

US-Japan Bi-Lateral Housing Initiative: Aging in Place

Verification of myth that “Value of the structure of wooden residential properties in Japan becomes zero after 20 years of construction”
~Addressing challenges for introduction of reverse mortgage in Japan~

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Background information

Feb 2017 Aging in Place Kick-off Event in DC

JHF explained overview of housing finance market in Japan and current status of reverse mortgage market in Japan. After the roundtable, there was a break session and finance team agreed that US researcher will study feasibility of reverse mortgage in Japan based on data to be provided by JHF.

Jun 2017 Aging in Place 2nd Event in DC

JHF presented more detailed analysis of elderly situation in Japan and explained more detailed analysis of housing market in Japan where housing price declines more rapidly than in the US after the construction. JHF provided data to Ginnie Mae to be transmitted to Dr. Green.

Besides,

Oct 2016 JHF and Ginnie Mae co-hosted the 2nd US-Japan Housing and Capital Markets Roundtable in Tokyo based on bilateral Memorandum of Understanding (MOU) concluded in Jan 2014. One of the agenda of the roundtable was reverse mortgage. After the roundtable, Ginnie Mae invited JHF to contribute an article to HUD “Cityscape” on reverse mortgage.

Mar 2017 HUD “Cityscape” was published which includes an article by Mr. Kobayashi et al.

The data provided to Dr. Green in Jun 2017 includes 830,716 granular transaction data on houses and land in Tokyo Metropolitan Area from 2005 to 2017. Among the 3 major risk associated with reverse mortgage, i.e. longevity risk, interest rate fluctuation risk, and value of collateral risk, the last one relates to more directly to housing market and as such, using the same data, more detailed analysis of proprietary nature of Japanese property market is analyzed in this paper, which implies a lot for reverse mortgage market in Japan.

Per square meter price of existing condo units in Tokyo (2016)

(years 0 = 100)

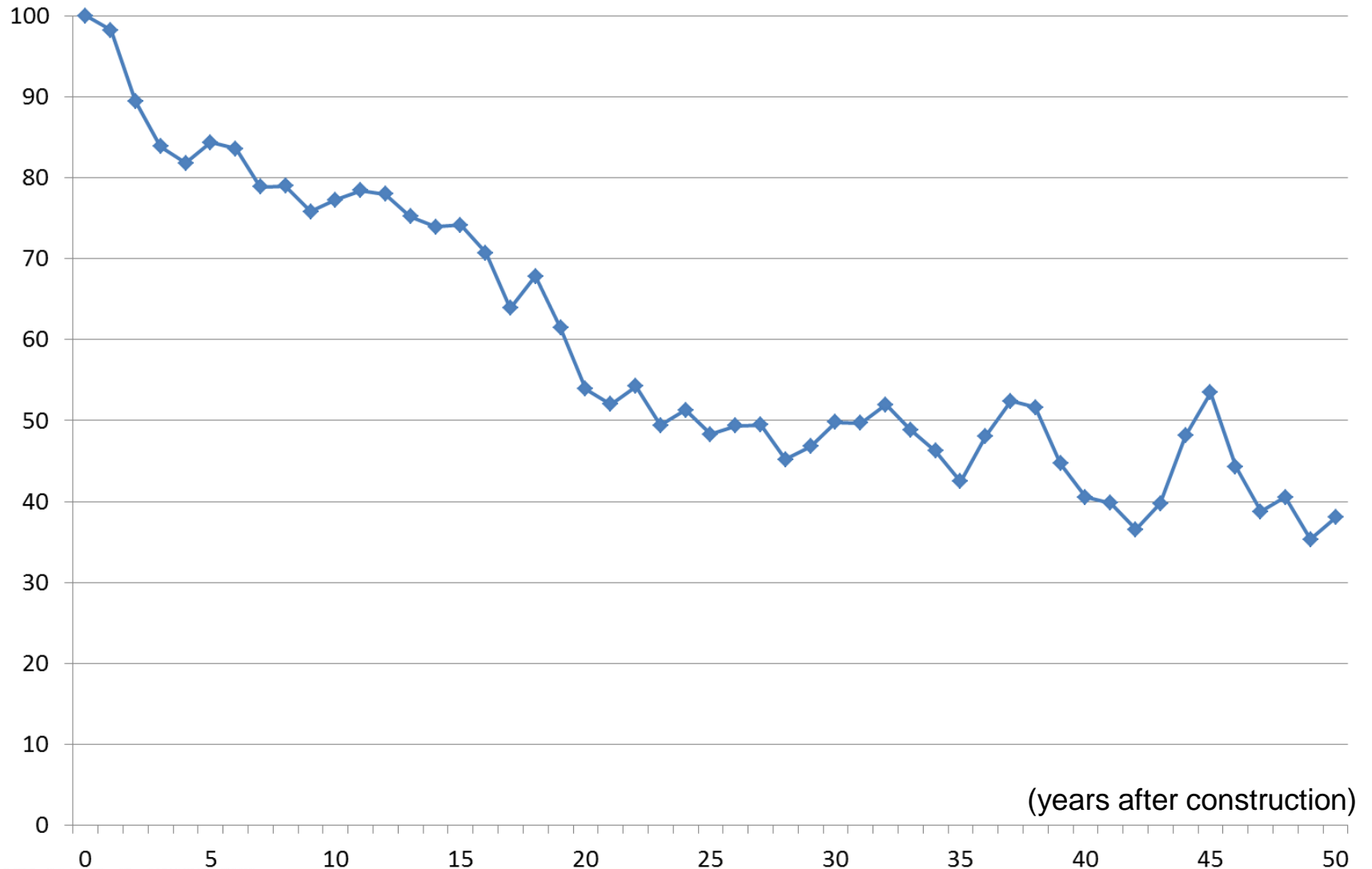
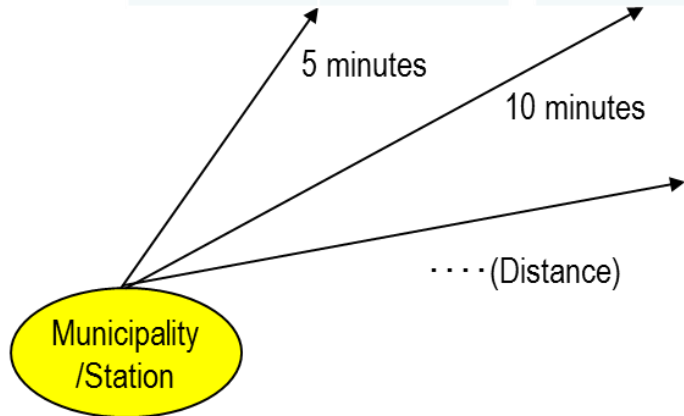


Image of analytical approach

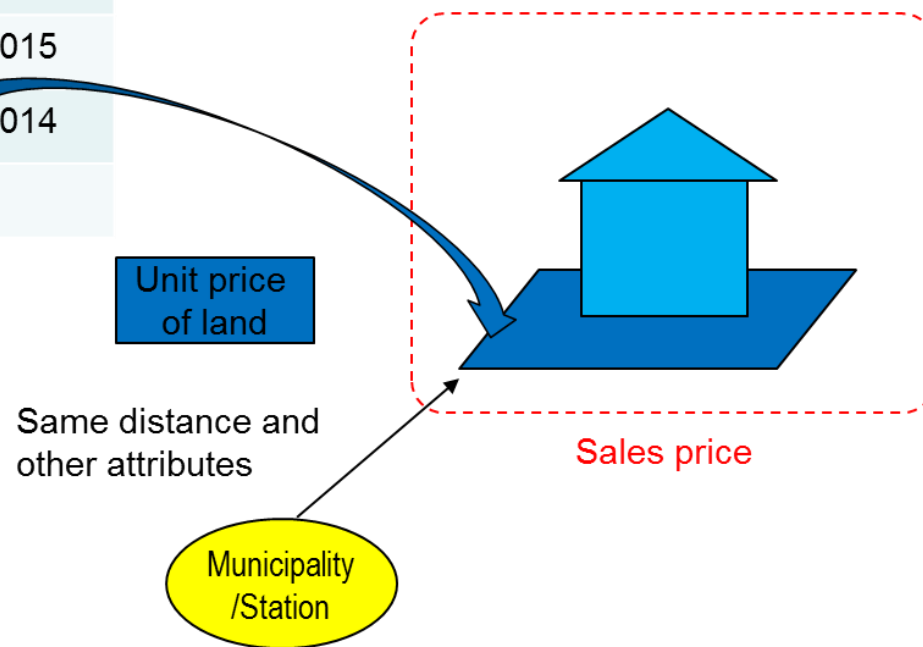
Average land price tables for each location

Land use	Residential	Commercial	Residential	Commercial
Year of transaction	2016	2016	2016	2016
	2015	2015	2015	2015
	2014	2014	2014	2014

$$\text{Sales price} = \text{Unit price of land} \times \text{lot size} + \text{Value of structure}$$



Data for land only

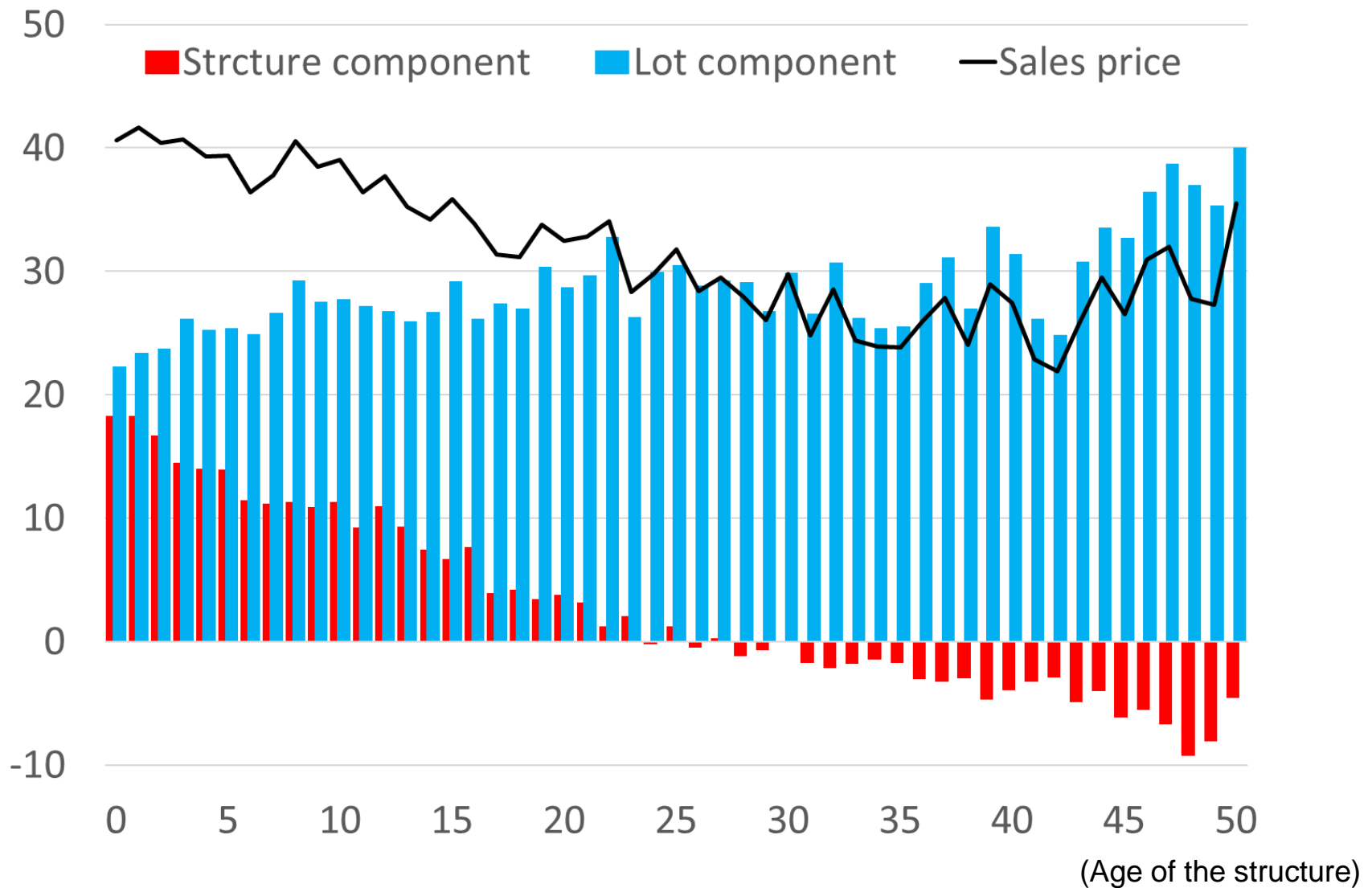


Data for single detached house

(Source) Created by editing the Real Estate Transaction-price Information (Ministry of Land, Infrastructure, Transport and Tourism) (http://www.land.mlit.go.jp/webland_english/servlet/MainServlet) ※hereinafter referred to as “MLIT” unless

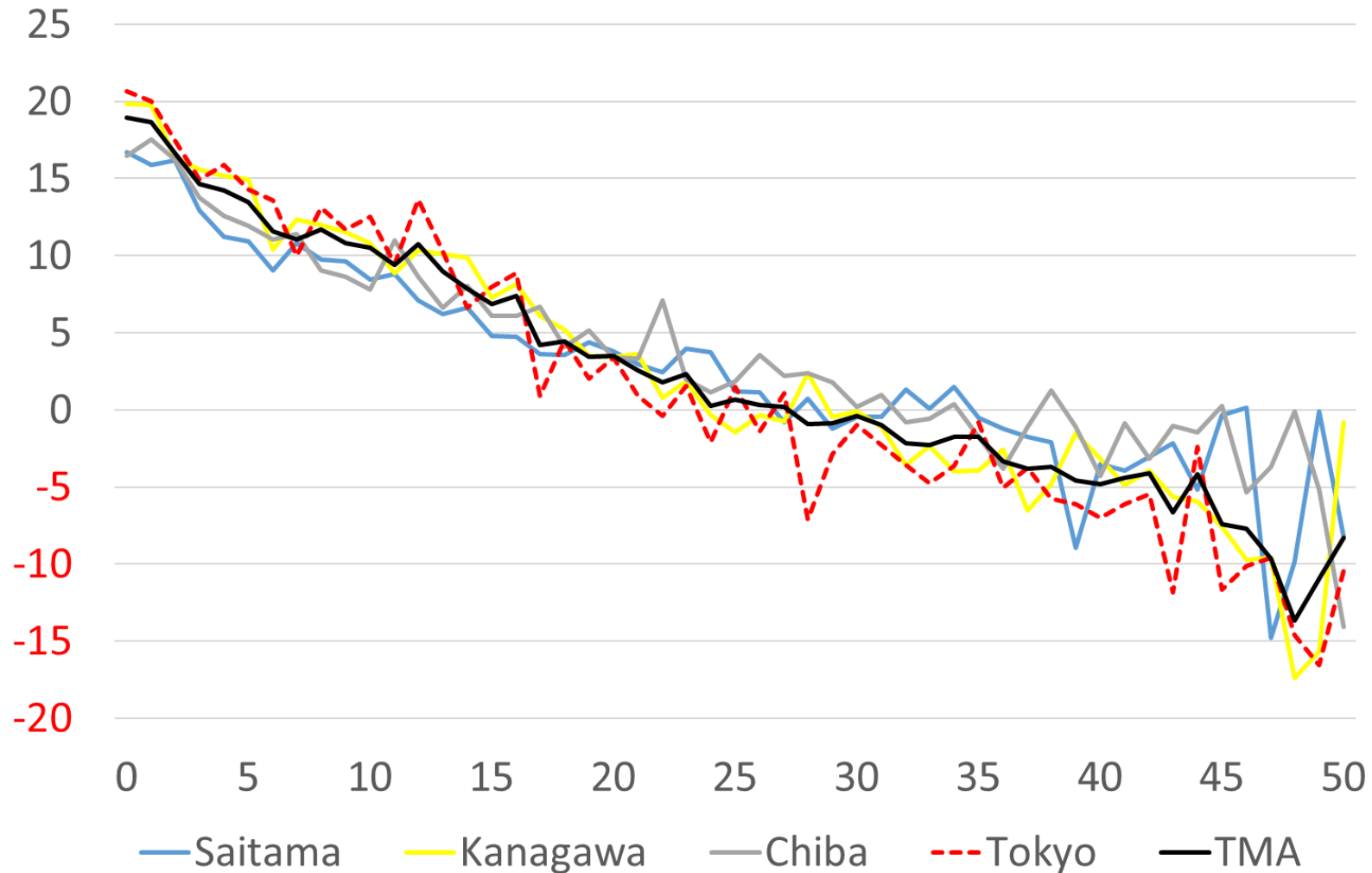
Unit price of wooden single detached houses with breakdown of structure and land component

(Million yen /unit)



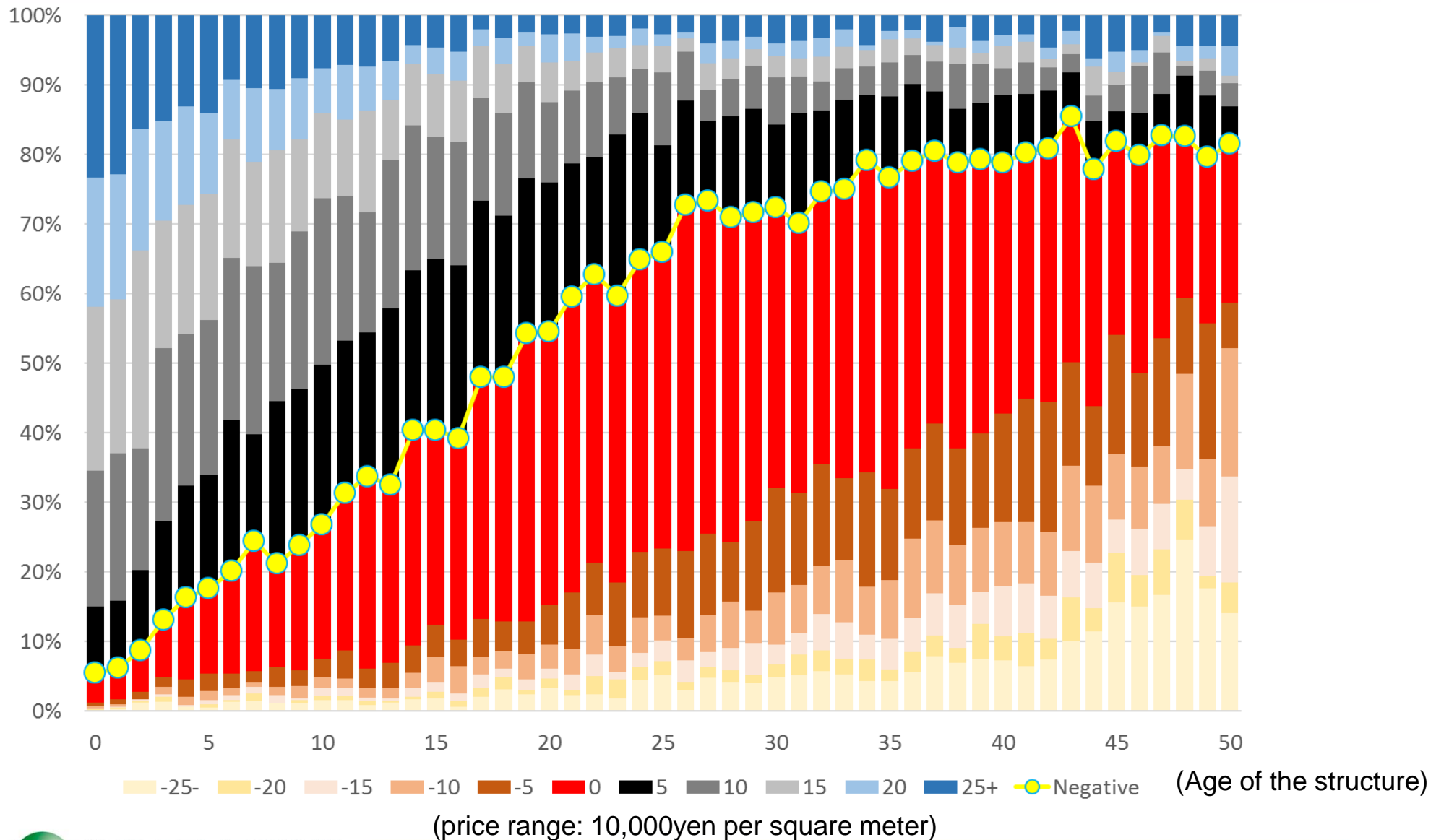
Per square meter value of residential structure of wooden houses

(10,000 yen/m²)



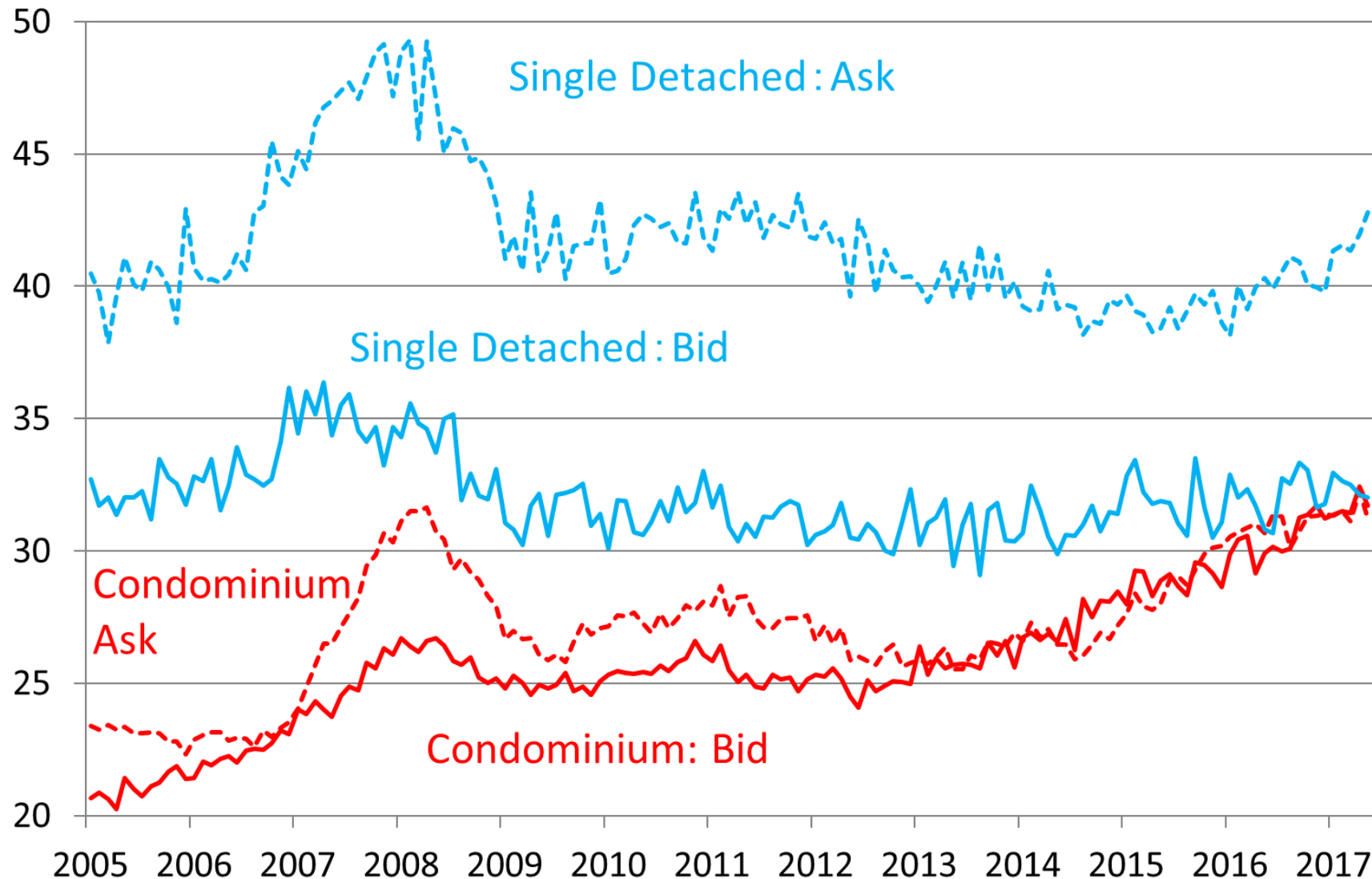
(Age of the structure)

Share of price range of structure component by age of the structure

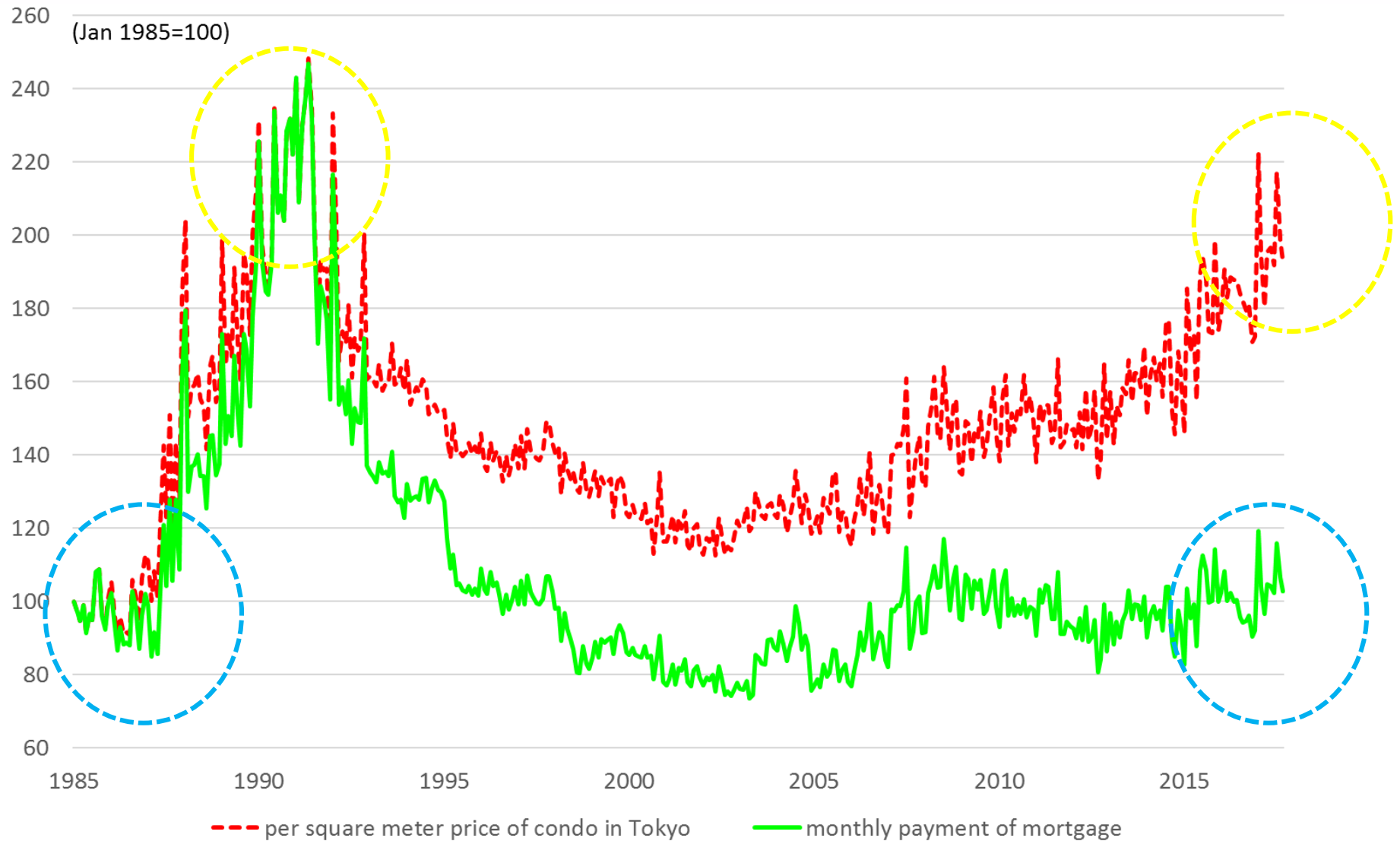


Ask and Bid price of existing houses

(million yen / unit)



Price of new condo is close to “Bubble” period, but remains affordable



(Note) monthly payment of mortgage is computed based on interest rate of GHLC/JHF 35 year fixed rate mortgage.

Conclusion

- The myth that “Value of the structure of wooden residential properties in Japan becomes zero after 20 years of construction” was almost true.
- The value of the structure component can go negative, instead of stopping at zero, after 30 years.
- The structure component was not evaluated as important as in the US. In order for the structure of the house to be properly reflected to the pricing of the house after due maintenance, it would be necessary to educate consumers as well. With increase of such transaction, transparency of the pricing would be enhanced.
- As the custom to regularly maintain the house spreads, collateral value of the house would be maintained and Japanese market for existing house would expand and become more close to the US market.
- If the existing home transaction expands, there is a possibility for the reverse mortgage market to expand in Japan and thus enrich the living of people in Japan.

Takeaway

From saving money to saving value of construction

In Japanese,

貯蓄 → 貯築

Chyo - chiku

Chyo - **chiku**

Thank you for your attention.

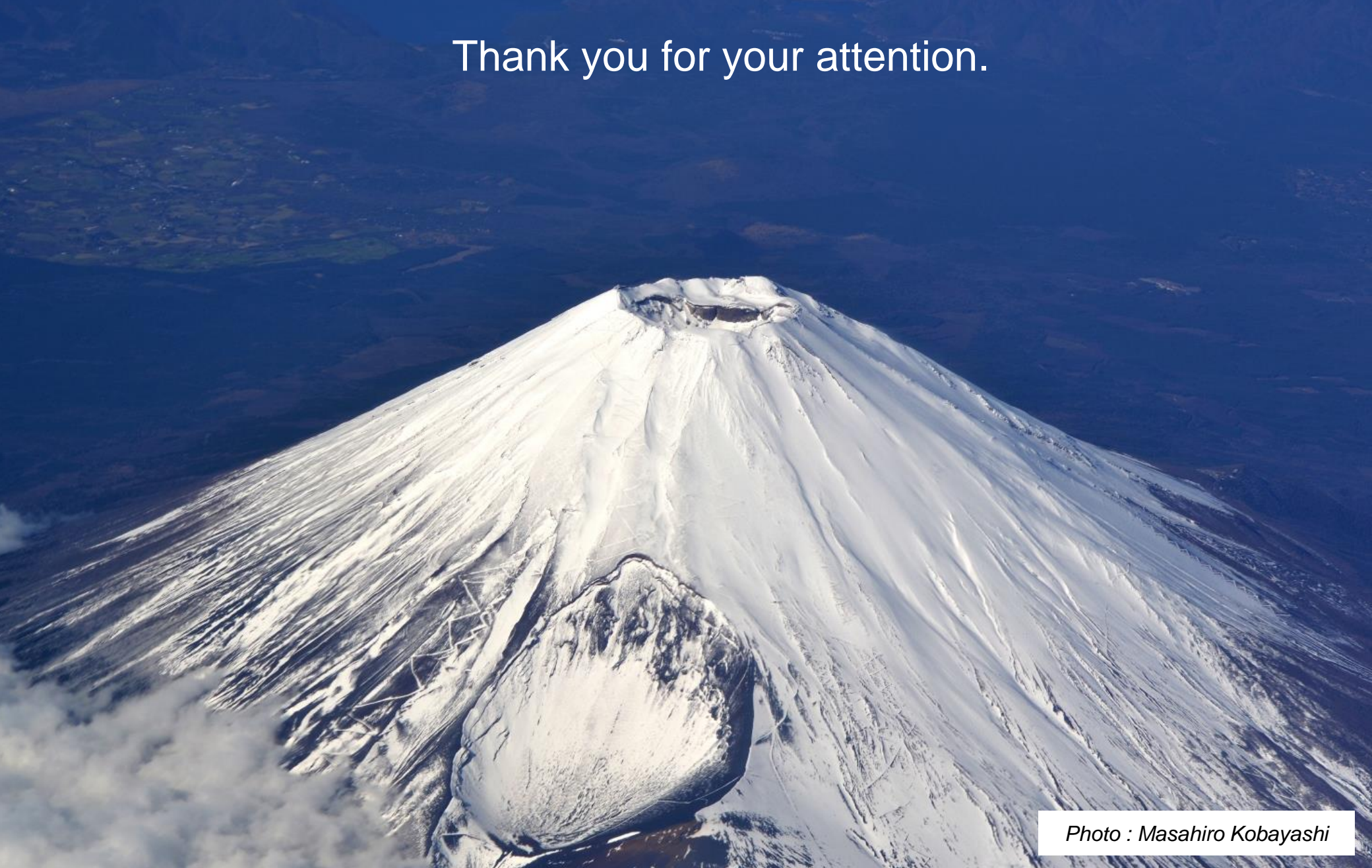


Photo : Masahiro Kobayashi

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