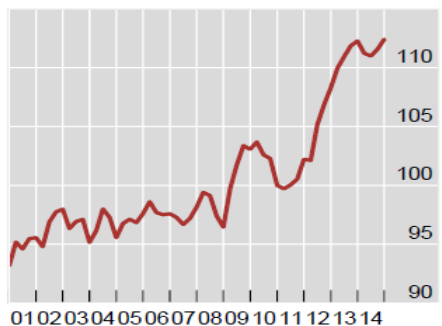
Australia



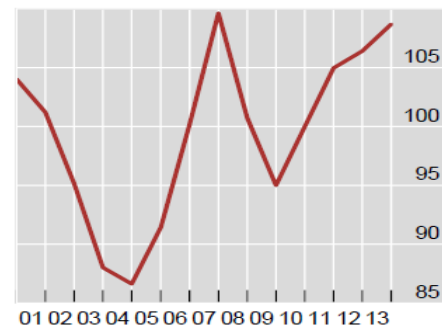
Denmark



Switzerland



Sweden

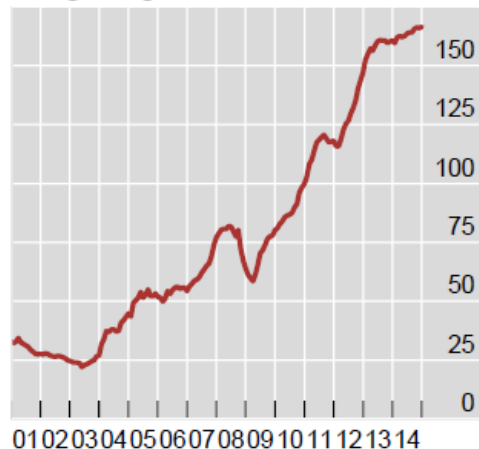


Source: See table in the presentation.

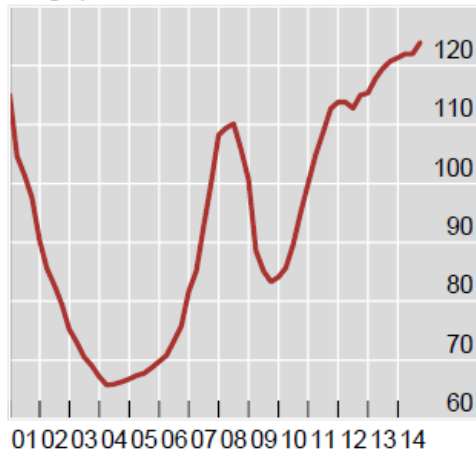
Annex: nominal commercial property prices 2010 = 100

Emerging markets

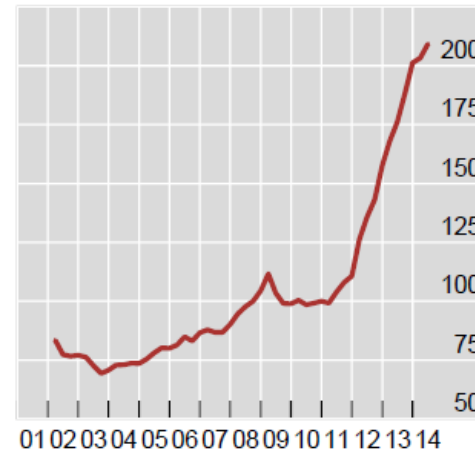
Hong Kong



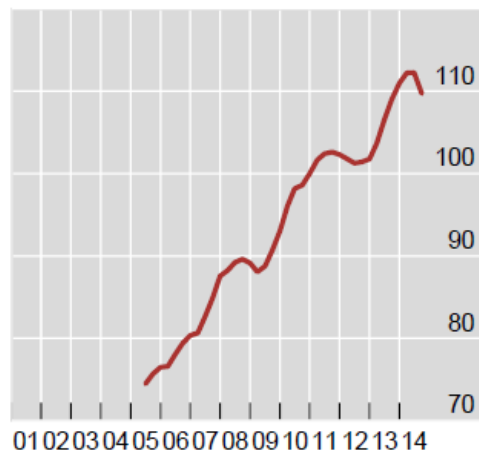
Singapore



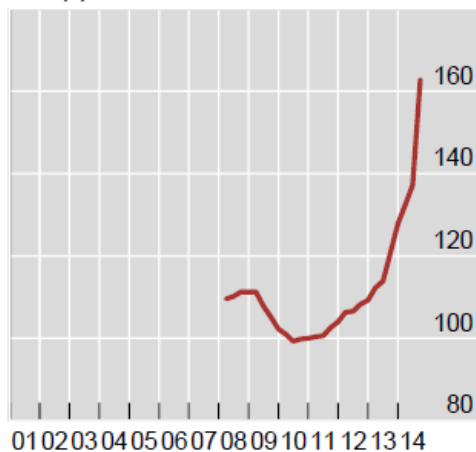
Indonesia



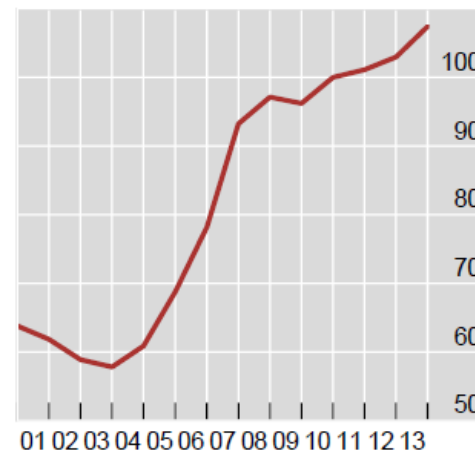
China



Philippines



South Africa



Source: See the table in presentation.