Bank Lending Behavior and Business Cycles (Very Preliminary)

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abstract

This paper studies banks' lending activity under the capital requirement and investigates its implication for business cycles and the economic growth. I present a quantitatively tractable macroeconomic model where firms acquire capital from banks facing capital requirement. Since there exists heterogeneity in firms' productivity in this model, TFP is endogenously determined by capital allocation between them. I calibrate the model using Japanese data and conduct some numerical experiments. Main findings are as follows. First, when there is a negative shock to bank's capital, it negatively affects output through banks' lending behavior. It suggests that the state of bank's balance sheet might be relevant to business cycles even if banks' capital itself is irrelevant to macro economic variables. Second, when banks hold a large amount of non-performing loan and its value deteriorates somewhat, output growth would slow down in the process of the disposal of the non-performing loans. The process of disposal negatively affects TFP in addition to investment because it takes some time and causes misallocation of capital. This result suggests that there is room for improvement in social welfare by some credit policy including capital injection.