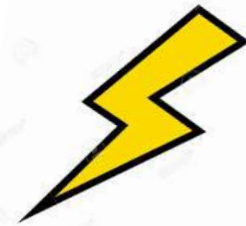


Bitcoin or Gold for a Diversifier? Tales of Pre- and During the COVID-19 Crisis

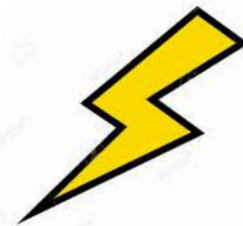
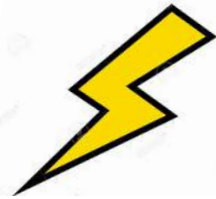
Yosuke Kakinuma, Ph.D.
Department of Finance, CMU Business School
Chiang Mai University



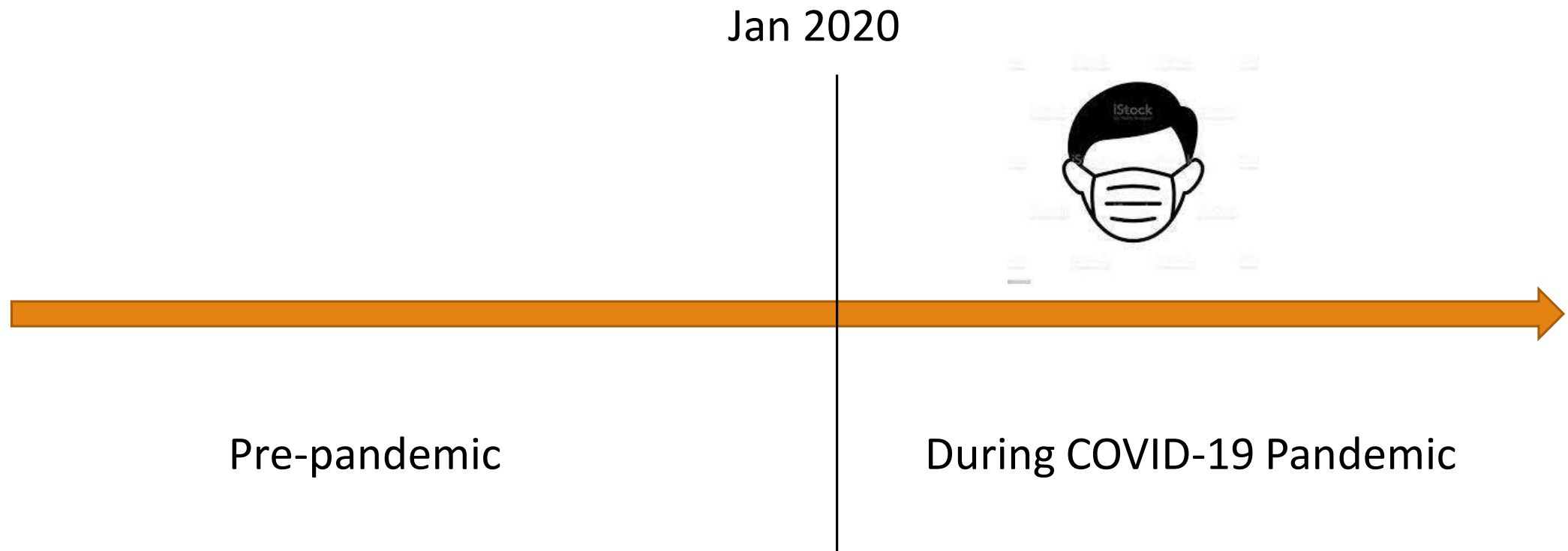
What is this research about?



Bitcoin



The Effect of the Pandemic on the interaction on asset returns



Conclusion

1

More interconnected during Covid pandemic



2

Bitcoin fails to provide protection



3

Risk-averse investors should allocate 40-55% of the portfolio to gold



Why bitcoin?



- “Digital Gold”
- Pricing mechanism-interest in cryptocurrency/block chain/anonymity
- Wang *et al.* (2019)-diversification in China

Gold-Traditional safe haven



- Low or negative correlation with stocks
- Hedge against inflation
- Store of value
- Baur and McDermott (2010)-Safe haven only for developed markets

SET:IND
Stock Exchange of Thailand SET Index

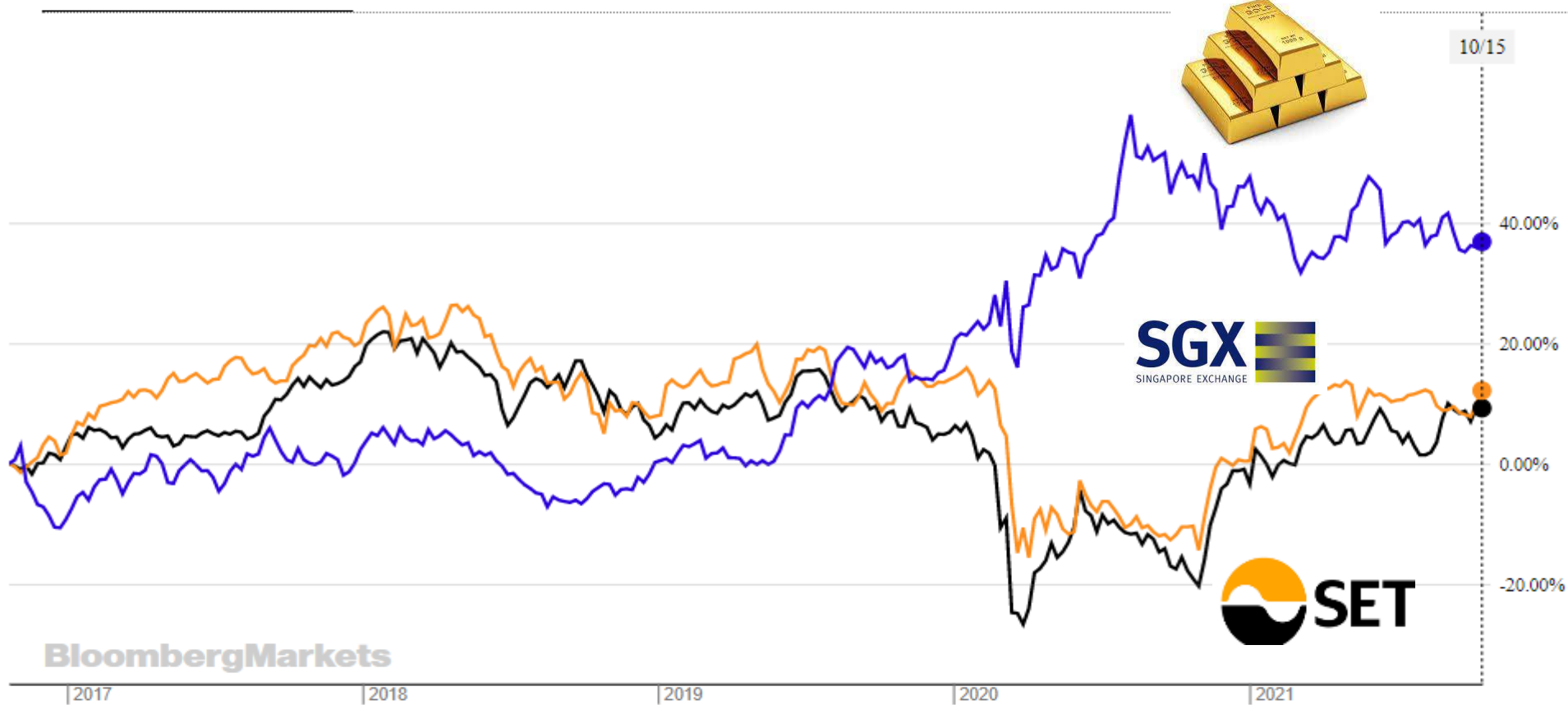
1,638.34 THB -2.63 -0.16% ▼

1D 1M 6M YTD 1Y 5Y

MINIMIZE CHART

gld

● SET:IND 9.20% ● ST:IND 12.11% × ● GLD:US 36.83% ×



10/15

SGX
SINGAPORE EXCHANGE

SET

SET:IND
Stock Exchange of Thailand SET Index

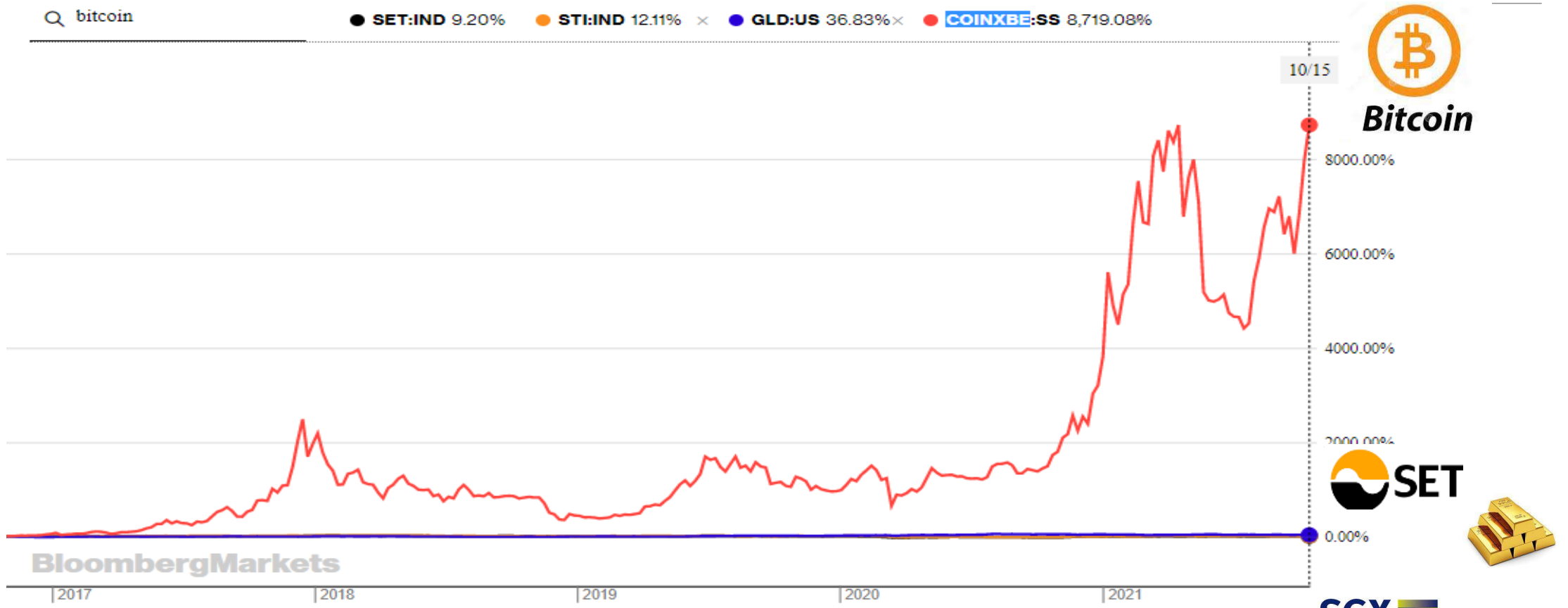
1,638.34 THB -2.63 -0.16% ▼

1D 1M 6M YTD 1Y **5Y**

MINIMIZE CHART

Q bitcoin

● SET:IND 9.20% ● STI:IND 12.11% × ● GLD:US 36.83% × ● COINXBE:SS 8,719.08%



BloombergMarkets



Bitcoin

10/15



Bitcoin & Gold



Bitcoin









- ✓ Limitation of scarcity of supply
- ✓ No cash flows
- ✓ Asymmetric reaction to positive and negative news (Shahzad *et al.*, 2019)

















Data & Methodology

- Daily returns of SET, Singapore market, Bitcoin, Gold ETF
- Pre-pandemic: Oct 2013-Dec 2019
- During-pandemic: Jan 2020-May 2021
- VAR-BEKK-GARCH model

Results-SET

Spill Over	 The Stock Exchange of Thailand		 The Stock Exchange of Thailand		 The Stock Exchange of Thailand	
	Pre	During	Pre	During	Pre	During
Return	—	→	—	—	→	→
Short-term Volatility	—	↔	—	→	←	→
Long-term Volatility	→	←	—	→	→	↔

Results-Singapore Market (SGX)

Spill Over	 		 	
	Pre	During	Pre	During
Return				
Short-term Volatility				 *
Long-term Volatility				 *

Minimum Variance Portfolio



Return

**Standard
Deviation**

Full
Sample

0.4

44.2

17.7

37.7

1.7

0.6

Pre-
pandemic

0.7

38.8

24.0

36.5

1.6

0.5

During-
pandemic

0.0

54.4

7.6

38.0

3.1

0.8

Conclusions/Key Take-away

- 1) Different asset classes (equities in ASEAN, gold, and bitcoin) get more interconnected during the pandemic.
- 2) Bitcoin fails to provide protection for investors in Southeast Asia.
- 3) Risk-averse investors should hold gold for significant portion in their portfolio (40-55%).

Implications



Bitcoin & stocks : High correlation
=> Being recognized as an
investment asset rather than
speculation

Implications

2

Herding: Join the crowd

=> Investors rushed to sell their assets due to the shock from COVID-19

Implications

3

Certainty effect: Prefer certainty more than probable

=> Investors have more trust in gold (tangible, physical shops) than bitcoin (invisible, new technology, cybercrime)

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Thank you



Yosuke Kakinuma