

ABOUT AUTHOR - ALBERT S. (PETE) KYLE



- Charles E. Smith Chair Professor of Finance of University of Maryland
- He earned a Ph.D. in Economics, University of Chicago
- Research focuses on market microstructure, including topics such as high frequency trading, informed speculative trading, market manipulation, price volatility, the informational content of market prices, market liquidity, and contagion

BACKGROUND

- In 2008 financial crisis, investors pulling a record \$140 billion out of money market account and were moving funds to Treasury bills, causing yields to drop to zero
- The fear of interbank lending caused LIBOR to increase and stock price to be plummeted
- Hence, financial firms were unable to raise capital and facing danger of going bankrupt (which was happened to Lehman Brothers)
- \$700 billion bank bailout was pass by Congress (or even more?)
- How can we prevent such a scenario? i) more regulation and ii) more capital

10/28/2008	Wells Fargo & Co.	San Francisco	Calif.	\$25,000,000,000
10/28/2008	Citigroup Inc.	New York	N.Y.	\$25,000,000,000
10/28/2008	JPMorgan Chase & Co.	New York	N.Y.	\$25,000,000,000
10/28/2008	Bank of America Corp. ¹	Charlotte	N.C.	\$15,000,000,000
10/28/2008	Goldman Sachs Group Inc.	New York	N.Y.	\$10,000,000
1/9/2009	Bank of America Corp. (Footnote 1)	Charlotte	N.C.	\$10,000,000
10/28/2008	Morgan Stanley	New York	N.Y.	\$10,000,000
12/31/2008	The PNC Financial Services Group Inc.	Pittsburgh	Pa.	\$7,579,200,000
11/17/2008	U.S. Bancorp	Minneapolis	Minn.	\$6,599,000,000
11/17/2008	Capital One Financial Corp.	McLean	Va.	\$3,555,199,000

PURPOSE FOR THE PAPER

- This paper shows how contingent capital securities, included in a bank's capital structure as a substitute for additional common stock, can amplify the effectiveness of both increased government regulation and higher capital requirements, and hence, prevent costly bailout scenarios
- In this paper, author suggested a design of contingent capital structure

WHAT IS CONTINGENT CAPITAL

- A hybrid security that has the risk characteristics of debt when a bank is healthy but converts to riskier common stock when a bank becomes undercapitalized
- It follows a template mandated by the bank's regulator and the template defines trigger events
- If the trigger event happened, it might lead to conversion

ADVANTAGE OF HAVING CONTINGENT CAPITAL

- Pressure on the bank to remain well capitalized
- Less information sensitive, and not "clogging up" the bank's capital structure

WHY CONTINGENT CAPITAL?

- A no-bailout policy is not creditable:
 - Too big to fail
 - Difficult to fail smaller banks
- Examples: 2008 Crisis, EU Crisis
- Resulting toxic interaction: adverse selection, moral hazard, good governance, and regulatory forbearance

GOOD STRUCTURE

- "It may be tempting to think of the policy problem as a mechanism design problem, where the regulator designs a game in which bank equity holders and contingent capital holders are the players and the regulator sets the rules of the games."
- "A good contingent capital mechanism is a robust security design that keeps banks well capitalized even if the equity holders do not play optimally, thus providing weak incentives for the equity holders to pressure regulators to change the rules of the game by allowing forbearance."

NOTATION

- "20+0": 20% capital structure that is all common stock
- "15 + 5":15% common stock + 5% contingent capital
- "10 + 10 + 10":10% common stock +10% contingent capital +10% backup contingent capital

LITERATUR

- Admati and Hellwig (2013) and Admati et al. (2013): 20+0
- Calomiris and Herring (2012): 15+5
- Kashyap et al. (2008): 10+10 is better than 20+0
- Coffee (2011) and Calomiris and Herring (2012) emphasize this monitoring role of contingent capital holders or subordinated debtholders, who can discipline common stockholders (see also Calomiris 1999)
- Sundaresan and Wang (2010), the contingent capital proposed here may sell at par
- McDonald (2013) and Squam Lake Working Group (2010) propose dual microprudential and macroprudential triggers such that contingent capital converts when both bank-specific market triggers and macroeconomic triggers are simultaneously pulled

PROPOSED STRUCTURE - FEATURES

- The threat by holders not to roll over maturing securities
- Combination of regulatory triggers and market triggers, forcing conversion when either trigger is pulled and not necessarily both
- Prevent contingent capital holders to collude with common stock holders
- Does no rely on cash settlement or "death spiral"
- limits on cash interest to contingent capital holders and increased capital requirements when dividends or high cash executive compensation is paid
- mandatory write-downs when a bank's common stock trades below book value for an extended time

PROPOSED STRUCTURE (CONT'D) - DETAILS

- Equity securities allowed in a bank's capital structure are common stock and contingent capital
- Contingent capital is structured as reverse convertible preferred stock
- Fixed window of conversion time with redemption with cash proceeds of new common stock issuance or some fraction of issuance in the recent past (e.g, the percentage of cash proceed can be used decrease by 5% each month). Unredeemed contingent capital coverts to common stock at the end of the fixed window of time
- Conversion is based on a highly dilutive fixed ownership percentage of the outstanding common stock (80-20 conversion rule)
- Contingent capital shares have equal seniority
- If fail to replace maturing contingent capital with new contingent capital or defaults on interest, an conversion event happens
- The regulator may declare a "Either-or" conversion event when a bank is deemed undercapitalized for any of a variety of reasons, such as i) low book capital, ii) failing grades on a stress test, iii) persistently low common stock prices, iv) persistently high CDS spreads, v) ratings downgrades, vi) accounting irregularities, or vii) persistently high levels of borrowing from the central bank

PROPOSED STRUCTURE (CONT'D) - DETAILS

- After a conversion event, the bank must promptly replace the converted contingent capital with new contingent capital
- Contingent capital is also allowed to be paid interest in shares of common stock
- Maturities of contingent capital securities should be limited
- The bank regulator may require a bank to write down the book value of assets when the market value of its equity is low
- When a bank pays cash dividends to common stockholders (or buys back common stock for cash) or pays high cash executive compensation, its forward looking capital requirement is raised by a multiple of the amount paid
- Institutions that own bank common stock or contingent capital securities cannot count the value of such securities as bank capital for regulatory purposes
- Cash interest (rate 2% over Treasuries) on contingent capital securities should be tax deductible as long as interest is not also being paid in common stock

WHO WILL BUY

- Long-term bond investors with a tolerance of bearing some degree of risk
- Pension funds, endowments, life insurance companies

MACROECONOMICS CONSIDERATION

- Strengthen quickly the capital structure of banks throughout the economy, thus bringing an end to the panic.
- Encourages banks to conserve cash during periods of financial stress. The required conversion of all contingent capital rather than just part of it tends to create a large capital buffer during periods of financial stress.
- A speedy conversion process should shorten the time during which banks try to deleverage their portfolios. This should have some stabilizing effect due to less contraction in credit supply

CONCLUSION

- The purpose of contingent capital is to incentivize banks to maintain healthy balance sheets, which reduces the expected value of taxpayer bailouts and therefore reduces the inefficiencies that expected bailouts lead to
- To achieve this objective, contingent capital should be structured as a robust security, designed to make banks less fragile. It should work both when contingent capital holders collude with common stockholders and when they do not. It should work when markets agree with regulators and when markets do not agree with regulators

BUT?