# Discussion:

# Effects of Monetary Easing Policy in Japan on the Markets in Hong Kong and China after the Global Financial Crisis

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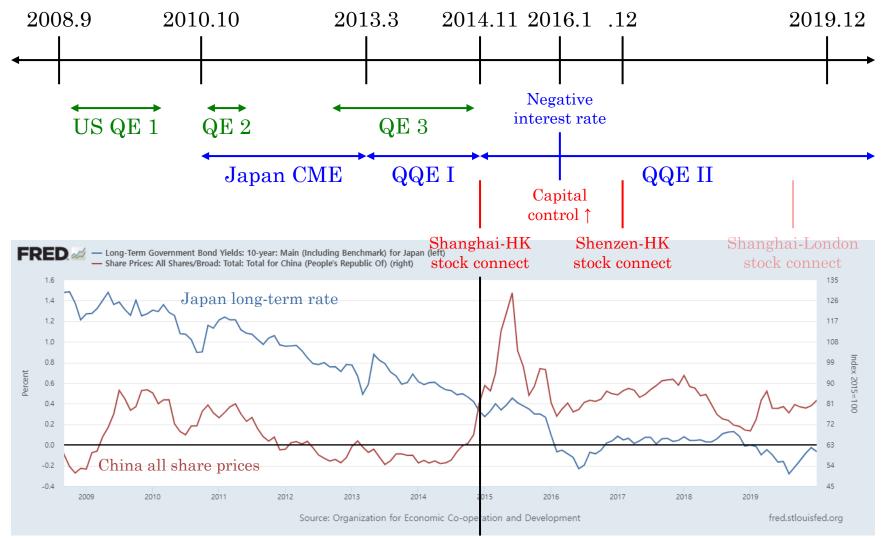
University of North Carolina at Pembroke

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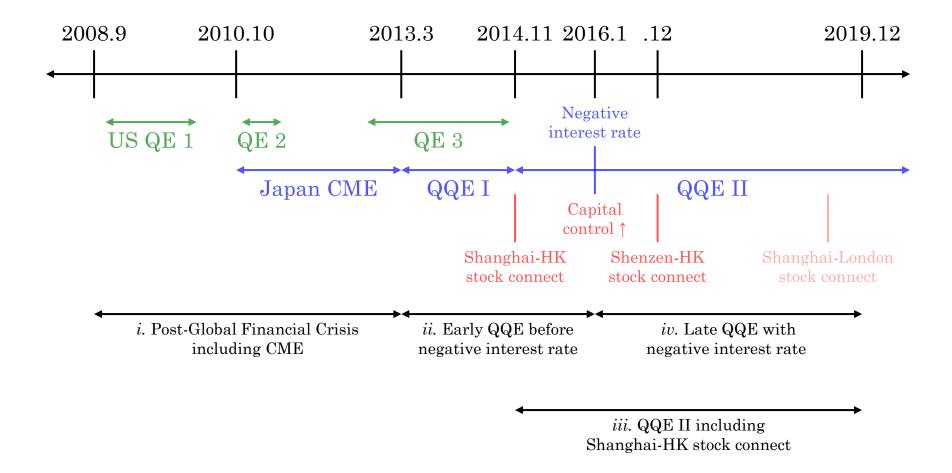
## Summary

- Japanese monetary easing policy
  - Comprehensive monetary easing (CME, Oct 2010-Mar 2013)
  - Quantitative and qualitative monetary easing (QQE, Apr 2013-)
    - QQE II (2014.11-), negative interest rate policy (NIRP, 2016.1-), yield curve control (YCC, 2016.9-)
- Chinese (Hong Kong) capial account liberalization
  - Shanghai-Hong Kong stock connect (Nov 2014)
  - Shenzen-Hong Kong stock connect (Dec 2016)
- Bayesian vector autoregression (BVAR), Sep 2008-Dec 2019
  - Japan's expanded money outflows → Positive impacts on China/Hong Kong markets/economies
  - Significant during CME, more pronounced after QQE
  - After QQE II and the Shanghai-Hong Kong connect, China/HK→Japan investments are more growing than Japan→China/HK investments
  - In Section 3.3.7, "... the BOJ's QQE *not only* had a significant impact on the Chinese and Hong Kong markets, *but conversely* had a significant impact on the Japanese financial and capital markets ..."

### Timeline<sup>i</sup>



## Timeline<sup>ii</sup>



# Comment 1i: Full-Sample Baseline

- Table 1 lists VAR variables
  - In Section 3.2, "... the variables used for Japan ... current account (BOJAC), call rate, JGB yield ...," but Table 1 has JPM2 rather than call rate

	Monetary base (MB)	Current account (AC)	Money stock (M2)	10-year gov. yield (10Y)	Stock prices (Share)	Industrial prod. (PROD)
Japan	$\sqrt{}$	$\checkmark$	$\sqrt{}$	$\checkmark$	$\sqrt{}$	_
Hong Kong	$\sqrt{}$		$\sqrt{}$	Money market	$\sqrt{}$	
China	$\sqrt{}$		$\sqrt{}$		$\sqrt{}$	$\checkmark$

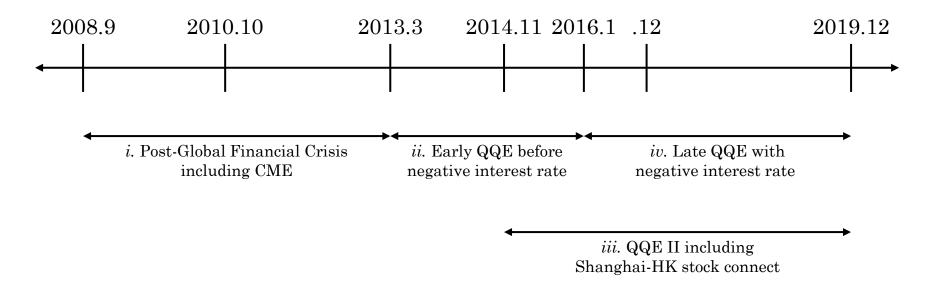
Impulse response/variance decomposition results for

i.	2008.09-2013.03:	Post-Global Financial	Crisis	(including CME)
ii.	2013.04-2016.01:	Early QQE	(before ne	gative interest rate)
iii.	2014.11-2019.12:	QQE II	(after Sh	anghai-HK connect)
iv.	2016.02-2019.12:	Late QQE	(after ne	gative interest rate)

Additional full-sample results (such as descriptive statistics, VAR
estimated posteriors, etc.) as benchmarks would be helpful to compare
structural changes and for follow-up spillover studies

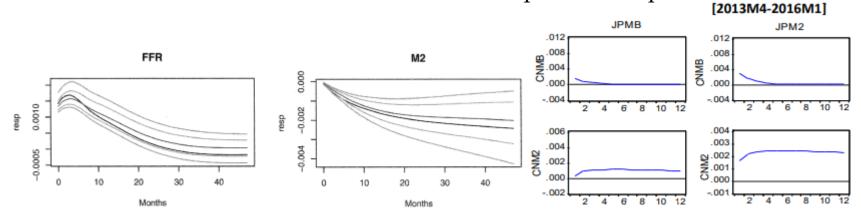
### Comment 1ii

- VAR has 13 variables and four lags
- Each equation has 53 coefficients
- Subperiods *i, ii, iii,* and *iv* have 54, 33, 61, and 46 months, respectively
- Full sample of 133 months would produce more robust statistics



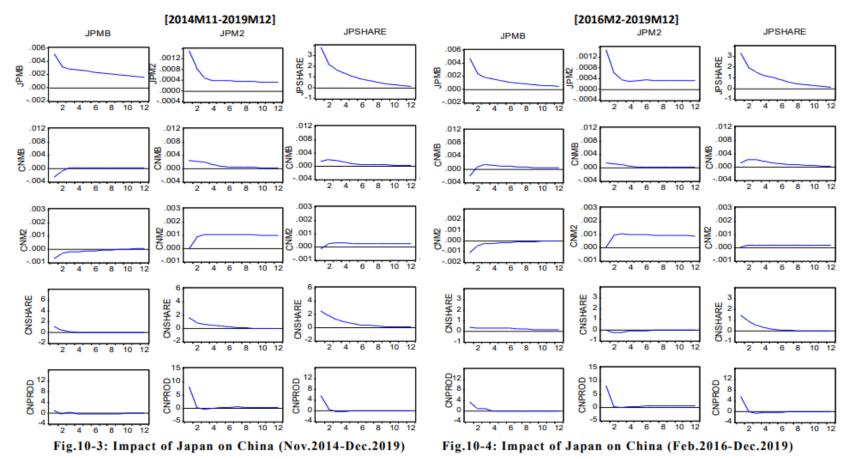
## Comment 2<sup>i</sup>: Standard Error Estimates

- For example, in Section 3.3.1 (b), "Japan's monetary base (**JPMB**) and money stock (**JPM2**) had a positive and *significant* impact on China's money stock (**CNM2**), but *not significantly* on the monetary base (**CNMB**) (Fig. 10-2)."
  - "Significant" appears 49 times in Sections 3.3.1-3.3.7
- Supplementary confidence intervals (standard errors) might be useful for more detailed statistical inference
  - Ex. FIGURE 2 in Sims and Zha (2006)
- So that they will enable to test hypothesis that subsample VARs are different from each other or their full-sample counterparts



# Comment 2<sup>ii</sup>: Do They Significantly Differ?

- Subsamples *iii* and *iv* have 46 out of 61 months (75.4%) overlapping
  - Standard errors would be useful in detecting structural breaks after NIRP



## Comment 3: Bayesian VAR and Details

- In Section 3.1, "In this model, ... based on the Litterman/Minnesota method, ..."
  - Recent priors such as Normal-Wishart and Giannone–Lenza–Primiceri (2015) would complement the Minnesota method (ex. unknown  $\Sigma$ , existence of stochastic trends or cointegrations, etc.)
  - Bayesian VAR Prior Comparison: https://blog.eviews.com/2019/06/bayesian-var-prior-comparison.html
- Also in Section 3.1., "Bayesian reasoning is said to require no special explanation of nonstationary. Particularly in the BVAR model, it has been pointed out that the existence of unit roots of data has no significant influence on likelihood with regard to non-stationarity, so it does not become a big problem (Sims, 1990; Sims, Stock, and Watson, 1990)."
  - A few Bayesian time-series studies seem to still care stationarity (Stock and Watson, 2005; Bańbura, Giannone, and Reichlin, 2010; Baumeister and Kilian, 2012; Carriero, Clark, and Marcellino, 2015)
- In Section 3.2, "... the lag periods ... are set four to measure enough ..."
  - A few robustness checks or references would strengthen findings (Carriero, Clark, and Marcellino, 2015)

## Comment 4: Is It QQE or Connect?

- After Nov 2014, CN/HK→JP flow grows more than JP→CN/HK flow
- Is this mainly because of QQE II or China-Hong Kong connect?
- Different policy implications (follow-up study)

### Minor Comments<sup>i</sup>

#### Introduction

• A few abbreviations such as RMB, LDP, and SDR seem shortened before elongations

#### Section 1

- In Section 1.1, "due → Due to the World First Quantitative Monetary Easing ..."
- Sept.2009-December  $2012 \rightarrow \text{Sep. } 2009\text{-Dec. } 2012$  (or September 2009-December 2012)
- $\Psi$ 617 trillion yen  $\rightarrow$  617 trillion yen
- In Section 1.2, "Moreover, Direct → direct exchange of the Chinese yuan ..."
- (y/y, %) at Fig. 4's upper-right corner seems unnecessary
- CNM2 in Fig. 6 and HKM2 in Fig. 7 would need (RHA)
- Fig. 9 would need pre-2013 period to be consistent with other figures
- Parenthesis, (R<sup>2</sup> [the coefficient, is incorrectly formatted
- "The capital flows from China have been restricted since November 2016 and 2017,"  $\rightarrow$  Is it November 2016 or 2017?
- "... but as *mentioned above*, the capital markets are at risk of experiencing a major shock if they are only partially liberalized." → Reference seems to be omitted

#### • Section 2

• International spillover in Churm *et al.* (2015)?

### Minor Comments<sup>ii</sup>

- Section 2 continued
  - "Meanwhile, Migliardo (2010) ... as a result, the influence ... was influenced ..."
  - A little paraphrasing for Anaya et al. (2018) and Fukuda (2018) might be helpful
  - "Xu & La (2017) ... under *certain* conditions."  $\rightarrow$  A little more detail would be helpful
  - Fukuda (2018): QQE had negative → positive effects on stock prices?
- Section 3
  - In Section 3.1,  $\phi(Y) \to \Phi(Y)$ ?  $\int \theta(\theta \mid Y) d(\theta) \to \int \theta p(\theta \mid Y) d(\theta)$
  - Sentence "In prior distribution in this analysis ..." seems incomplete
  - In Section 3.3, "This section compares ... to analyzes → analyze how quantitative ..."
  - QQE II and QQE (2) in section titles have different meanings but seem misleading
  - Impulses in variables other than MB, M2, and Share seem not visualized
  - In Section 3.4.1, Fig.  $12 \rightarrow$  Fig. 16
  - "... the shares of JPMB and JPM2 as JPShare (?) in the variance decomposition ..."
  - Some variance decomposition figures (ex.  $CNMB \rightarrow JGB10Y$ ) seem not displayed
  - In Section 3.4.2, "... also has been evident in the financial mark  $\rightarrow$  market ..."
  - "... yield on 10-year Japanese government bonds (JGBs  $\rightarrow$  JGB10Y) ..."
  - Legends in Fig. 17 (3,2), Fig. 18 (2,2), and Fig. 19 (4,1) would need corrections

## Minor Comments<sup>iii</sup>

#### Section 3 continued

- In Hamilton (1994), "Thus, [11.5.6] permits calculation of the *portion* of the total variance of  $y_i$  that is due to the disturbance  $u_j \dots$ "  $\rightarrow$  Variance decompositions in this study seem to focus *more on shifts* over time and *less on portions* among variables
- "... the recent increase in Chinese investment in Japanese real estate." → Simple reference about real estate trend might be supportive
- In Section 3.4.3, "... in the pre-QE  $\rightarrow$  early QQE (April 2013 January 2016) ..."
- "... between Hong Kong and Shenzen → Shanghai in November 2014 ..."
- In Section 3.4.4, "... in the 10th period of QQE II (2014.11-2019.12)."
- "... early QQE period (September 2008 March 2013 → April 2013 January 2016)"
- "... Hong Kong and Shanghai markets  $(112/2016 \rightarrow 11/2014)$  ..."
- In Section 3.4.5, Figure  $16 \rightarrow \text{Fig. } 20$
- In Section 3.4.6,  $)(CNM2) \rightarrow CNM2$
- In Section 3.4.7, "... when the stock trading ... were  $\rightarrow$  was liberalized ..."

#### Conclusion

- Both Conclusion and Footnote 7 discuss issues of informal financial markets such as crypto-asset market → Supplementary studies or references would support argument
- References have some non- or mis-cited papers → Miscellanies

### Conclusion

- Interplay between non-conventional monetary policy instruments and capital market liberalization strengthens international spillovers
- Important work with lots of insightful findings
  - Cater stylized facts and policy implications for authorities and regulators
  - Contribute to the "spillover" literature and the "stock connect" literature
    - Ex. Li and Chen (2021), Liu, Wang, and Wei (2021), Ma, Rogers, and Zhou (2021), He, Wang, and Zhu (2023)
- Timely potentials!
  - Shanghai-London stock connect (Jun 2019)
  - Shanghai-London Stock Connect to include Germany, Switzerland (Reuters, Dec 2021)
  - In *The Stock Connect to China* by He, Wang, and Zhu (2023): "... compared with possibly homemade foreign investors, *genuine foreign investors are more likely affected* by the U.S. monetary shocks, the exchange rate risk, the U.S. market performance ..."
- Enjoyed reading this thoughtful paper!

### **Miscellanies**

- Some authors (ex. Nakajima, Nagata) have their first names missing
- Non-cited papers in References
  - Abostini et al. (2016), Arai et al. (2016), Baba et al. (2006), Deng and Walker (2016), Engen et al. (2015), Feldstein (2011), Fukuda (2019), Honda (2014), Kimura et al. (2003), Kimura and Small (2006), Okina and Shiratsuka (2004), Shiratsuka et al. (2010), Stock and Watson (2001), Teruyama (2001), Ugai (2006), Voutsinas and Werner (2011), Bin and Aizong (2013)
- Typos in References
  - Ohta (2019) and Sims (1988) seem cited but is not in References
  - Guindos (2019) in Section  $2 \rightarrow De$  Guindos (2019)
  - Anayaet et al. (2017) in Section  $2 \rightarrow$  Anaya et al. (2017)
  - Ganelli and Tawk (2016) in Section  $2 \rightarrow$  Ganelli & Tawk (2016)
  - Sims et al. (1998)  $\rightarrow$  Either Sims et al. (1990) or Sims and Zha (1998)
  - Bhattarai and Cahtterjee (2018) → Bhattarai, Chatterjee, and Park (2018)
  - Chen and Tsang (2018) 11 April 2018  $\rightarrow$  Chen and Tsang (2020) 25 (1), 3-20
  - Rhee, Changyonh  $\rightarrow$  Rhee, Changyong
  - Churm, R at al.  $\rightarrow$  Churm R. et al.
  - Ho et al. (2018) 30 May  $\rightarrow$  Ho et al. (2018) 50 (7), 1543-1569
  - Miyao, Ryuzo (2017) → Miyao, Ryuzo and Okimoto, Tatsuyoshi (2017)
  - Sun, Hon, and Zhang (2018)  $\rightarrow$  Sun, Hou, and Zhang (2018)
  - Utlaut and Von Roye (2010)  $\rightarrow$  Utlaut and Van Roye (2010)