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Equity Depletion from Government Guaranteed Debt

Robert E. Hall Stanford University and NBER

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Equity Depletion from Government-Guaranteed Debt

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Ninth Jacques Polak Annual Research Conference, IMF, November 13 and 14, 2008

PROMPT CORRECTIVE ACTION?

Federal Regulators $\varsigma_{(i) \circ i}^{\varsigma \varsigma}$ 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. Pulask 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 <u>65st its Tederal deposit</u> insurance fund \$214 million

lion.

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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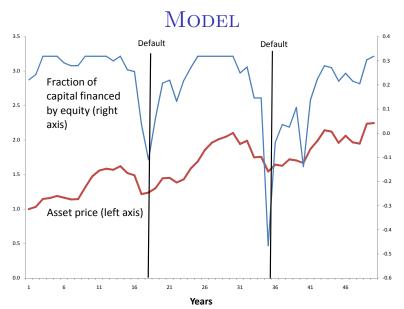
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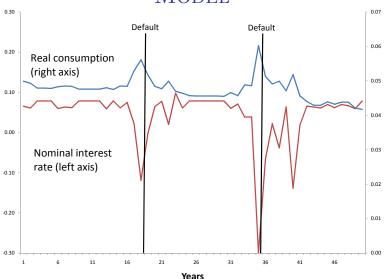
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Example of a History From the



Example of a History From the Model



CAPITAL REQUIREMENTS

$$D \le (1 - \alpha)pK$$

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unless earlier debt is greater

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but
$$D \leq pK$$

CALIBRATION

$$\gamma = 2$$

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$$r = 0.05$$

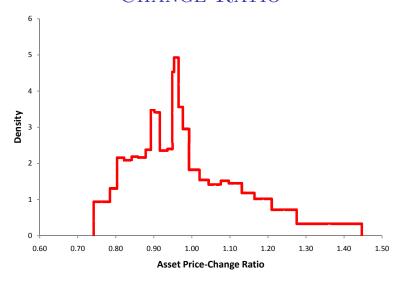
CALIBRATION

$$\gamma = 2$$

$$r = 0.05$$

$$\alpha = 30$$
 percent

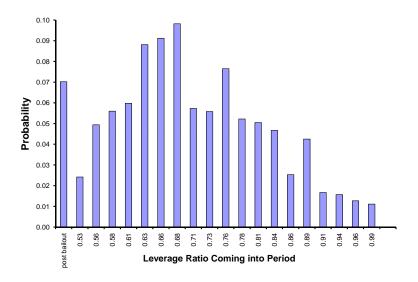
DISTRIBUTION OF ANNUAL PRICE CHANGE RATIO



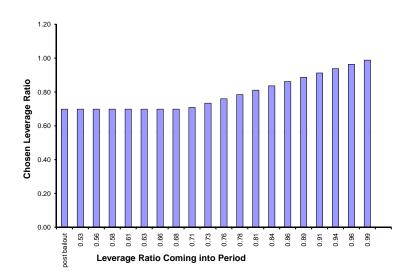
EULER EQUATION

$$\int_{p^*}^{\infty} c'(p'/p)^{-\gamma} dF(p'/p) = c^{-\gamma}$$

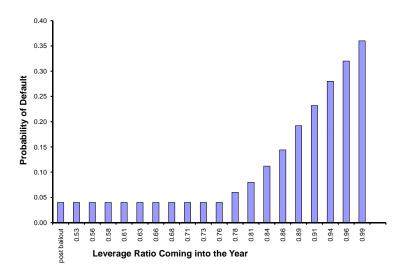
DISTRIBUTION OF LEVERAGE RATIO



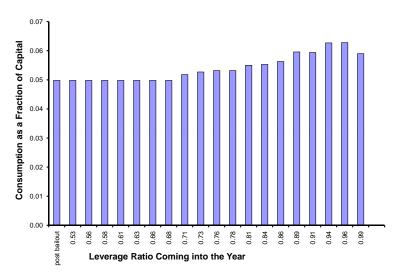
CHOSEN LEVERAGE RATIO



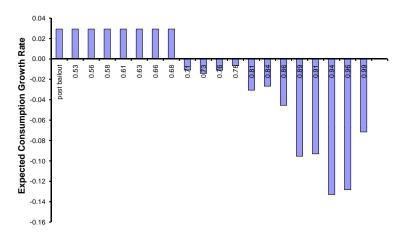
Probability of Default as a Function of the Leverage Ratio



CONSUMPTION/CAPITAL RATIO AS A FUNCTION OF THE LEVERAGE RATIO

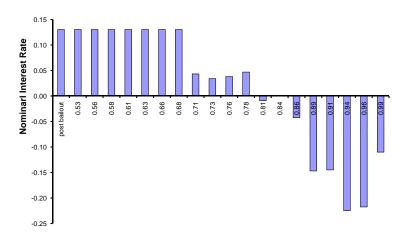


CONSUMPTION GROWTH RATE AS A FUNCTION OF THE LEVERAGE RATIO



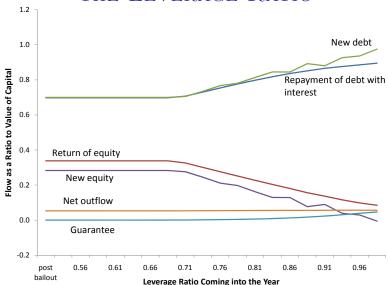
Leverage Ratio Coming into the Year

NOMINAL INTEREST RATE AS A FUNCTION OF THE LEVERAGE RATIO

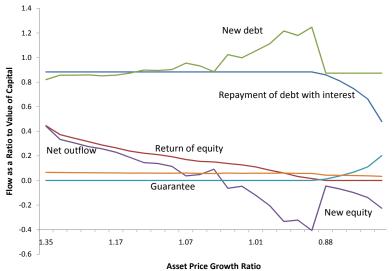


Leverage Ratio Coming into the Year

EXPECTED FLOWS AS FUNCTIONS OF THE LEVERAGE RATIO



FLOWS AS FUNCTIONS OF THE PRICE RATIO WHEN PRIOR LEVERAGE IS 0.85



CONSUMPTION IN FOUR CASES

