Shin notes that the dynamics of boom bust cycles are fundamentally different because of longer intermediation chains. Long intermediation chains increase lending and borrowing to non-banks. What is interesting to ask is what is the role of the policy interest rate in this process.

Policy recommendations

The paper goes on to make three broad policy recommendations, which are high on many of the authorities' "to do" lists. These include changes in capital and liquidity requirements, leverage caps (such as those already used in Canada and recently introduced in Switzerland), forward-looking statistical provisioning schemes (such as that used in Spain), and encouraging/requiring securitizers to keep more "skin in the game" (such as by issuing covered bonds).[2]

However, although intermediation chain lengthening undoubtedly played an important role in creating the conditions for a financial crisis, the financial system's inherent procyclicality also played an important role. Professor Shin's paper takes credit cycles as a natural and recurring phenomenon, but there were additional amplifying factors that played a role in the present crisis, and so we need to add them to the list of reforms that need to be considered. On provisioning, I tend to agree with Professor Shin that forward looking provisions help with both leaning against the wind and cleaning up afterward. Valuation reserves can also be another way of mitigating some of the hazards of securitization, particularly for the trading book which may be inherently complex when valuing the more complex securities. But I would go beyond the measures that Professor Shin calls for or alludes to in his paper. Here I would list six additional changes that can help to alleviate some of the risks of lengthened intermediation chains.

The first step that can be taken is to enhance current risk management frameworks. At present, risk management structures tend to encourage firms to increase the risk they take in benign low-volatility environments, and crank it down when volatility increases. Furthermore, margin requirements and haircuts tend to vary with cycles. To offset potential procyclicality, risk management systems and margin requirements should be based on through-the-cycle measures. They should be forward looking over sufficiently long time horizons, and smoothing techniques applied to risk capital allocations. Stress testing should also play a more prominent role. Firms also tend to underestimate liquidity risk in market upswings and vice versa. Market liquidity tends to be procyclical – volumes rise and bid-ask spreads narrow during upswings and reverse in downturns. Marketability tends to be overestimated during good times, particularly for assets that are customized or complex. Also, banks may anticipate the provision of public sector liquidity support under extreme conditions, underinsuring themselves for such cases. Funding risk procyclicality can be alleviated with more rigorous stress testing, plus making cash flow and funding cost scenarios more sensitive to credit ratings and collateral triggers, correlated credit risk events and funding

[2] Regulations could alternatively require securitizers to retain prescribed amounts of risk exposure, as will become the case in Europe and the United States. The European implementation of Basel 2 (the Capital Requirements Directive) will require securitizers to retain a material economic interest in any assets they securitize. In the United States, the Mortgage Reform and Anti-Predatory Lending Act, currently being debated in the Senate, requires securitizers to retain an economic interest in some mortgages. In a recent Washington Post editorial, Timothy Geithner and Lawrence Summers said that soon-to-be announced regulatory reforms would *require the originator, sponsor or broker of a securitization to retain a financial interest in its performance.*