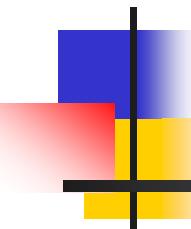
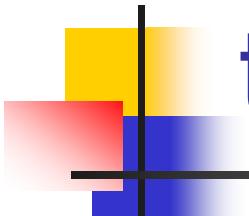


# FRBNY/Princeton Conference Panelist Comments: Moral Hazard(?)

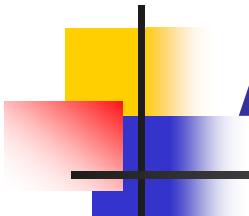


Jeremy Stein  
Harvard University  
December 13, 2007



# Various policy tools available to deal with “crisis” episodes

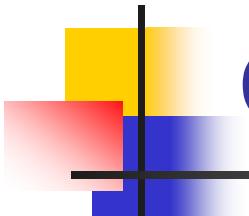
- Easing of monetary policy.
- Increased use of discount window.
- NY Fed’s facilitation of LTCM workout.
- Efforts to restructure subprime mortgages.



# A familiar worry: moral hazard

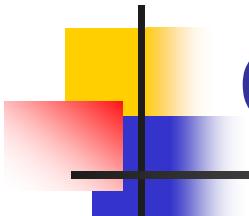
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- Policy may be ex post helpful, but distorts ex ante incentives.
- Two questions:
  - Is ex ante effect quantitatively important relative to high stakes in a crisis?
  - When does moral hazard argument make logical sense?



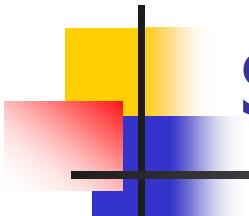
# Contrast two types of “bad” decisions

- 1. An ex ante negative-NPV investment (e.g., buying an overpriced CDO).
  - If investor anticipates bailout in bad state, will want to buy the asset.
  - This is the classic moral hazard problem.
  - Implication: interventions have ex ante costs; only question is how big.



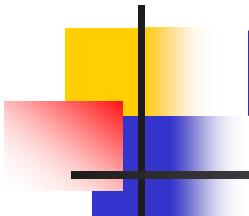
# Contrast two types of “bad” decisions

- 2. Overleveraging a fundamentally positive-NPV investment.
- Example: two quant funds, A and B, use same screens to find “value” stocks.
  - Fund A then levers 10-to-1.
  - Fund B levers only 3-to 1.



# Too much leverage can have social costs here.

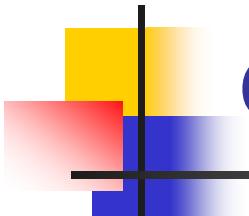
- If Fund A has to liquidate in a crisis, this imposes externalities on Fund B via asset prices.
- Even modestly-levered Fund B may end up having to liquidate.
- Similar to a bank run: can have multiple equilibria, extreme sensitivity to shocks.



# Policy response to this threat?

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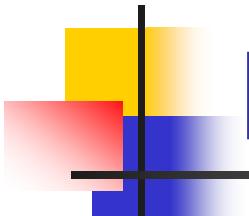
- Can try to restrain leverage ex ante
  - But this is blunt tool; may cut off positive-NPV investments.
- Can try to intervene as needed ex post
  - In some cases, mere promise of support may be helpful.
  - Gets rid of bad outcome in multiple-equilibrium case.



# But doesn't ex post intervention encourage bad behavior?

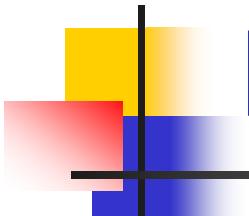
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- Bad behavior here is not buying value stocks, but using “too much” leverage.
- Key question: *differential* effect of intervention on incentives of A and B.
- Note that in good states, high leverage→A does better than B.



# Effects of intervention on payoffs in crisis states.

- Without intervention, huge asset price decline, both A and B wiped out.
  - B pays the price for A's leverage in bad times, without the benefit in good times.
- With intervention, more modest asset price decline, A still badly hurt, B less so.
  - Prospect of intervention makes B's low-leverage strategy more attractive.
  - Moral hazard argument is turned on its head: sensible *ex post* interventions *improve* *ex ante* incentives.



# Putting this in perspective

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- This is an example to make a point.
- Traditional moral-hazard argument is no doubt relevant in some cases too.
- But blanket negative reaction to all policy responses based on “moral hazard” mantra is misplaced.
  - Especially if contagion via leverage and asset prices is a central part of the crisis.