

# Comments on "Banks' Buffer Capital: How Important is Risk?" (by Kjersti-Gro Lindquist)

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# **Summary of Paper**

• Panel study of the determinants of capital buffers (ratio above 8% minimum?) for 153 Norwegian banks over 1992 Q2-2001 Q4 period.

• Eclectic approach assessing whether individual bank's capital buffers are determined by a range of bank specific and more macro factors. 4 types of reasons for holding excess capital in the model:

## 1. Voluntary

- Insurance against capital being depleted this cushion depends positively on uncertainty and negatively on bank size (eg diversification or monitoring effect), the cost of holding capital, and general loan loss provisions (an alternative cushion).
- **Portfolio risk** more risky the portfolio the higher the capital buffer.

### 2. Market discipline

• A bank's capital buffer depends positively on capital buffer of rivals (peer group).

## 3. Regulatory discipline

• Capital buffer depends positively on regulatory scrutiny.

## 4. Economic cycle

 No strong priors - buffers could rise or fall in booms (recessions).

## Results

#### All banks

As expected, size of capital buffers depend positively on:

- uncertainty (buffer variance)
- market discipline (buffer held by rivals)
- regulator (on-site inspections)

#### and negatively on:

- cost of capital
- bank size
- alternative cushion (general loan loss provisions)

Also finds banks with riskier portfolios hold <u>lower</u> capital (moral hazard).

# Results

	Excess capital ratio (buffer) depends on:			Actual sign		
			Expected sign	All banks	Actual commercial banks	Savings banks
Voluntary measures	Insurance variables:	Real interest rate on 10 year bonds (PEC)	-	-	-	0
		Variance of bank's capital buffer (VRES)	+	+	0	+
		Size	-	-	-	-
		General loan loss provisions (lagged) (USLP)	-	-	-	-
	Portfolio risk:	Bank's risk profile (RPR)	+	-	-	-
Market discipline		Capital buffer of competitors (lagged) (CBUF)	+	+	0	+
Regulatory scrutiny		Number of on site inspections (REG)	+	+	+	+
Economic cycle		Annual growth in GDP (GDPG)	+/-	+	_	0

## **Comments**

• Most surprising result is banks with higher risk hold <u>lower</u> capital. This result holds up in separate regressions for commercial and savings banks. If true implies behaviour will be affected by Basel 2 risk-sensitive capital weights (ie riskier banks will have to hold higher capital).

Needs further investigation.

Moral hazard explanation but this would imply:

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capital ratio ↓ ⇒ risk ↑ rather than risk ↑ ⇒ capital ratio ↓ so endogenity problem
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# Comments (cont'd)

- Expect moral hazard to bite only at very low levels of capital here expect gamble for resurrection (S&Ls). More generally, interesting to see how these results change depending whether banks very close to 8% limit or far away from it.
- Missing variables? Expected v unexpected risk. If portfolio risk has been priced for then expect that it will be reflected in banks' margins (or profit). But no margins/profits variable in the equation (eg Kim et al (2001) find negative relationship between margins and capital).

# Comments (cont'd)

- Surprising that <u>market discipline</u> (competitors' buffers) affects buffers of savings banks rather than commercial banks.
- Could try other variables to proxy market discipline which may affect capital buffers (Baumann & Nier (2003)):
  - implied safety net proxied by Fitch IBCA TBTF rating (-)
  - amount of information disclosed (+) proxied by
     (i) listing in the US; (ii) credit rating or not;
     (iii) disclosure index
  - share of uninsured deposits (+)

# Other possible missing variables

• Volatility of profits (+) - measure of insurance rather than volatility of buffers.

• Public-sector ownership or not?

# Bank capital buffers and the economic cycle

- Finds  $\overrightarrow{GDP} \downarrow \text{implies} \left( \frac{K}{RWA} \right) \uparrow$  for commercial banks no impact for savings banks. Why the difference?
- On face of it, good news for commercial banks regarding Basel 2. Expect Basel 2 will increase capital requirements in recessions but seems commercial banks in Norway start with a cushion of capital in recession.
- Is the countercyclical effect simply passive reaction to large swings in loan demand (RWA) or banks deliberately reducing loan supply (RWA) and/or increasing capital (K) in recessions?