# Leverage and asset bubbles: averting Armageddon with Chapter 11?

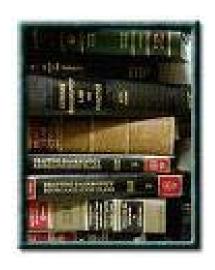
Marcus Miller and Joseph Stiglitz

- on bringing balance sheets and bankruptcy into macroeconomics

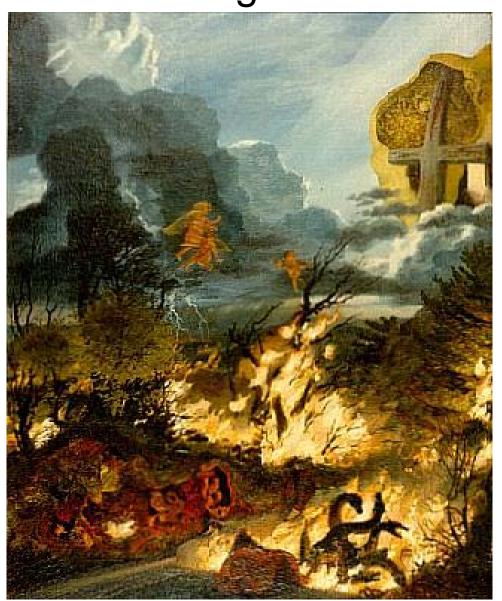
#### Introduction

- Current financial crisis poses severe challenges for central bank policymaking
- Widely-used used economic paradigm used to design anti-inflation policy ill-suited to understanding the origins of the crisis or designing measures to resolve it.
- •It does not consider the vulnerability of Highly Leveraged Institutions to the bursting of **asset bubble**.
- •It does not consider the role of **Chapter 11-style** capital restructuring in crisis resolution.

## Can Chapter 11 avert Armageddon?

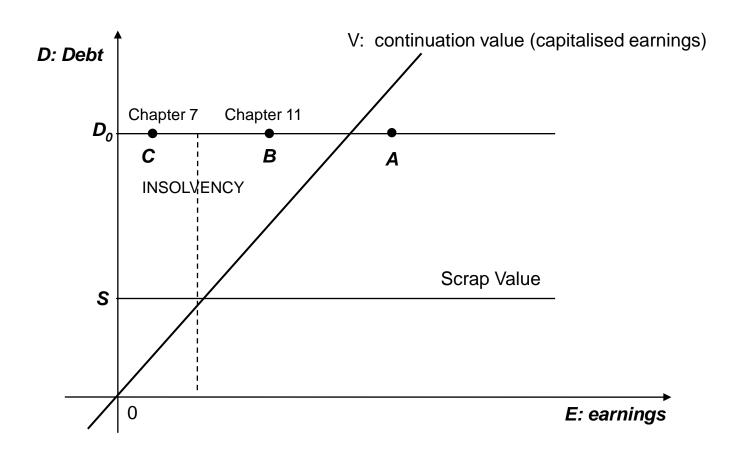


US bankruptcy code



#### An economist's ABC of US Corporate Bankruptcy

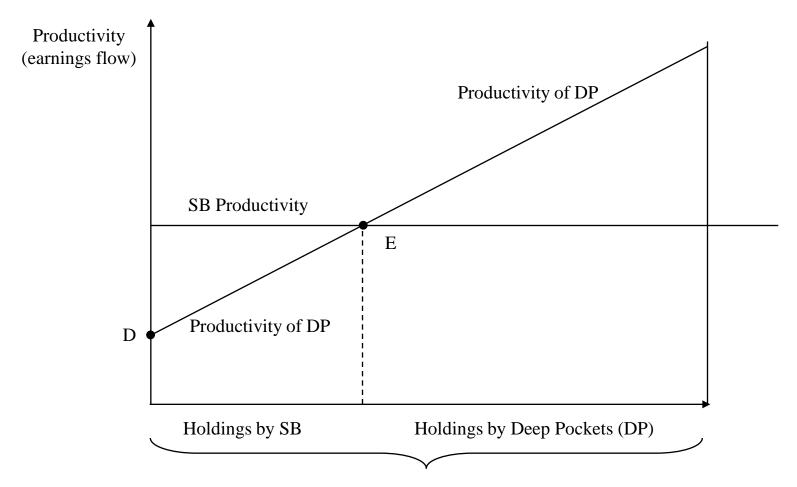
Insolvency with Chapter 11 (restructuring) or Chapter 7(liquidation).



### The set up we use (the 'model')

- There are two groups of actors and a fixed supply of an asset ('land'). The actors are impecunious but productive Small Businesses; and Deep Pocket entrepreneurs who are more well endowed but face diminishing returns in using land
- Small Businesses, who use an land as a factor of production, also use it as collateral for **borrowing from Deep Pockets**. Their highly levered/ highly geared position makes them vulnerable to shocks – both to current earnings and to asset values.
- But individual ('idiosyncratic') productivity shocks hitting the current earnings of a Small Business can be handled by selling land to other SBs (deleveraging) to reduce debts without much effect on the price of land; or by insurance.

### Two possible allocations of land: E ('efficient') and D('disastrous')



Total endowment of 'land'

### Macro - shocks

- But if a 'macro-shock' occurs (which hits the earnings of all SBs), this strategy involve sales of land to less-productive Deep Pockets. So the price of land will fall.
- This reduces the net worth of SBs and so triggers a **financial accelerator** that amplifies the initial shock.
- A good example of a 'macro shock' is the bursting of a bubble in the value of land. This will hit the net worth of SBs and will tend to lead to 'fire sales' of land to Deep Pockets.

# Could 'firesales' not lead to mass liquidation- the Armageddon scenario?

- If all SBs try to sell at once to less productive Deep Pockets, the resulting collapse in asset values could lead to Mass liquidation of SBs with all land being transferred from SBs to Deep Pockets (as in point D).
- This would clearly be socially inefficient as the productivity of land in the hands of Deep Pockets (the scrap value) will be a lot less than if it was to continue being used by SBs.
- To avoid this Chapter 7 outcome, seems like a clear case for Chapter 11.

# Can Chapter 11 save the day?



## Coordinated capital restructuring needed

In principle Yes. But customary legal procedures are not designed to handle macro shocks hitting the whole economy. The courts cannot be expected to take account of the externality that sales of productive assets impose on other firms.

To internalise the price effects of asset 'fire-sales' due to margin calls in the midst of a crisis requires an override of normal procedures — what we refer to as "super" Chapter 11. The government may need to step in to restructure balance sheets via debt-equity swaps, temporary capital injections, or write-downs.

Timely **cuts** in **interest** rates can also help. The idea is simple enough – to stabilise the prices of those assets whose collapsing values are threatening the system. (So could insurance against macro shocks.)

### In practice

- In practice the application of massive balance sheet restructuring in the in the UK and USA has been not been to SBs but temporary capital injections to Banks, which are too big to fail.
- The externality here is the destruction that a collapse of banks would wreak on the rest of the economy (as in the Great Depression).
- We would argue that So the government has been averting collapse by a Super Chapter 11

### Conclusion

- Restructuring balance sheets a key part of crisis management
- But Chapter 11 does raise incentive issues
- If banks know they are too big to fail, then the problems may recur. Quote M Wolf
- Case in point? Investment bank avoids collapse by taking government money, recovers, repays Government, than goes back to business as usual (gambling, big bonuses... another crisis)

### Martin Wolf, FT, April 15, 2009

### 'Cutting back financial capitalism is America's big test'

Decisive restructuring is indeed necessary. (...)
Two things must be achieved: first, the core financial institutions must become credibly solvent; and, second, no profit-seeking private institution can remain too big to fail. That is not capitalism, but socialism.

(...) Bankruptcy – and so losses for unsecured creditors – must be a part of any durable solution. Without that change, the resolution of this crisis can only be the harbinger of the next.

The ending of an asset bubble and the risk of

