

**Comments on
Aaron Klein, “Incorporating Macro-
prudential Financial Regulation into
Monetary Policy”**

Masahiro Kawai, PhD

**Economic Research Institute for Northeast Asia
and**

Graduate School of Public Policy, Univ. of Tokyo

Macro Economy Research Conference

“Monetary Policy Normalization: Ten Years after the Great Recession”

Organized by the Nomura Foundation

Tokyo, 24 October 2018

1. Introduction

- The paper proposes a new framework to better integrate monetary policy and financial regulation
- A financial crisis requires a combination of a fundamental mispricing of an asset value (or an asset price bubble) and excess leverage
- The paper asks how central bankers should conduct macro-prudential financial regulation
- To deal with asset price bubbles, the paper states that financial regulation, not monetary policy, should be used as the tool and its target should be leverage, not asset values

2. What the paper does:

A new framework

- The paper focuses on two interrelated concepts to help (understand) the relationship between financial regulation and monetary policy
- The first offers a new framework for understanding the relationship between financial regulation and monetary policy
 - ▣ Monetary policy is the gas or brake that guides the overall speed of the economy
 - ▣ Financial regulation is the clutch that controls the transmission, setting the gear for the motor and the economy to operate
 - ▣ When the transmission falls out of gear, the car simply ceases to operate just as the financial crisis, which helps explain why monetary policy is less effective in returning the economy to growth

2nd part of the new framework

- The second part of this framework details the two necessary conditions to create a financial crisis or panic (the moment when the transmission breaks down): the fundamental mispricing of an asset and excessive leverage
 - ▣ While one of these two conditions can cause a bubble, both are required for a crisis
 - ▣ Central bankers need to be concerned from a financial stability aspect only when both elements are at play
 - ▣ Financial regulation is a better tool than monetary policy to deal with leverage in a more direct and fundamental manner

(1) Financial regulation and monetary policy

- Macro-prudential and micro-prudential regulation
- Monetary policy could not jump-start the economy after the GFC
- The existing economic models employed by central banks generally failed to predict the severity of the impact of the financial crisis on the real economy because these models had only elementary financial sectors
- Two views
 - ▣ Consensus view (Adrian and Liang 2018): Financial stability is created through a combination of channels that could or could not include monetary policy decisions
 - ▣ The Peter Fisher view (2016): Financial instability is inherently related to too-easy monetary policy conditions

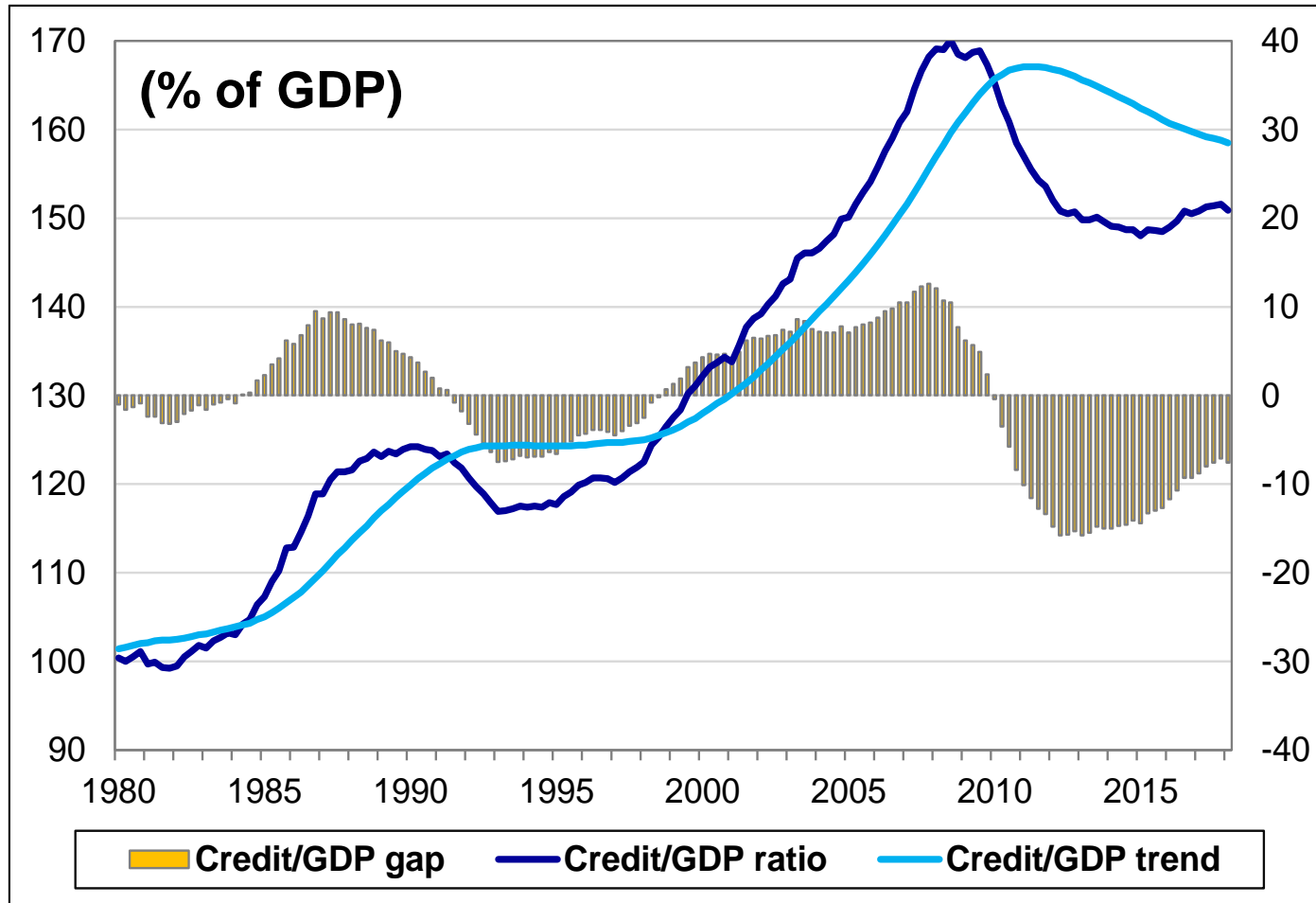
(2) Counter-factual for crisis prevention

- The paper examines a counter-factual, considering that the Federal Reserve could have used some financial regulatory tools to prevent the subprime financial crisis
- The Fed had authority to regulate “unfair or deceptive acts or practices” (known as UDAP), regulation over subprime mortgage definitions in the Home Ownership and Equity Protection Act (HOEPA) of 1994
 - ▣ If the Fed had exercised its authority under UDAP, it could have had an industry wide impact reducing the quantity of subprime mortgages created, particularly among the most toxic products
 - ▣ If the Fed had labeled types of subprime mortgage loans as high risk under HOEPA, it would have provided a clear signal to other financial regulators to increase regulatory scrutiny of these loans and their securitized products
- Cost-benefit framework: Est. cost of GFC was \$14 trillion

(3) Tying financial regulation into monetary policy

- Two conditions are necessary to create a financial crisis: the fundamental mispricing of an asset (or an asset price bubble) and excessive leverage
 - ▢ An asset bubble without leverage can have major economic disruptions, without causing a crisis (e.g., dot.com bubble)
 - ▢ Excess leverage without the fundamental mispricing of an asset can lead to a recession without causing a crisis (Savings and Loan [S&L] debacle in the 1980s)
- S&L debacle
 - ▢ Tangible capital of 4000 S&Ls as a ratio of total asset declined from over 5% in 1980 to 0.5% in 1982
 - ▢ The combined asset of the S&Ls was over \$1 trillion in 1985, roughly 25% of GDP

Credit/GDP ratio, trend and gap for the United States, 1980-2018



Source: BIS, GDP/Credit Gaps

https://www.bis.org/statistics/c_gaps.htm?m=6%7C380%7C670

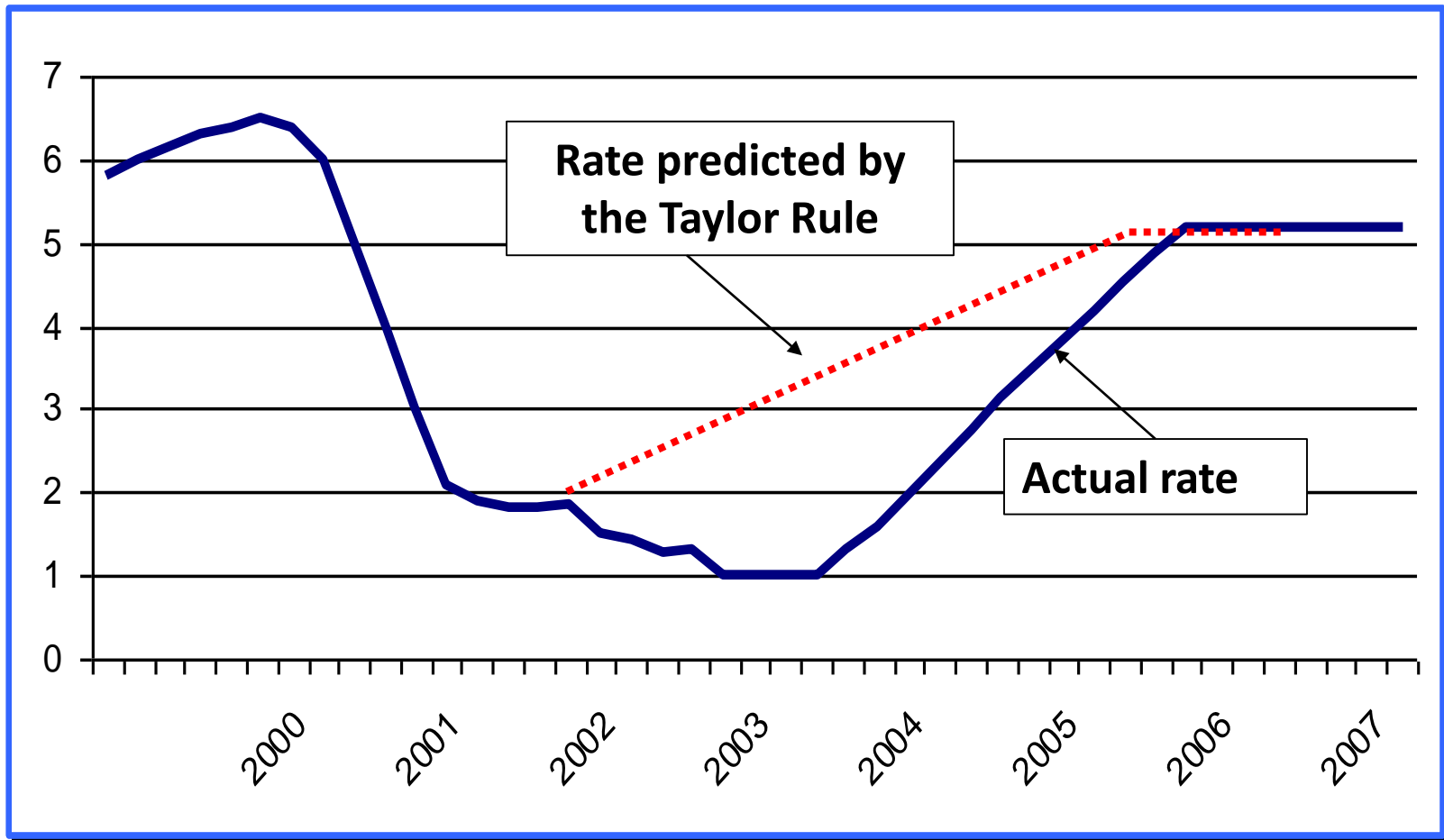
(4) Operationalizing the framework

- Monetary policy has not been powerful enough to restore price and economic stability once they have been disturbed by a major financial crisis
- Emergency liquidity, capital injections and regulatory measures (such stress testing) put the economic car back in gear, by restarting the financial system and allowing the economy to begin to recover
- **But this new gear was fundamentally slower than the previous gear** and this helps explain why the US economy continued to underperform expectations
- **Zarnowitz' rule (i.e., the size of economic recovery is inversely proportional to the size of the recession) does not apply to recessions created by financial crisis**

3. Comment (1)

- The paper discusses the importance of rigorous and formal cost-benefit analysis for financial regulation
- The same cost-benefit analysis (as well as effectiveness analysis) may also be needed for monetary policy
 - (1) When leverage rises, the question arises as to whether macro-prudential policy or monetary policy should be used to contain leverage
 - (2) Is it a priori clear that macro-prudential policy is more effective? On what ground?
 - (3) In the counterfactual analysis, the paper may consider what would have happened to leverage and asset prices if the Fed had adopted tighter monetary policy pre-crisis (by raising the FF rate)

US short-term interest rate below the rate predicted by the Taylor rule



Source: Financial Times, September 12, 2007

Comments (2)

- The paper argues that restarting the financial system puts “the economic car back in gear” but that this new gear is “fundamentally slower than the previous gear”
- Zarnowitz’ rule does not apply to recessions created by financial crisis
- The narrative is interesting, but is this just a speculation or is there any evidence to support the claim?
 - ▣ Is the rate of bank loan growth lower in the post-crisis period controlling for various other factors (interest rate, monetary base growth, the business cycles)?
 - ▣ Is corporate sector health lower in the post-crisis period than in the pre-crisis period?
 - ▣ Does a financial crisis reduce potential growth by stifling the animal spirits of entrepreneurs?

Potential benefits and costs of measures

Policy measures	Benefits	Costs
Macroeconomic policy a. Sterilized FX intervention b. Exchange rate flexibility c. Monetary policy d. Fiscal policy	Consistent with international obligations <ul style="list-style-type: none"> • Sterilized FX intervention and exchange rate flexibility preserve monetary policy independence • Monetary policy easy to use • Fiscal policy effective in containing capital flows 	<ul style="list-style-type: none"> • Effects of FX intervention may be temporary • Exchange rate flexibility may create problems (competitiveness, inflation) • Monetary policy may encounter trade off with other objectives • Fiscal policy difficult to mobilize quickly
Macroprudential policy measures a. Housing-related measures b. Consumer loan measures c. Credit limit d. Capital measures e. Dynamic provisioning f. Reserve requirements g. Liquidity requirements	<ul style="list-style-type: none"> • More targeted at specific areas and better at dealing with financial stability risks in specific areas than macroeconomic policy • Able to reduce financial risks independent of macroeconomic policy 	<ul style="list-style-type: none"> • Ineffective against shadow banking activities that bypass regulated markets and institutions • Effectiveness dependent on efficiency and capacity of financial sector supervision • Less effective in responding to capital outflows
Capital flow management (CFM) measures a. Prudential measures (FX limit) b. Capital controls, quantity-based (bans, trading limits) or price-based (taxes, URR) c. Relaxation of capital controls	Flexibility of design <ul style="list-style-type: none"> • Alters composition of capital flows toward LT flows • Signals of policy intentions • Allows independent monetary policy • Can temporarily contain rapid currency movements • Outflow or inflow liberalization 	<ul style="list-style-type: none"> • Potential distortions and negative spillovers to other economies • May harm credibility of policy consistency • Effectiveness may be temporary as investors find ways to circumvent • Ineffective in limiting total capital flows
Structural policy a. Financial market development and deepening b. Strengthening the supply side of the economy	Addresses the fundamental weakness of EMEs <ul style="list-style-type: none"> • Financial market development most vital to financial stability • Stronger supply side helps contain current account deficits 	Fundamental reform takes time to be effective <ul style="list-style-type: none"> • More developed financial markets and greater financial openness can generate more capital inflows

4. Conclusion

- A very insightful paper with interesting comparison with automotive driving
 - ▣ Gear transmission = financial regulation or macro-prudential measures
 - ▣ Pedals = monetary policy (interest rate)
- However, the impact of macro-prudential policy measures remains unclear and understudied, not to mention their lagged impacts
- More rapid output contraction during a financial crisis and slower output recovery after the crisis than expected were also observed at the time of the Asian financial crisis of 1997-98

Conclusion (cont'd)

- The paper claims that after a financial crisis the gear is (forced to be?) set in slower mode, thus making monetary policy less potent post-crisis in generating economic recovery than in the pre-crisis period
 - ▣ But how do we know that the gear is in slower mode? Any evidence?
 - ▣ Does potential growth decline after a financial crisis?
- An emerging economy can be sent to a financial crisis without having both high leverage and asset price bubbles, because of contagion and capital outflows

Thank you

For more information:

Masahiro KAWAI, PhD

**Representative Director and Director-General
Economic Research Institute for Northeast Asia**

kawai.masahiro.19@erina.or.jp

and

Professor

Graduate School of Public Policy

University of Tokyo

mkawai@pp.u-tokyo.ac.jp