(1942–2017)
ธนาคารแห่งประเทศไทย
BANK OF THAILAND

Integrating Monetary Policy & Financial Stability:

A New Framework

Bovonvich Jindarak

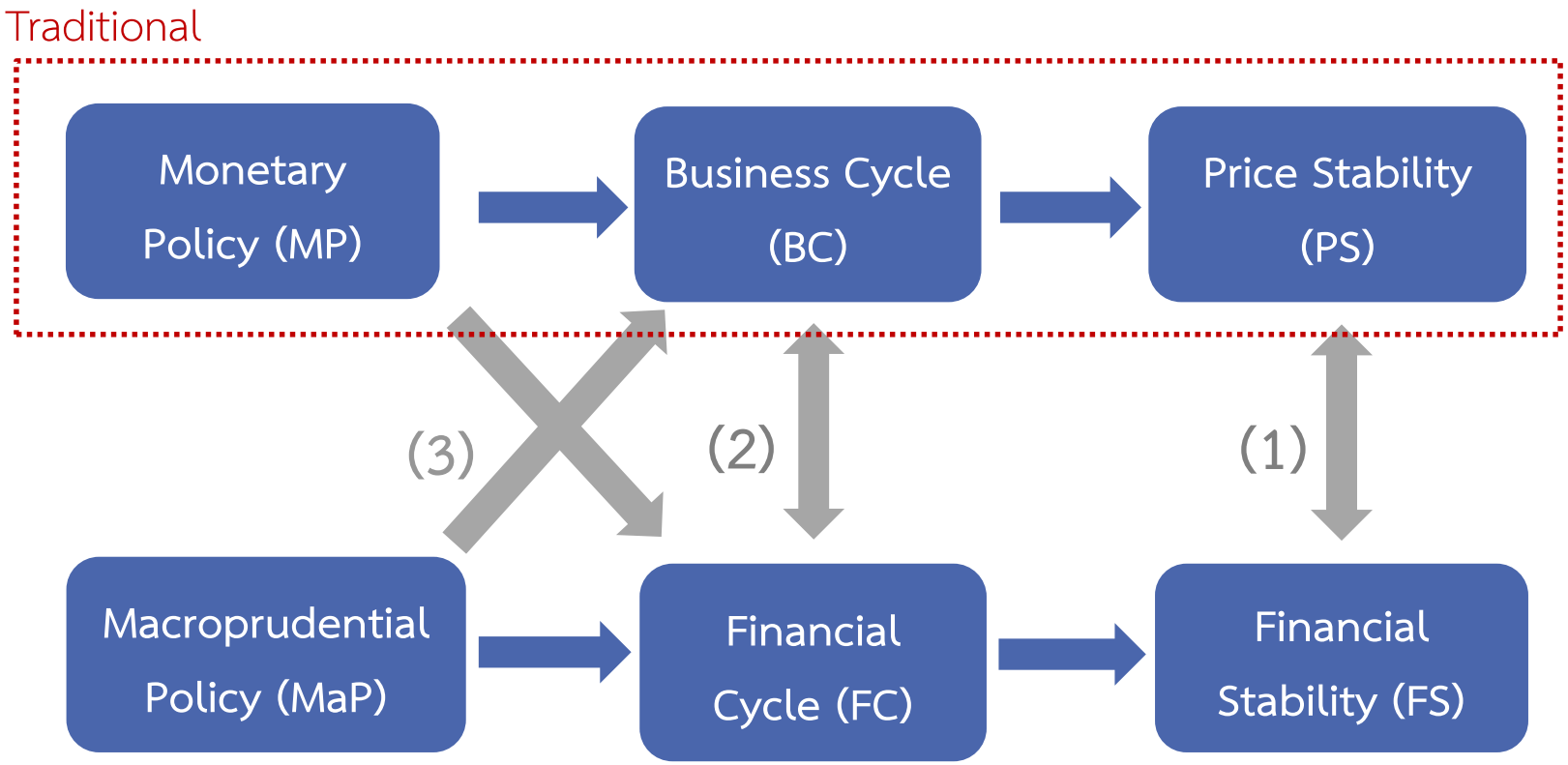
(W. Wongwachara, N. Nookhwun, S. Tunyavetchakit, and C. Klungjaturavet)

Monetary Policy Department, Bank of Thailand

Financial Stability Networking

30 October 2018

Emerging MP Framework



Link (1): PS and FS are mutually beneficial and re-enforcing

Link (2): FC and BC are related

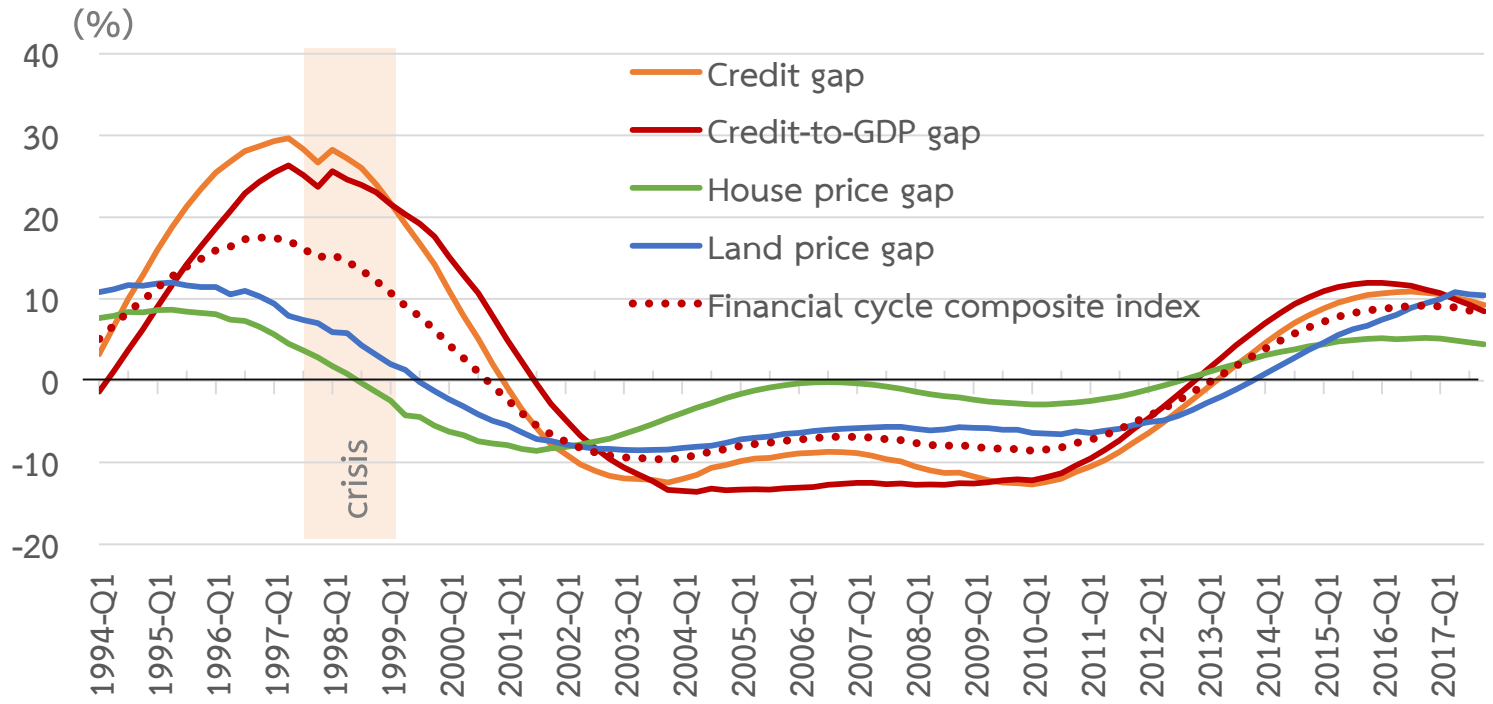
Link (3): Interaction between MP and MaP

ธนาคารแห่งประเทศไทย
BANK OF THAILAND

How to systematically integrate Financial Stability into the Monetary Policy framework?

1) New Indicator

How to measure FS: Aggregated level

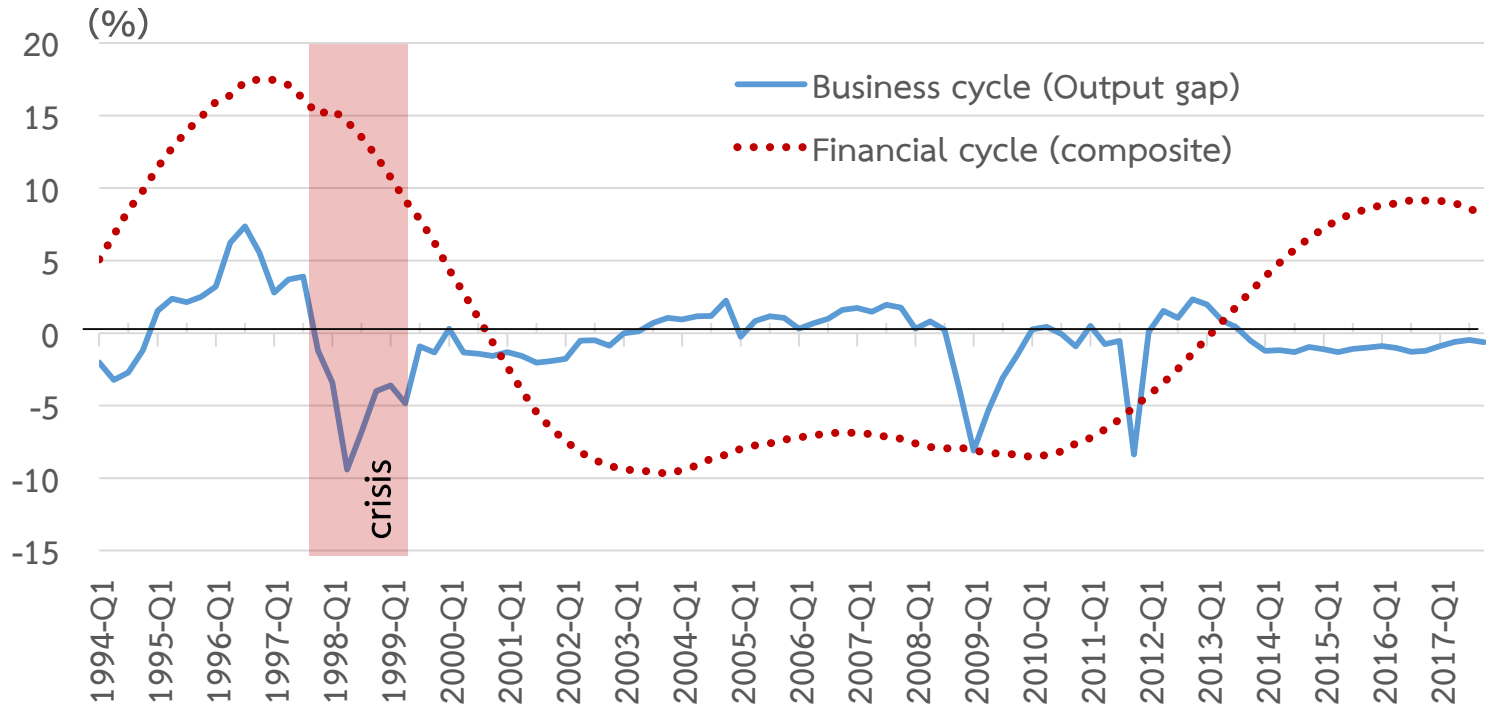


- FC is a summary measure of financial imbalances*
- The determinants of FC are primarily cycles of credit** and asset prices

* FC (composite) is calculated by averaging 4 sub-indices: credit gap, credit-to-GDP gap, land price index gap, and house price index gap, by using CF-filter, see Drehmann et al. (2012) "Characterising the financial cycle: don't lose sight of the medium term!".

** The credit aggregate is the total credit (loan and debt securities) to private non-financial sector.

Some stylized facts on FC & BC



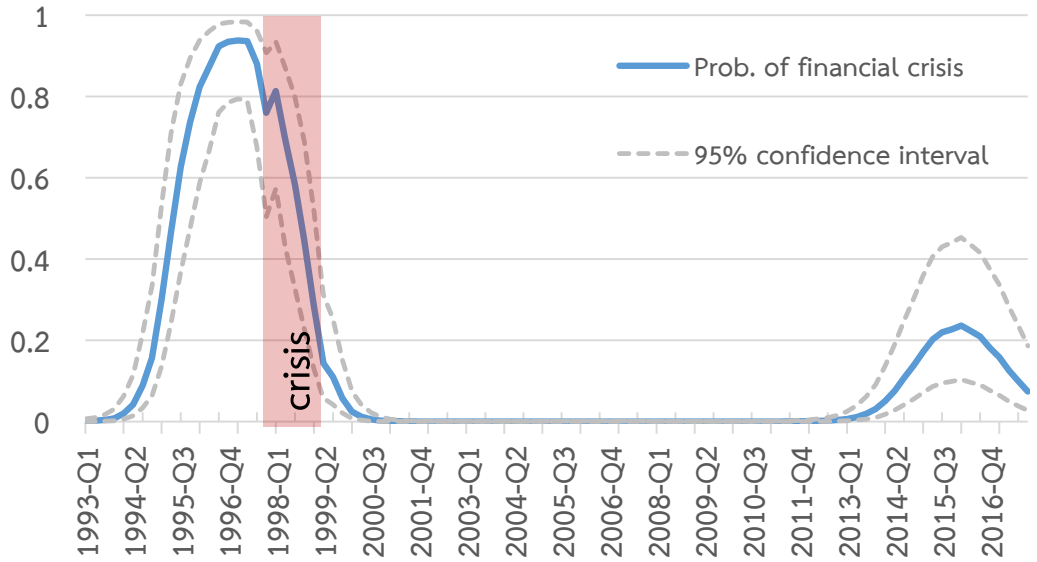
- Duration and amplitude of FC (red) are much higher than those of BC (blue)*
- Peaks could be used as a predictor of financial crisis
- Economic recessions are more severe during the financial crisis period

Quantification:

Probability and Magnitude of Crisis*

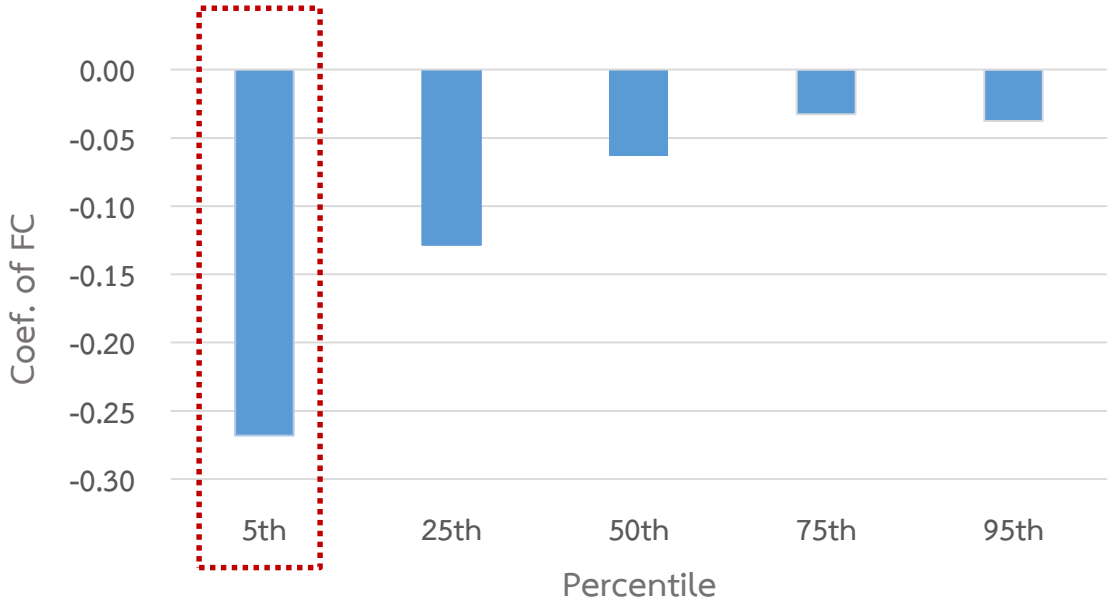
Forward-looking crisis probability in Thailand

(1-3 years ahead)



- Crisis probability can be derived by mean of cross-country panel logistic regression

Quantile regression coef. of 1Yr-ahead GDP growth on FC



- The magnitude of FC inversely impacts the magnitude of future GDP growth

* Data comprises 9 countries, both emerging and advanced economies, over the period of 1993-2017

How to measure FS: Disaggregated level

[work in progress]

1. *Household*
2. *Corporate*
3. *Bank*
4. *Non-bank*

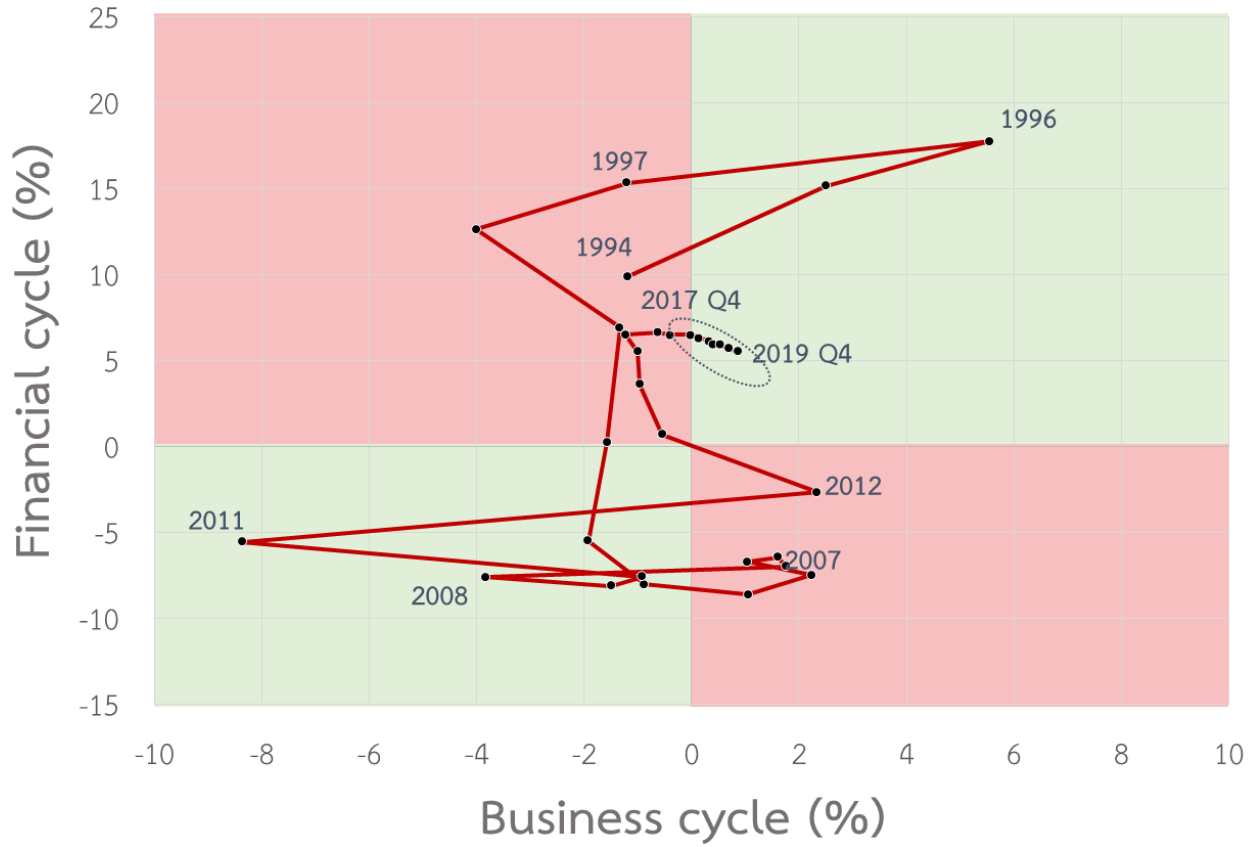
5. *Real estate*
6. *Financial market*
7. *External*

7 x 6	Type of Risk					
	Risk Appetite	Underpricing of Risk	Leverage	Mismatch	Vulnerability in debt serviceability	Interconnected ness
Entity						
Market						

- Ensure all pockets of risks on the radar
- Shed some light on which sectors are at risk and which type of vulnerabilities are building (that will facilitate an appropriate policy mix)

2) New Model

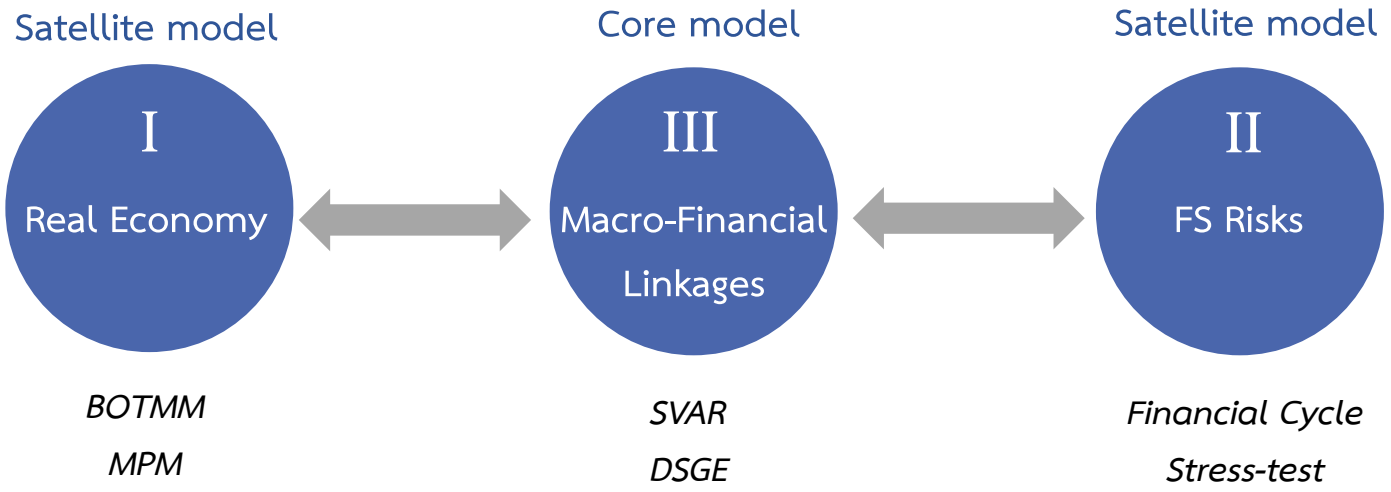
A Simple MP Trade-off



- In 'complementary' zone (green), policy that addresses PS would also benefit FS
- In 'opposite' direction (red), we need to analyze a trade-off between PS and FS

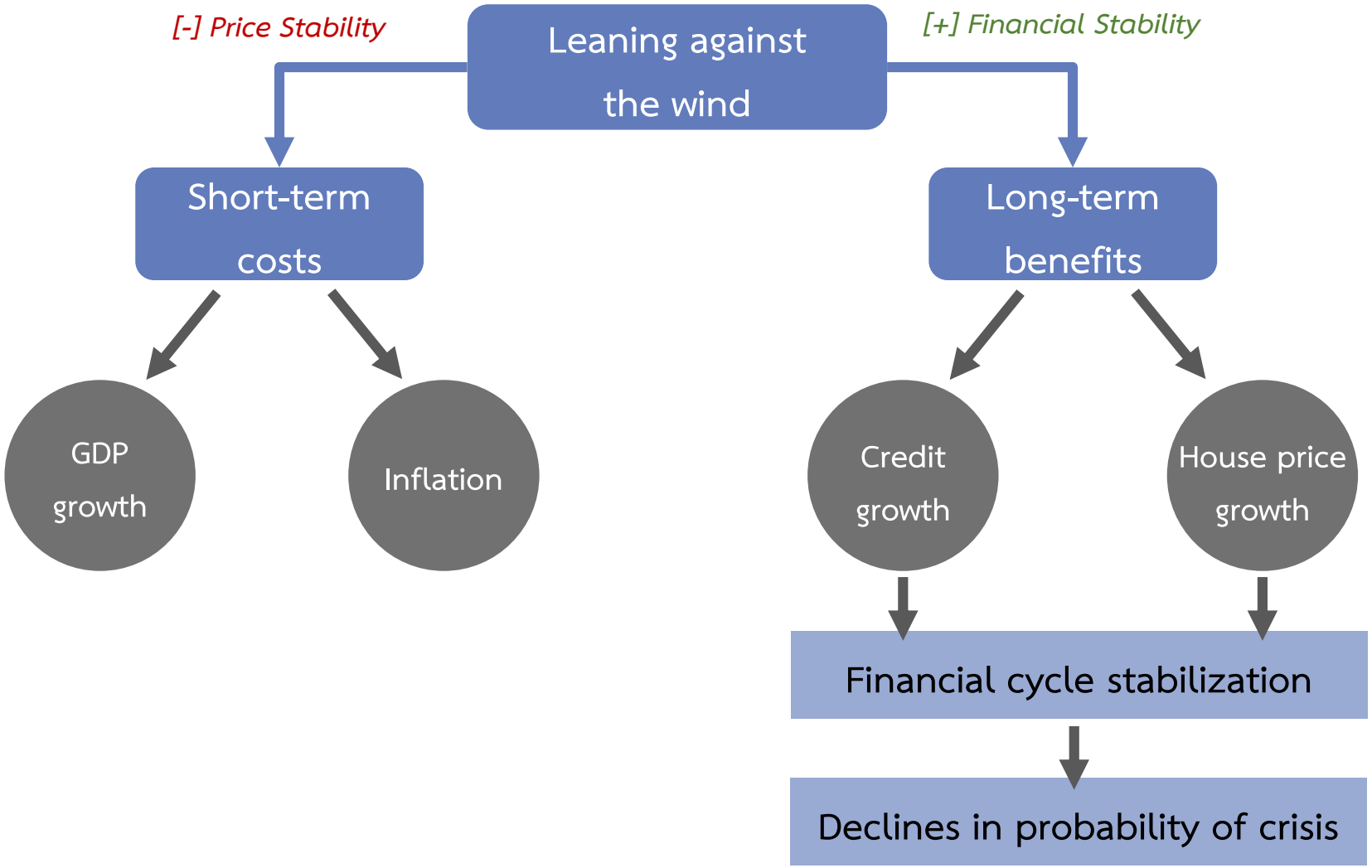
*Projected path (2018 Q1 -2019 Q) for FC is consistent with 4-6% credit growth and historical house price growth.

Model Development: Model platform



- Important features
  1. Bridge FS risks with economic and inflation projection
  2. Assess different policy tools

Framework for Trade-off Analysis



ธนาคารแห่งประเทศไทย
BANK OF THAILAND

3) New Policy Tool

Incorporating Macroprudential Policy

1. tailor policy for specific purposes

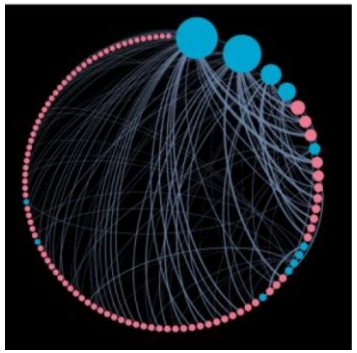
Source of Financial Imbalances	Instruments
House prices bubble/high mortgage growth	Loan-to-value regulation
High household debt	Limits on debt-to-income ratio
Excessive overall bank credit growth	Countercyclical capital buffer

2. increase the resilience of financial system

To improve an ability of the financial sector in withstanding the busts

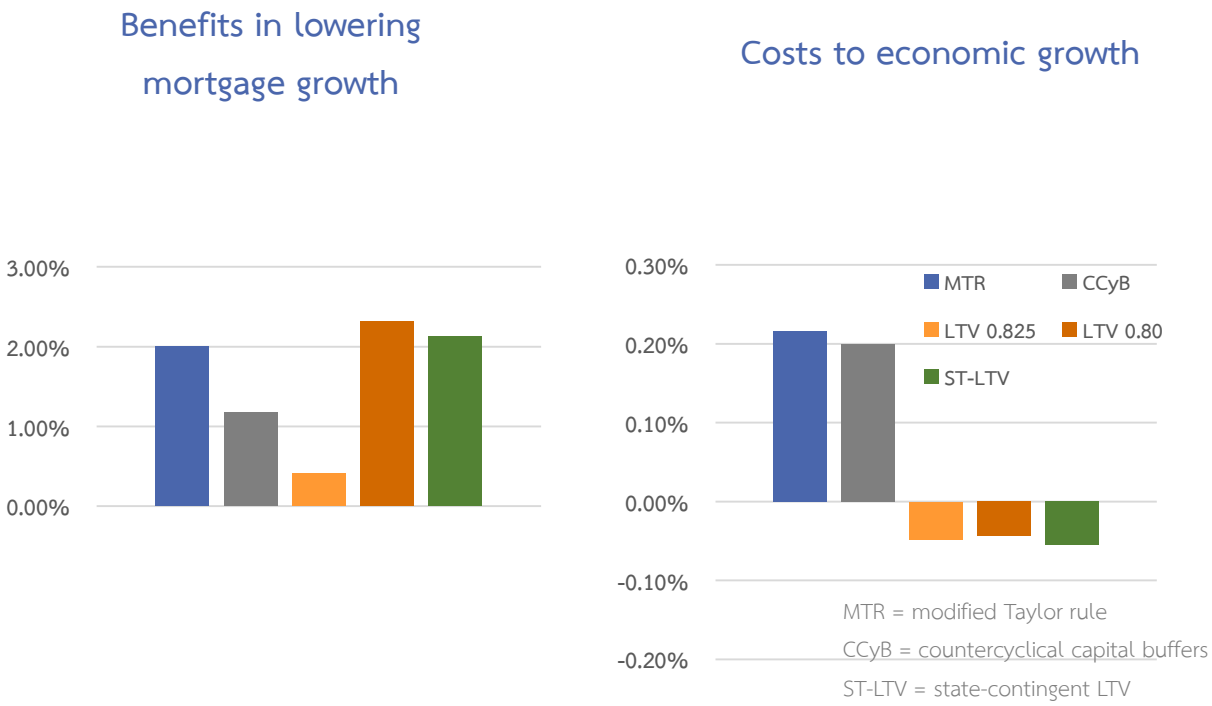
3. is well-suited to address structural risks

- "Too big to fail" financial institutions
- Interconnectedness within the financial system

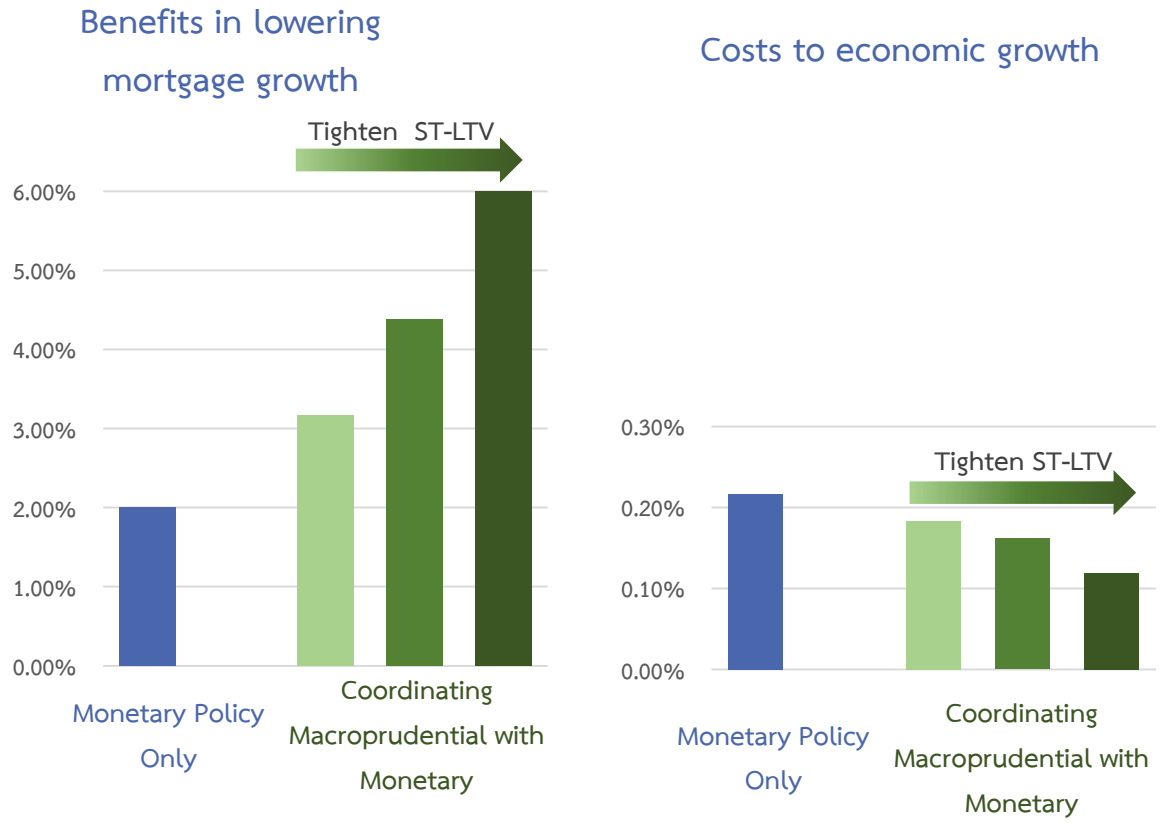


Coordination of Policy Tools: complementary*

- Evaluate cost and benefit of of each policy in dealing with periods of housing boom**



- How have policy trade-offs changed?



* Calculated from the DSGE model

** Benefits and costs calculated from cumulative over 4 quarters compared to the benchmark case (Taylor rule)

Decision-making Process

- Source of financial imbalances ?
- Development of financial imbalance going forward ?
- Potential consequence on the economy ?

- Effectiveness of Policy Tools
- Costs and benefits analysis:
  [-] Decelerating economic growth in the short run
  [+] Stability in financial sector, leading to sustainable growth

- Balancing 3 objectives:
  (i) Price stability
  (ii) Economic growth
  (iii) Financial stability
- Deployment of policy package

Summary

1. FS is an integral part of the new MP framework
2. Developments of analytical tools are necessary for an effective integration
3. Coordination between MP and MaP is at the heart of the decision-makings

ธนาคารแห่งประเทศไทย
BANK OF THAILAND

Thank You