Equity Depletion from Government Guaranteed Debt

Robert E. Hall
Stanford University and NBER

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Prompt corrective action?

**Federal Regulators Close ANB Financial**

By Damian Paletta and Paulo Prada

WASHINGTON—Federal regulators closed ANB Financial Friday, marking the third financial institution to fail this year amid what regulators have warned might be a tumultuous time.

The $2.1 billion bank, of Bentonville, Ark., is the second-biggest federally insured bank to fail since 2001. ANB, which opened in 1994, had touted itself as one of the first Internet banks. As of Friday afternoon, the bank’s Web site was no longer working.

The biggest recent failure was NetBank, a $2.5 billion Alpharetta, Ga., bank that was closed last year and also struggled with an Internet banking model.

The Federal Deposit Insurance Corp. said ANB’s nine offices would reopen Monday as branches of Pulaski Bank and Trust Co., with deposits transferred to that bank.

ANB came under regulatory scrutiny in June 2007 as its assets grew but its capital shrank, in part because of a surge in delinquent loans. The Office of the Comptroller of the Currency, which regulates ANB, required the company to hire a new senior loan officer and raise capital, among other things.

In January, the bank and its parent company, ANB Bancshares Inc., entered into a separate regulatory agreement with the Federal Reserve Bank of St. Louis, consenting to improve its capital.

The bank’s delinquent loans and leases surged to $394 million at the end of 2007, up from $40 million at the end of 2006. It had roughly 200 employees. The OCC blamed “unsafe and unsound practices” for the bank’s failure.

ANB had $1.8 billion in deposits as of Jan. 31. Pulaski is taking on $212.9 million of ANB’s insured nonbrokered deposits and will buy $235.9 million of the bank’s assets. The FDIC said the failure would cost its federal deposit insurance fund $214 million.

Bank regulators have publicly warned that the rate of insolvent banks is expected to pick up this year. The FDIC is recruiting retired employees to help handle an increased workload.

There have been two other bank failures so far in 2008, both small Missouri banks. Three banks failed in 2007, following a record two-year span in which no banks failed.
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Example of a History From the Model

- Fraction of capital financed by equity (right axis)
- Asset price (left axis)

Years vs. Fraction of capital financed by equity (right axis) and Asset price (left axis)
Example of a History From the Model

Real consumption (right axis)

Nominal interest rate (left axis)

Years
$D \leq (1 - \alpha)pK$
$D \leq (1 - \alpha)pK$

unless earlier debt is greater
Capital requirements

\[ D \leq (1 - \alpha)pK \]

unless earlier debt is greater

but \( D \leq pK \)
CALIBRATION

\[ \gamma = 2 \]
Calibration

\[ \gamma = 2 \]

\[ r = 0.05 \]
Calibration

\[ \gamma = 2 \]

\[ r = 0.05 \]

\[ \alpha = 30 \text{ percent} \]
DISTRIBUTION OF ANNUAL PRICE CHANGE RATIO
Euler Equation

\[ \int_{p^*}^{\infty} c'(p'/p)^{-\gamma} dF(p'/p) = c^{-\gamma} \]
Chosen Leverage Ratio

Leverage Ratio Coming into Period

Chosen Leverage Ratio

post bailout

0.53 0.56 0.58 0.61 0.63 0.66 0.68 0.71 0.73 0.76 0.78 0.81 0.84 0.86 0.89 0.91 0.94 0.96 0.99
Probability of Default as a Function of the Leverage Ratio
Consumption/Capital Ratio as a Function of the Leverage Ratio
Consumption Growth Rate as a Function of the Leverage Ratio

Leverage Ratio Coming into the Year
Nominal Interest Rate as a Function of the Leverage Ratio

Leverage Ratio Coming into the Year
Expected Flows as Functions of the Leverage Ratio

Flow as a Ratio to Value of Capital

- Repayment of debt with interest
- New debt
- Return of equity
- New equity
- Net outflow
- Guarantee

Leverage Ratio Coming into the Year

post bailout

0.56 0.61 0.66 0.71 0.76 0.81 0.86 0.91 0.96
Flows as Functions of the Price Ratio when Prior Leverage is 0.85
Consumption in Four Cases

Leverage Coming into the Year

Consumption as a Ratio to Capital

Lower capital requirement

Higher intertemporal substitution

Lower price volatility

Base case