

This paper analyzes lean against bubbles versus clean up after bubbles crashes in a rational-bubble model. The main results are as follows. Firstly, macro-prudential regulation can be justified in the case of over-sized bubbles which are more likely to occur when the quality of the financial system is relatively high. Secondly, although macro-prudential regulation reduces the over-sized bubbles, it may end up increasing boom-bust cycles in real variables. Thirdly, when the degree of externality (i.e., interconnectedness in production) is large, bailout policy can improve taxpayer's welfare, but it creates a time-inconsistency problem if government cannot commit to it, thereby generating welfare loss. Macro-prudential regulation can mitigate the welfare loss due to commitment problem. Under some conditions, macro-prudential regulation can function as a commitment device. Moreover, even if government can commit to future bailout policy, macro-prudential regulation can mitigate welfare loss associated with commitment equilibrium, thus improving taxpayer's welfare. These findings provide a theoretical foundation of the case for leaning against bubble policy as well as for clean up policy after the collapse of bubbles.