

Bank Profitability and Risk-Taking

2nd ACPR conference
Paris, December 2, 2015

Natalya Martynova
(De Nederlandsche Bank)

Lev Ratnovski
(IMF)

Razvan Vlahu
(De Nederlandsche Bank)

Short summary

Traditional view on bank profitability and risk-taking:

Profitability reduces risk taking because of role of charter value

Main point of the paper:

Profitability allows banks to borrow more, leading them to expand their portfolio by engaging in side-activities (ie, activities riskier than their core portfolio)

The key is to have a profitable core-business which generates stable long-term returns (UBS example), enabling the bank to increase its borrowing capacity to engage in risky side-activities

Key features of the paper

- ▶ Simple, clear mechanism
- ▶ Can explain recent events, nexus with recent theoretical and empirical literature
- ▶ Several extensions improve contributions of the paper (effort to reduce risk of core business, effect of monetary policy, effect of bank capital)
- ▶ Important policy implications (importance of considering bank risk-taking from a «dynamic» perspective)

Some suggestions

- ▶ Can you incorporate in the model the dynamics between franchise value, capital requirements, and bank risk-taking (Hellmann et al, AER 2000)?
 - r_0 in your model decreases bank risk-taking. A higher r_0 should decrease franchise value (profitability in a «dynamic» sense) . In your model, this results in lower borrowing capacity and therefore lower risk-taking (investment in side-activities decreases).
 - When you consider bank equity capital in your analysis, you obtain the same results as before because an increase in the level of explicit equity is akin to higher bank profitability.
 - However, you do not consider explicitly the effect of bank capital requirements.

Since holding capital is costly, the per-period future profits of the bank are lower, ceteris paribus, when bank capital increases

Some suggestions (2)

- ▶ Looking at eq. (19) and (31) in your paper:

$$X_{\min}(r_0) = \frac{(1-p)(R - (1+r_0))}{p\alpha - \varepsilon - (1-p)(1-\theta)} \quad (19)$$

$$X_{\min}^k = \frac{(1-p)(R - 1 + k)}{p\alpha - \varepsilon - (1-p)(1-\theta)} \quad (31)$$

- ▶ On p. 19 you say that endogenizing r_0 should have no effect on the analysis of the extensions (including that on bank capital). However, an increase in r_0 should also decrease k (ie, the value of bank capital).
- ▶ Therefore, an increase in r_0 might indirectly (ie, via a decrease in k) *increase* bank risk-taking!
- ▶ Allowing for this requires discounting in your model (the «franchise value effect» on bank risk-taking should be stronger for higher values of the discount factor) – could this be a potential extension?