Equity Recourse Notes

Jeremy Bulow and Paul Klemperer and Jacob Goldfield
Equity Recourse Notes (ERNs)

- Bail-inable debt with key differences

- Conversion based on percentage (e.g. 25%) of share price on date of bond issue

- Conversion takes place payment-at-a-time instead of all-at-once

(Bulow and Klemperer, EJ August 2015)
Example of ERNs

- Bond is issued when share price is 80
- On date a payment of $1000 (principle or interest) is due there are two possibilities.

- If share price is less than $20 bank pays 1000/20 = 50 shares in lieu of interest
- If share price is greater than $20 bank may pay either $1000 or 50 shares.
- If share price is below 20 on one payment date and then rises above 20 on the next, the second payment may be made in cash
ERNS vs. Cocos

- Market Capital vs. Regulatory Capital

- ERNs much less manipulable
- Conversion of ERNs doesn’t send a signal beyond what is already in share price
- Credibility of ERNs as going concern capital much greater
- Political changes to delay conversion more transparent
Commercial Banks worse than Investment Banks

- 1940-2010 the top 7 years for bank equity/asset ratios were... 2004-2010
- Commercial banks marked the same assets at much higher prices than the commercial banks. Even Lehman was conservative compared to the commercial banks

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ERNs vs. Cocos

- Payment-at-a-time vs. all-at-once conversion: more gradual so incentive to act only in a crisis operates in favor of letting the system operate

- Coco conversion focuses on regulatory capital rather than economics

- ERNs save >$1 cash immediately for every $1 of new equity created (selling shares at premium); Cocos may not save any cash right away; changes politics of delay
ERNs vs. Market Cocos

- If an entire stream of payments converts based on a market price there are multiple equilibria

- Bondholders may then want price to go down to cause conversion

- This problem is eliminated by payment-at-a-time conversion
ERNs Counter-cyclicality

- Say share price goes from 80 to 40
- New ERNs would have conversion price of 10 instead of 20
- New ERNholders would not lose money until old bonds lost 50%
- Old bondholders lose seniority when new bonds are issued; shareholders gain --- REVERSE DEBT OVERHANG
  - Given that the market should “haircut” bank assets by a higher percentage when collateral values fall, we think this is stabilizing
Banks could offer guaranteed government money market funds and non-guaranteed “prime” money market funds to depositors.

“Prime” funds would be marked to market like ultra-short bond funds.

Firms regarded as SIFIs would be funded with equity, ERN-like bonds, and secured debt with recourse only to ERNs and equity.

By “ERN-like” we mean bonds that capture the key ERN features --- they credibly bear losses and credibly do not deter raising additional risk capital.
*creditors’ recourse beyond collateral limited to ERNs or equity

**the less equity the bank chooses, the more volatile its stock, and the more likely there will be ERN conversions (which increase the amount of stock) and that secured creditors will demand larger haircuts.

***ideally based on market measure for secured debt
Why Not Just More Equity?

- Obvious Reasons
  - Agnosticism about MM (empirical evidence)
  - Counter-cyclicality of ERNs
  - Better all ERNs + Equity for unsecured claims than e.g. doubling or tripling of equity requirements, even in static model
  - Pooling and trancheing of ERNs easy
But most importantly

- What makes the current system complicated is not whether ERNs are added to a firm’s capital structure. What is complicated is Basel 3 and the 1000 subsidiaries a big bank might have.
- ERNs would be used in many places where a creditor would have a debt claim: on a defaulted secured loan, derivatives contract, or line of credit obligation.
- ERNs thus integrate into a simple, market-based regulatory capital system, closer to the requirements banks impose on their customers.
- Proposals for more equity leave Basel 3 and Dodd-Frank, are generally vague on derivatives, repos, risk weights etc. They do not use market-based capital requirements, which are key.
Conclusion

**Relative to “Cocos”:**
- ERNs convert credibly if the bank loses money
- ERNs improve banks’ liquidity in bad times
- ERNs reduce credit cycles

**Relative to holding more Equity:**
- ERNs facilitate recapitalization if the bank loses money
- ERNs are debt-like which may have (social) advantages, and makes them harder for banks to oppose
- ERNs help general transition to market-based system
Thank you!
Tax Issues

- ERNs could be tweaked to make tax deductibility more likely but this misses the big picture

  - No clear reason to tax equity and any kind of debt differently on margin
  - MLP taxation?
  - Deductions limited to riskless rate times assets?

Beyond the scope of this talk
Problems with the Regulatory Capital System in the Crisis

- Asset prices fall a little, Citi and Merrill among others hold securities at 100 instead of selling at 97 to preserve book profitability of new securitizations.
- As collateral values fall, mortgage values fall and mortgage risks rise.
- Banks nevertheless retain risky “toxic” assets because selling would reduce reg. capital and force asset sales (asset marked at 100 with 10% req. vs. value of 60).
- With equity worth much less than reg. value shareholders don’t want banks to raise $ make new fairly marked loans (debt overhang).
Individual Bank Regulatory Capital

![Graph showing Individual Bank Regulatory Capital over time. The graph includes multiple lines representing different banks, with the x-axis indicating quarters from Q1-06 to Q3-08. The y-axis represents the tier 1 risk-based capital ratio. The graph highlights the well-capitalized and adequate capital levels.](image-url)
Small “Simple” Banks Probably Worse

- Amongst 2008-2010 “Failure 400” Banks, 90 percent imposed losses on the FDIC in excess of 14 percent of assets;
- Europe worse than US: banks that pass stress tests fail months later
Requirements for a Better (more efficient) System

- “Property Rights” in losses are well defined and allocated to the private sector
  - Institutions that will not be allowed to fail don’t
  - Claims that won’t be allowed to take losses don’t
- Counter-cyclical, or at least not pro-cyclical
- Robust to mistakes, both by the market and by regulators
  - Regulatory system should be able to deal with a variety of contingencies, including the market is right
  - Regulators should not be expected to value most assets
- The same assets held by different institutions should face (approximately) the same regulations otherwise asset sales for regulatory not economic reasons
Market-Based Capital Requirements

- To make sure that firms do not fail (without a bailout) one possibility is allowing no debt
- But why not allow at least non-recourse debt?
- Going one step further, our solution is to allow secured debt recourse only to equity or to unsecured debt which the issuer can convert into equity (Equity Recourse Notes)
- If a bank owns loans worth $p$ and can receive loans against them of 50 then cap. requirement is $p-50$
- All unsecured debt would be limited to Equity Recourse and so could not cause bankruptcy
- Guaranteed Deposits become first in line secured debt instead of de facto unsecured long-term
- A much simpler regulatory system than, say, Basel 3 with a very high equity requirement and a Dodd-Frank like volume of regs