

Comments

Fukui and Yagasaki's paper

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This paper

- Measures **the impact of stock purchase policy**
- BOJ is the only central bank purchasing stocks
- Stock purchase indirectly by purchasing index-linked ETFs

- BOJ's purchase **increases long-term interest rate**, but no impact on stock prices before YCC
- After the introduction of YCC, **interest rate stopped responding and stock prices rises** when BOJ purchased stocks
- **YCC matters!**
- Support a theory that explains both stock and bond markets are inelastic

This paper

For ETFs;

- Provides solid, concrete empirical analysis with figures
- **Sample split into periods based on policy changes**, cut-off points detected

For JGB

- Policy changes after introduction of YCC, not considered, more analysis?

For theoretical framework

- **Assumption**, existence of central bank, can be monopolistic?
- **Discussions** on inelasticity connected with the size?

ETF(comment 1)

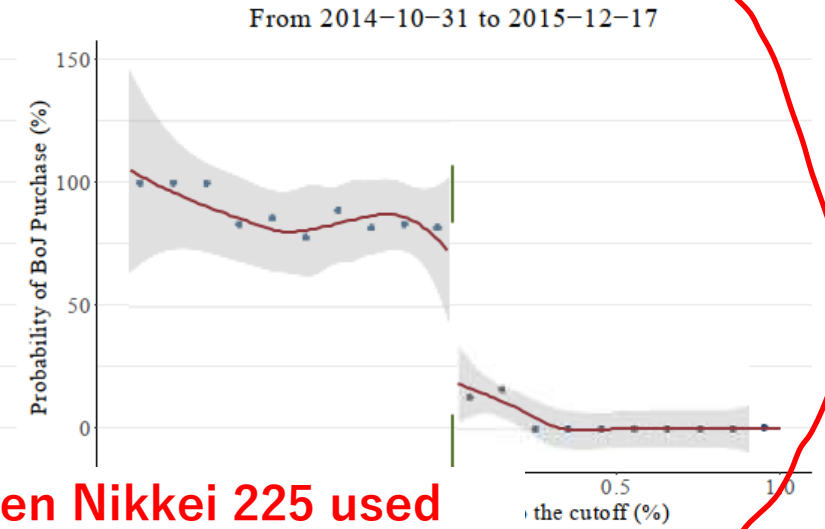
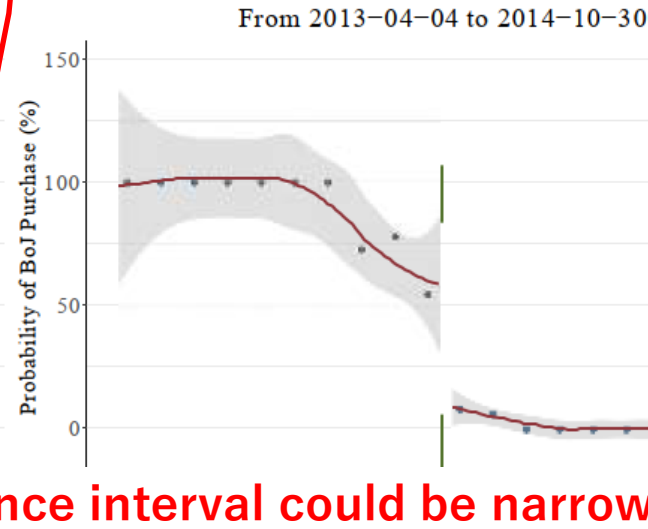
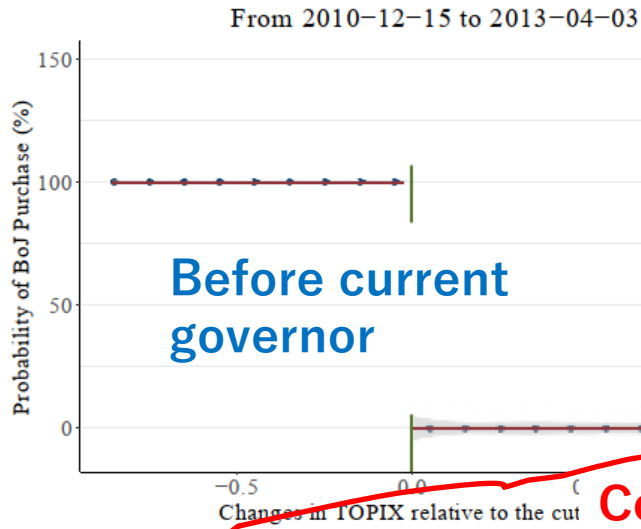
- The bank purchased more ETFs tracking Nikkei 225 until Sep. 2016, then gradually declined the ratio
- The cut-off rule could have been based on Nikkei 225 rather than TOPIX until recently
- For robustness tests, try using **Nikkei 225 as benchmark?**

Nikkei 225

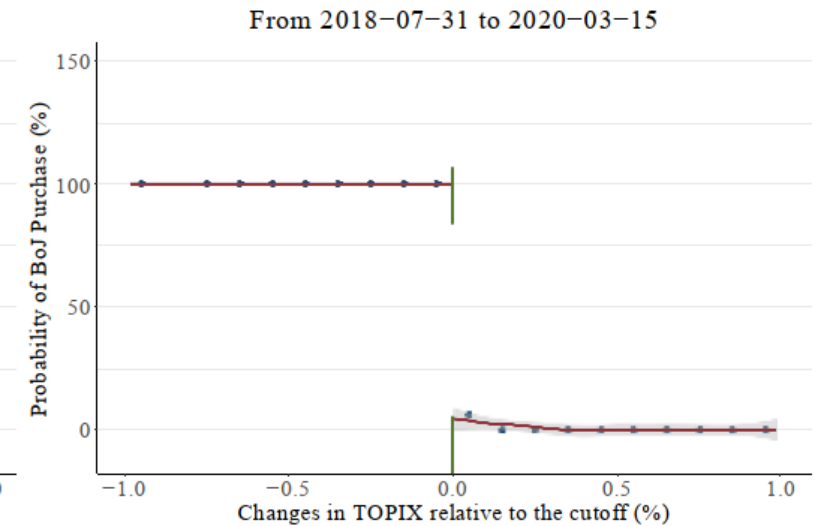
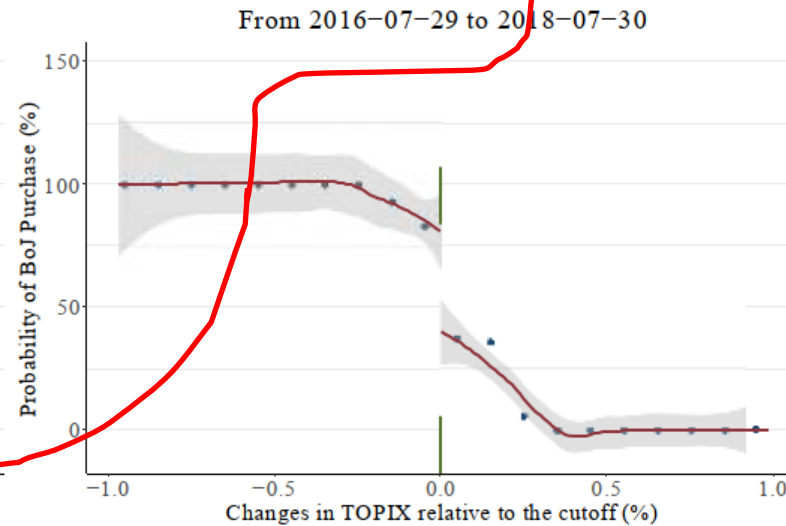
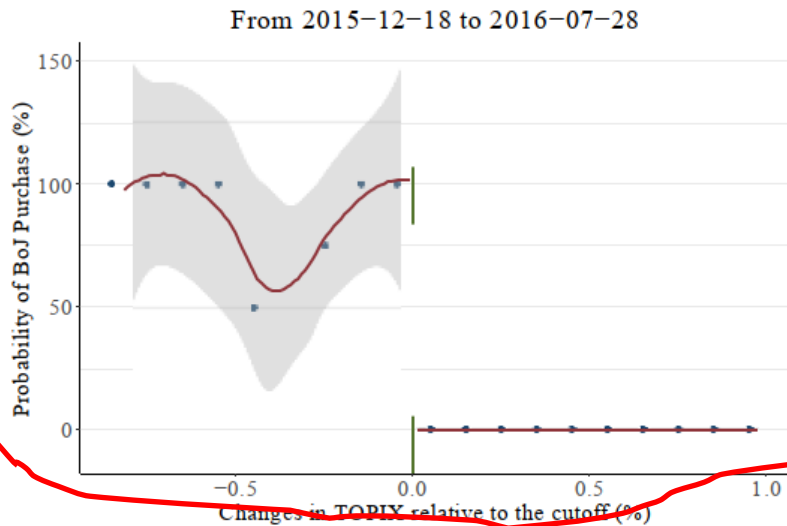
- Purchase based on market capitalization of each ETF
- More than half were Nikkei225
- **ETFs tracking Nikkei 225 began to decline from Sep. 2016**
 - 1) 3 tril. yen/year, proportional to the market value; 2.7 tril. yen/year for TOPIX
 - 2) 1.5 tril. yen/year, proportional to the market value; 4.2 tril. yen/year for TOPIX
- **Stopped buying Nikkei 225 ETFs in March 2020**

All ETFs are tracking TOPIX since then

ETF (comment 1)



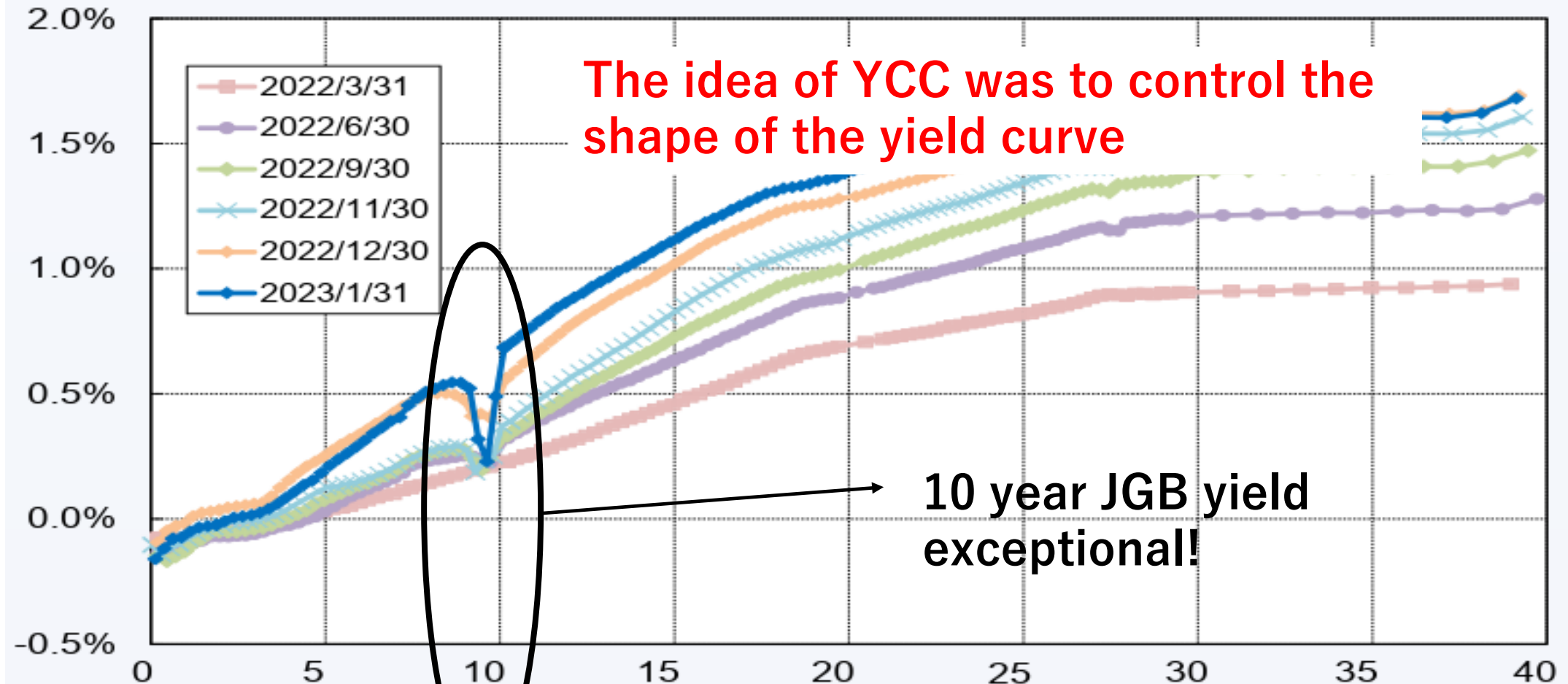
Confidence interval could be narrower when Nikkei 225 used as BOJ mainly purchased Nikkei 225 ETFs until Sep.2016



JGB (Comment 2)

- When YCC was introduced, pegging around 0%
- Dividing sample into two, **before and after YCC**
- The 10-year yield could move **0.1%** above or below zero in July 2018
- BOJ widened the band to **0.25%** in March 2021
- Again doubled the band to **0.5%** in December 2022
- Changed over time, impacts could be larger later period
- Similar to ETFs, **three parts (-Sep. 16, Oct. 16-July 18, Aug.18-)?**
- **10 year JGB yield** move differently under YCC, taking average?

JGB Yield Curves



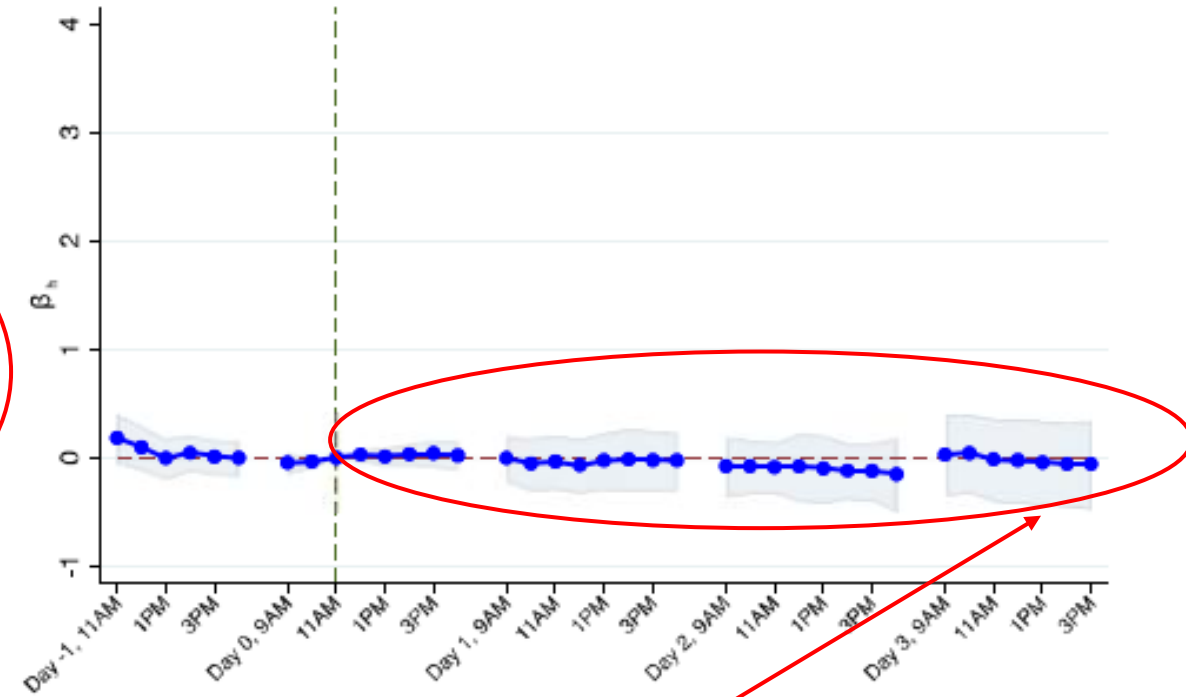
Source: Japan Bond Trading Co.,Ltd.

Source: Ministry of Finance(2023) 「Japanese Government Bonds Newsletter」 Feb.2023

(D) JGB 10-Year Yield Response before YCC

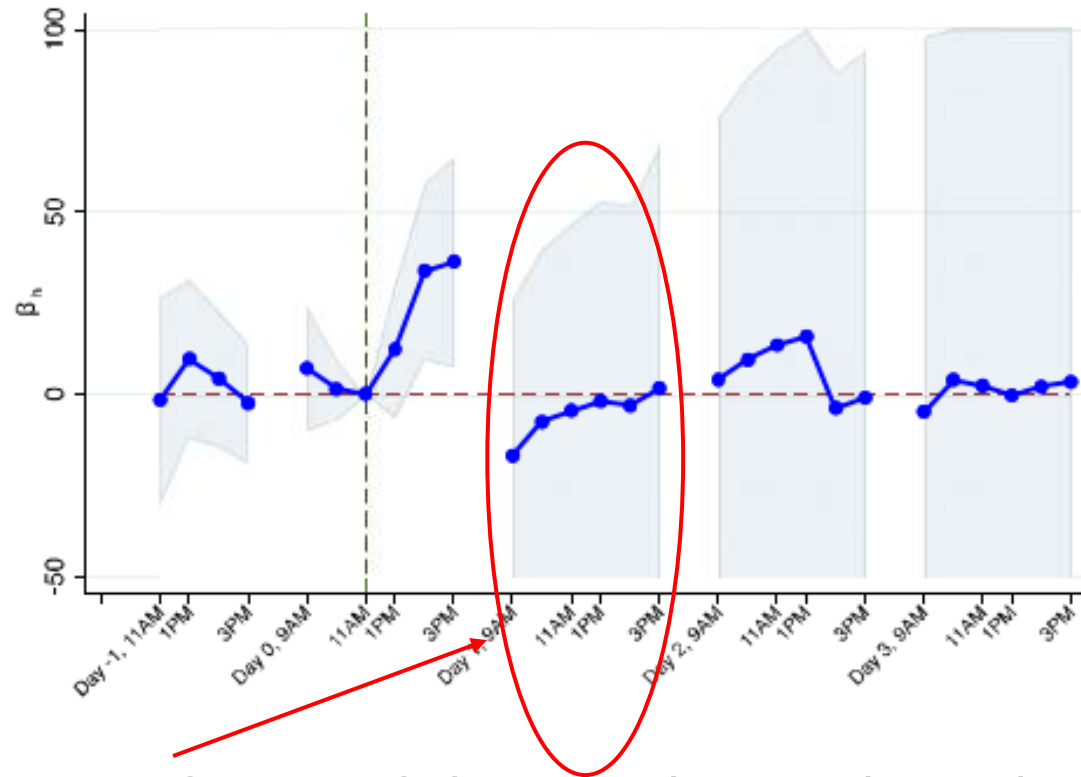


(E) JGB 10-Year Yield Response after YCC



- Before YCC, **long-term interest rate respond positively by ETF purchase**
- After YCC, the effect is zero, no wonder

(B) Stock Price Response before YCC



(C) Stock Price Response after YCC



- Before YCC, stock market did not respond after one day
- After YCC, stock prices persistently rise
- Explained mainly by inelasticity, changes in the policy?

Model's Inerasticity (comment 3)

- Both stock and bond markets are **inelastic can explain all of their findings**

1) Stock purchases increases both stock prices and long-term interest rates

2) Before YCC, no evidence of stock price increasing but long-term interest rate increased

3) After YCC, long-term interest rate stopped responding and stock prices increased

- **Inelastic model** or **monopolistic situation**, or both?
- Huge central bank

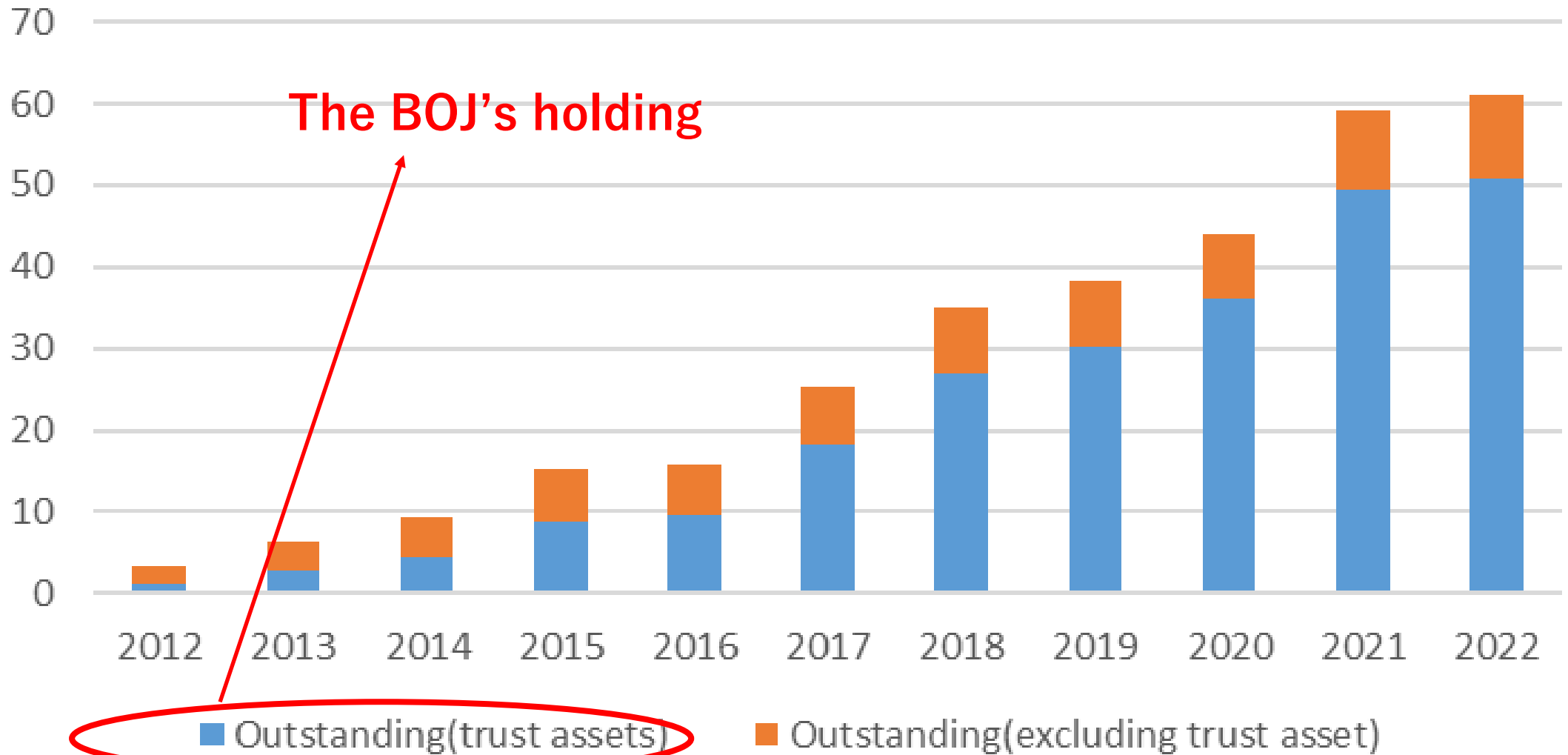
Model's Inerasticity (comment 3)

- **More than 50%** of the JGB market occupied by BOJ
- **More than 80%** of the ETF market held by the bank
- The bank indirectly holds **nearly 8%** of TSE

- **Inelasticity be partially related** to huge outstanding?
- “Too big to sell” situation makes the market inelastic?
- Bonds have maturity but stocks don't
- Can be incorporated in theoretical analysis

Japanese ETFmarket

(Trillion yen)



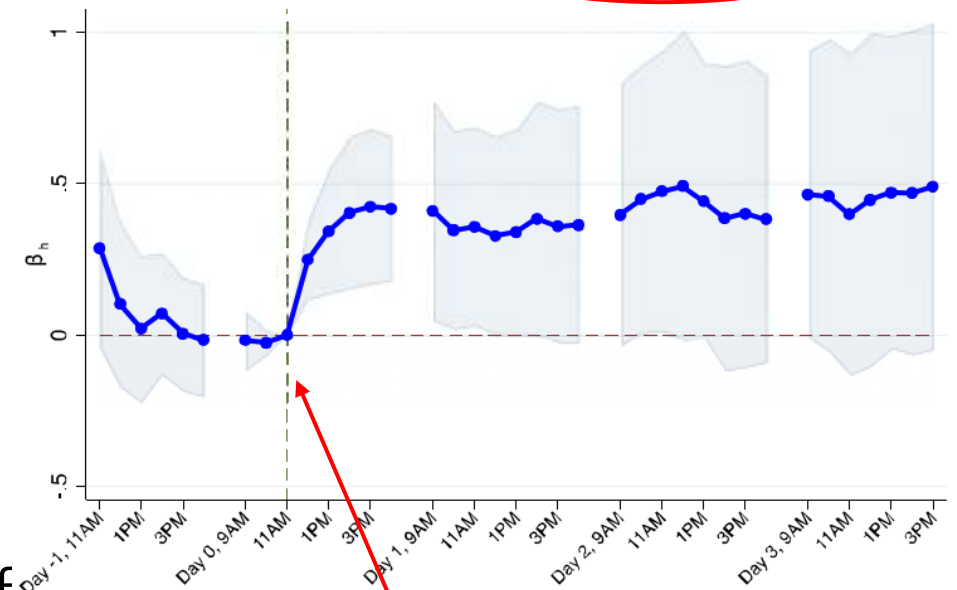
Questions

- Page 2; ETF purchases are swaps between stocks and bonds, How possible?
- Page 8; ETF purchase is accompanied with the rise in long-term interest rate, Why so?

Definition of stock market inelasticity;

- the impact on stock prices from an inf. ν into stock market *holding interest rate fixed*

(D) Impulse Response of JGB 10 Years Yield



11am,
when BOJ
buy ETF

Sustainability



- **The largest shareholder** in the Japanese stock market
- **De facto largest shareholder** at over 100 firms
- One of the top 10 largest shareholders in **more than half** of the **TSE listed firms**, and more problems (see next page)
- Corporate governance issues
- Impairs market function, less floating stocks and less fluctuations

- YCC worked when inflation rate was low
- BOJ has **half the bond market**, now hard to commit to buying and has tapered bond buying