WHAT IS COMMERCIAL PROPERTY?: CONCEPTS AND CLASSIFICATIONS

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CPPI HANDBOOK 2ND DRAFT CHAPTER **4**

PREPARATION OF AN INTERNATIONAL HANDBOOK ON
COMMERCIAL PROPERTY PRICE INDICATORS

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1. CONCEPTS OF COMMERCIAL PROPERTY.

- Before considering property price indexes, let us first define "What Property is".

- Property is one of the most significant **non-financial assets**.

- What's more, its economic role changes depending on the entity that *owns* and *uses* it.

- Entities that "*own*" property are *households*, *firms*, and *governments*, and "*use*" differs for each one.

(1) PROPERTY: WHO "*OWN*" AND HOW "USE".

- With regard to households, use centers on residential use. Households are an entity that consumes housing services. →One may assume that households change the usage method and amount owned in order to maximize utility.

- Property owned by firms is one of the factors in producing goods and services. →Depending on the goods and services produced by the company, property may be used for various purposes, such as offices, commercial facilities, factories, medical facilities, warehouses, or hotels. Companies change the usage method and amount used in order to maximize their profit.

- Governments use property that is required in order to produce public services. →The amount is determined in order to maximize utility for citizens of the state or local residents.

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(2) TOWARDS A NATIONAL ACCOUNTS BASED DELINEATION OF COMMERCIAL PROPERTY

- ## What is Property? SNA perspective.

  - Dwellings (AN111)

  - Other buildings and structures (AN112)

  - Buildings other than dwellings (AN1121)

  - Other structures (AN1122)

  - Land improvements (AN1123)

  - Land (AN211)

  - Reproduced or not: Land(non-reproduced tangible assets) and Building (reproduced tangible assets).

  - Activity : Market/non-market output and output for own final use.

  - Use (residential, office, retail, industrial, etc.)

National Accounts Concepts		Market Output	Non-Market Output	Own-Use
	RPPI and CPPI concepts	Commercial	Non Commercial	Owner Occupied Housing
Dwelling + land underlying dwelling	Residential Property	**Commercial Residential Property**	—	**Owner Occupied Housing**
	Social Housing	**—**	**Social Housing**	—
Building other than dwelling, land underlying	Office Property	**Commercial Real Estate**	**Non-Market Real Estate**	—
	Retail Property	**Commercial Real Estate**	**Non-Market Real Estate**	—
	Industrial Property	**Commercial Real Estate**	**Non-Market Real Estate**	—
Other Structure	—	—	—	—

(3) DELINEATION OF COMMERCIAL PROPERTY IN BUSINESS SECTOR.

- The business sector classifies "*income-producing properties*" and "*own-use properties*"

- The business sector has a greater wealth of experience than the official statistics sector. For example, in the *property appraisal business*, appraisers determine prices based on three methods:

- a) transaction comparison or comparable method,

- b) cost method, (Land + Building).

- c) capitalization method. (*income-producing properties*).

- Where mkt is strong, *transaction comparison method* will dominate, though capitalization method & cost method may also be used.

(5) DATA AVAILABLE.

		Urban area	Own use	Non-Urban area
Dwelling + land underlying dwelling	Residential Property	A	na.	C
Building other than dwelling, land underlying	Office Property	A	B	C
	Retail Property	A	B	C
	Industrial Property	A	B	C
Agriculture land		na.		D

A: Rich transactions and income or rent data.
B: Poor transactions and rich income or rent data.
C: Poor transactions and income or rent data.
D: Strong regulation for conversion and transaction.

MARKET SIZE: CASE OF JAPAN.

Note: figures are trillions of yen

REAL ESTATE ASSETS
2,489
Land   : 1,205
Buildings
          : 1,284

FINANCIAL ASSETS
5,715

Investor Sector

Cash & deposits

1,288
Including 24 in foreign-currency deposits

| 821 (55%) | | Households 1,488 |

Investment assets

4 traditional assets : 1,824

Domestic equities (listed) : 320
Domestic bonds : 1,148
Foreign equities & bonds : 356

| 52 (3%) | | Private corporations (non-financial) 786 |

| 19 (2%) | | |

| | | Institutional investors |

Alternative assets

Equity financing approx.12

Real estate related assets
Investment trusts : 87
Structured-Financing Instruments
: 24
(CMBS : approx. 7)

| 8 (7%) | | Pension funds 122 |

Domestic equities (unlisted) & investments: 233
Derivatives : 91

| 16 (4%) | | Insurance Companies 373 |

| 13 (1%) | | |

<Income Property>
Corporate-owned rental properties (ex. housing)
96

Rental housing
28

Securitized Assets approx. 31 (J-REIT approx. 8)

Debt financing approx. 20 (NRL approx. 16)

Natural resources Intellectual properties & other assets

Other assets

Private financial institution lending : 682
Insurance & pension reserves & Deposits

| 592 (39%) | | Banks 1,523 |
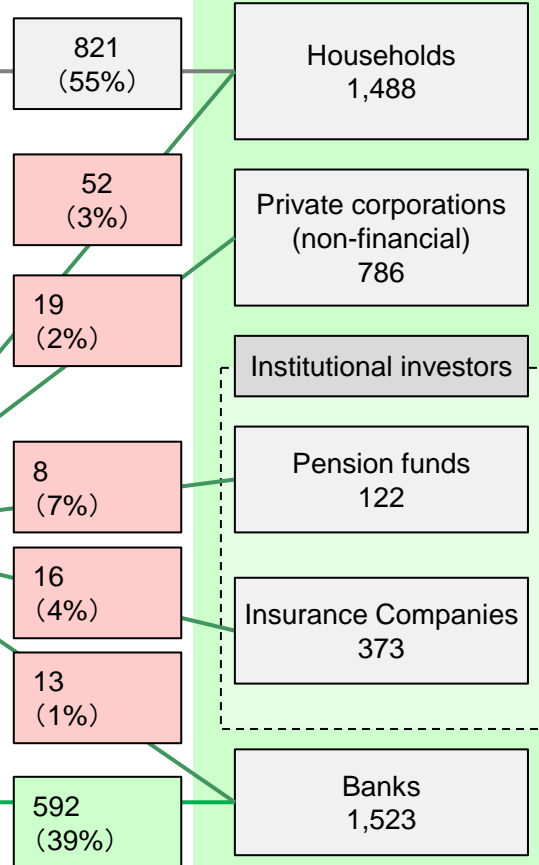
Source: Japanese Cabinet Office, Ministry of Land, Infrastructure, Tourism and Transportation

2. CLASSIFICATION OF COMMERCIAL PROPERTY.

- Commercial properties are very heterogeneous. Heterogeneity exists not only at the individual asset level, but at an aggregate level in populations of properties that effectively trade in distinct asset market segments.

- To construct useful CPPIs it is crucial to recognize this type of aggregate level heterogeneity and market segmentation, because different price dynamics can prevail across different market segments. Prices in one market segment might be rising at the same time those in another segment are falling. If you mix the two segments (or "populations") together without care and attention, then you may think nothing is happening to prices in either market.

(1). CLASSIFICATION IN OFFICIAL STATISTICS.

- Asset classification in SNA perspective.

- For buildings, the acquisition amount should be recorded as the economic value, but subsequently, "consumption of fixed capital", "improvement of building", and "demolition" are taken into consideration in estimating the economic value.

- Therefore, when it comes to the categorization of these assets, one can see that it is necessary to perform estimation by distinguishing between assets with varying depreciation rates or curves.

- Specifically, they must be classified based on property use (housing, office, commercial facility, factory, hotel, medical facility, etc.) and building structure (wooden, reinforced concrete, steel-reinforced concrete).

- →"***Cost method***" in business sector.

CLASSIFICATION IN BUILDING.

- ## Classification of types of construction .

- 11. Residential buildings

- 111. One-dwelling buildings

- 112. Two- and more dwelling buildings

- 113. Residences for communities

- 12. Non-residential buildings

- 121. Hotels and similar buildings

- 122. Office buildings   → Office

- 123. Wholesale and retail trade buildings   → Retail

- 124. Traffic and communication buildings

- 125. Industrial buildings and warehouses   → Industrial

- 126. Public entertainment, education, hospital or institutional care buildings

- 127. Other non-residential buildings

PRODUCT CLASSIFICATION.

- The CPA (Statistical Classification of Products by Activity) 2008.

- Residential.

- Business.

- Industrial and warehouses.

- Agricultural.

- Non-residential properties include: factories, office, warehouses, theatres, multiple-use buildings that are primarily non-residential, agriculture, forestry properties, similar properties.

CLASSIFICATION IN J-SNA.

- Use × building structure .

(Use)

(Building structure)

1.Dwellings
1.Houses owned by corpoations
2.Complex housing owned by corporations
2.Buildings other than dwellings
3.Plants
4.Warehouses
5.Offices
6.Stores
7.Hotels
8.Restaurants
9.Laboratories
10.Model home
11.Recreation and training facilities
12.Other buildings

×

wooden: W
steel-framed reinforced concrete: SRC
reinforced concrete: RC
steel-framed: S
other structure

Source: NOMURA, K and Y.SUGA (2014), " Asset Service Lives and Depreciation Rates based on Disposal Data in Japan" ESRI Working Paper(Mimeo).

(2) CLASSIFICATION IN BUSINESS SECTOR.

- Building usage type "*sectors*," geographic location "*markets*," and the perceived physical quality and/or size "*class*" of the individual properties.

- **Sectors**: offices, retail, industrial (including logistics) and rental residential.

- **Geographic Regions & Markets**: geographical divisions, within the metropolitan region or not, etc.

- **Property Physical Quality & Size Classes**: Class A (sometimes referred to as "prime" or "premium" or "institutional quality") or Class B.

3. CLASSIFICATION OF J-CPPI

- In Japan, since the economic system is heavily reliant on land, there is a long history of estimating land asset amounts in official statistics.

- The survey on appraisal based property price indexes started in 1926.

- Land asset amounts were estimated in 1970 as a "National Wealth Statistic" and joined to the National Accounts (J-SNA).

- The "Corporations Survey on Land" begun in 1993 has companies declare the land they own and collects information on the land's address (location), size, and characteristics. In addition, a *hedonic index* is estimated using transaction price information and estimate "Land asset amounts" which owns by.

(1) CLASSIFICATION IN J-CPPI.

- CPPI's for "Land with Structure".
  - Retail
  - Office
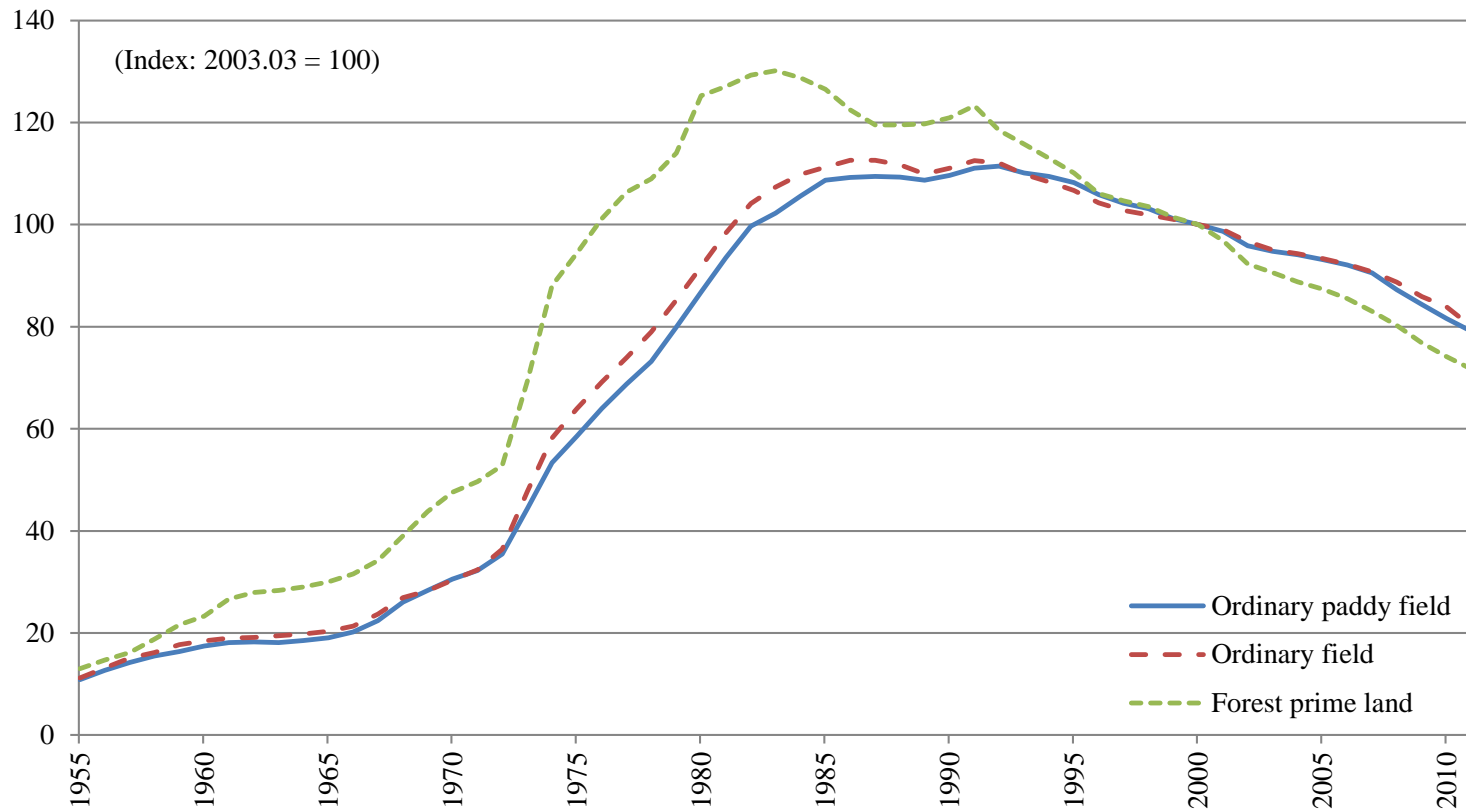 - Warehouse
  - Industry or Factory

- CPPI's for "Land".
  - Commercial
  - Industrial

(2). APPRAISAL BASED INDEXES FOR CPPI IN JAPAN.

(Index: 2003.03 = 100)

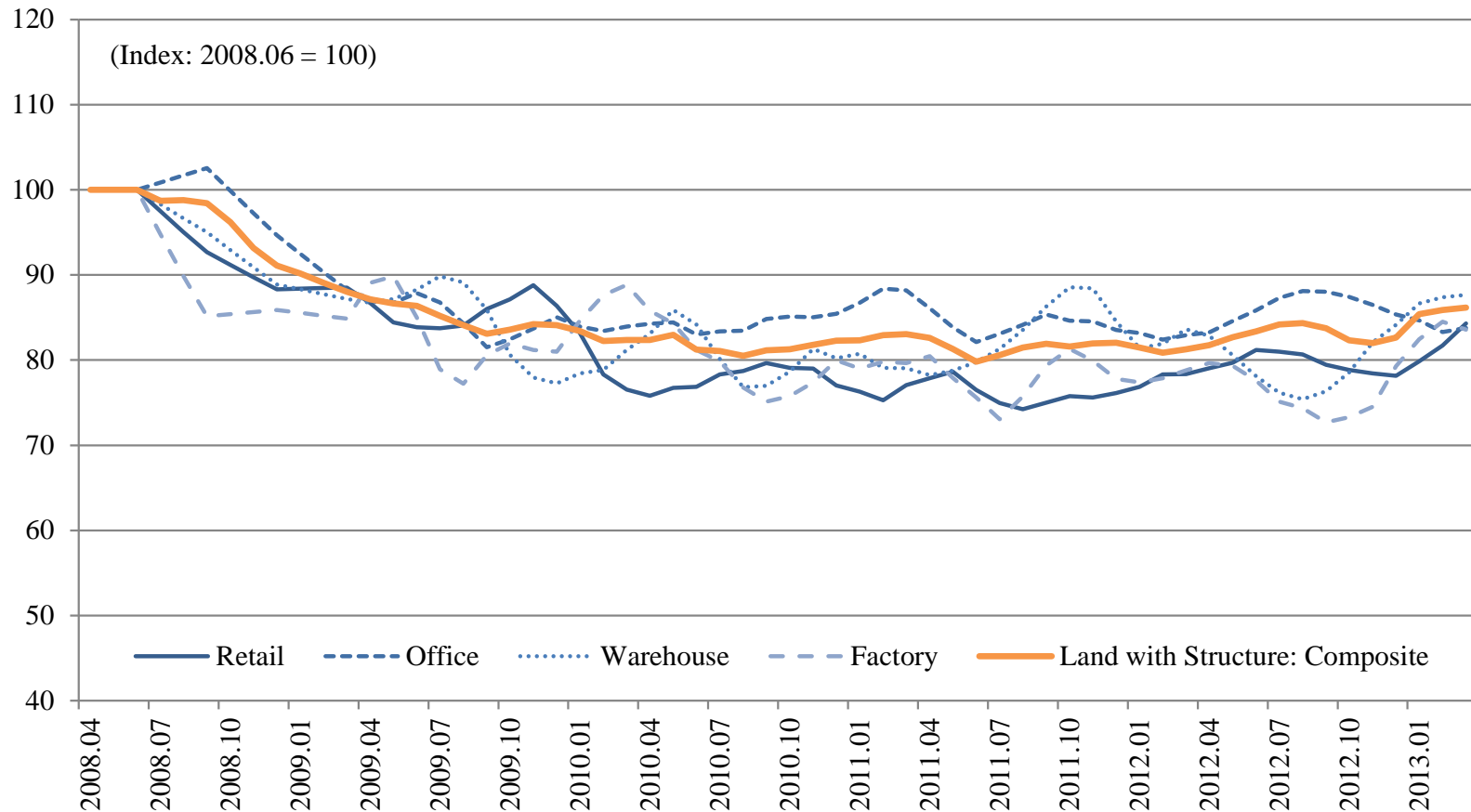Commercial
Residential
Industrial
Composite
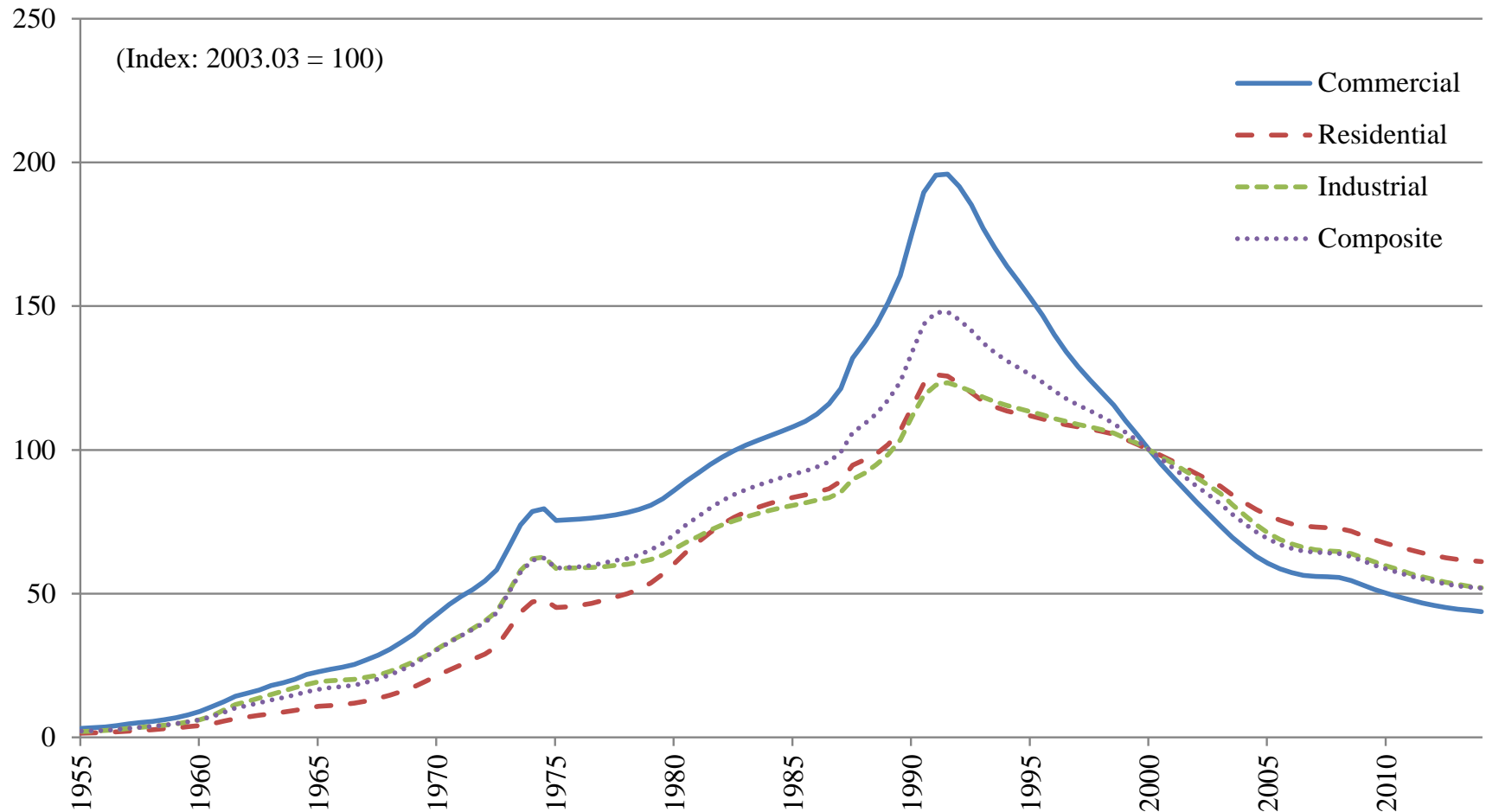
Source: Japan Real Estate Institute, Research & Study Department, "Urban Land Price Index"

# (3). APPRAISAL BASED INDEXES FOR AGRICULTURAL LAND IN JAPAN.

Source: Japan Real Estate Institute, Research & Study Department, "Survey on Farmland Value and Rent" and "Survey on Timberland Value"

(4). TRANSACTION BASED OFFICIAL CPPI IN JAPAN.

(Index: 2008.06 = 100)

Legend: Retail, Office, Warehouse, Factory, Land with Structure: Composite

Source: Japanese Ministry of Land, Infrastructure, Tourism and Transportation

(5). TRANSACTION BASED OFFICIAL COMMERCIAL LAND PRICE INDEXES IN JAPAN.
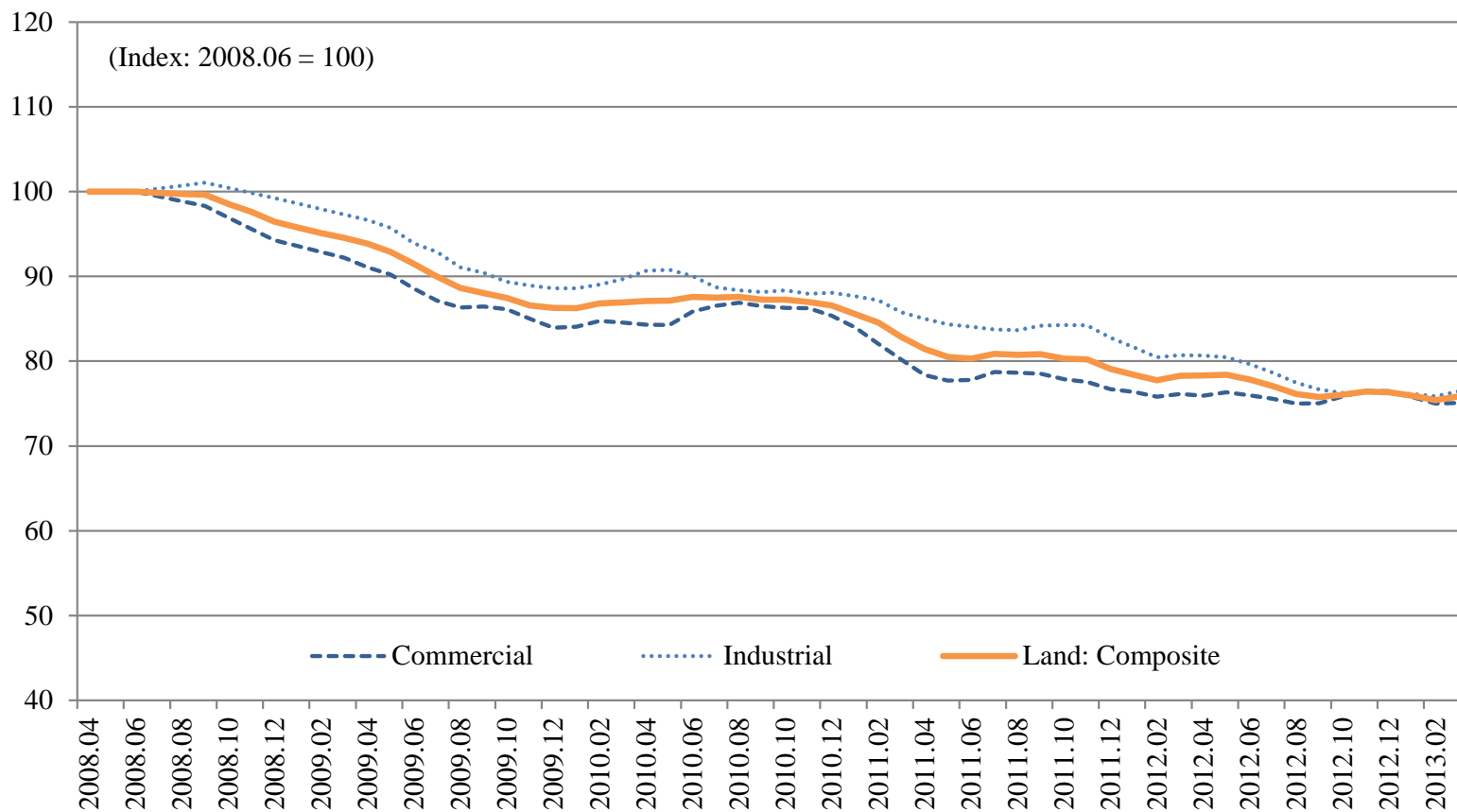
(Index: 2008.06 = 100)

- - - Commercial .... Industrial —— Land: Composite

Source: Japanese Ministry of Land, Infrastructure, Tourism and Transportation

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Thank you!

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