11-22-1994

Notes on: Proposal for a Conference at the University of "Bergamo"

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Proposal for a Conference at University of "Bergamo"

by

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The proposed Call for Papers to be in the European Economic Review.

Conference Title:

"INTERNATIONAL PERSPECTIVES ON THE MICRO AND MACRO IMPLICATIONS OF FINANCIAL CONSTRAINTS"

These papers are to be the basis of the proposed conference

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(revised Dec 22)

Theme: Imperfect substitutability of internal and external sources of finance for firms because of asymmetric information problems and imperfect or costly contract enforceability

Firms pay a premium for external finance

The existence and evolution of financial constraints has a profound impact on a firm's decisions anent investment and at the aggregate level on the propagation of business cycles

The basic idea is that the premium (or access) to external finance depends upon "internal" net worth.

HPM In my exposition of Keynesian theory of investment I assumed there was an initial horizontal supply curve of external finance and only after some critical level was passed did the supply curve of finance begin to rise. In these expositions the levering ratio was determined by the marginal cost of finance equaling the demand for external finance as determined by the demand price for investment output, as adjusted to allow for the subjective aversion of the equity owners for the leveraging of losses due to the greater risk of loss of control over the enterprise because of debt financing.

The proposition that firms pay a premium for external finance cannot go unchallenged: asset holders are eager for protected incomes which firms are able to offer. Recall the idea of a constitutional weakness in financial markets as lenders prefer "short term" or even monetary assets and borrowers prefer "long term" liabilities and the relative terms adjust to these preferences. Markets that create an illusion of a short term commitment enter here.

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Text refers to internal net worth:

HPM:

What is the beast "internal" net worth?. Is the distinction between a net worth based upon the historical costs of assets as modified by losses and profits and the net worth as given by the market valuation of the firm's equity shares?

Net worth increases as a result of

a) retained earnings: such increases can be called an internal growth of net worth.

b) public offerings of equities as well as converting preferred stock and convertible bonds into equities.

c) a market appreciation of shares which leads to an increase in equity on a mark to market basis.

A balance sheet involves assigning values to assets and debts: the net worth of a household, business firm or banking institution is the difference between the two. On a balance sheet the debts denominated in money have a definite value even though the market value of the debts may vary from the contractual value whereas in principle the assets are marked to market.

A more precise way of looking at debts, which may be better for the problem as set, is that every debt can be transformed into dated, demand or contingent payments on account of interest and principal; i.e.. a time series of payment commitments which is modified by demand or contingent considerations. Each accounting period's "cash flow out" because of liabilities can be interpreted as a prior determined claim on the "cash flows in" to an economic unit during that period. Thus each unit is "constrained" by its liability structure. Credit evaluations depend upon an analysis of the commitments involved in the inherited liability structure, the prospects for cash flows to the unit from either operations or from the fulfillment of owned contracts, and the effect that the deal on the table has upon the prospective cash flows to and from the unit. Note that a sale of assets or of a subdivision can lead to a positive cash flow and even a rise in equity if the assets have been on the books at a lower valuation than what has been realized. In the leveraged buy outs of the 1980's the buyers often counted on selling subsidiaries at good prices: the involvement of banks in bridge financing mat well have entered through this door.

Recalling Keynes' characterization of capitalism as a world in which borrowing and lending based upon margins of safety takes place, the excess of prospective cash flows from operations to a unit over the cash flows from a unit as committed by the liability structure is a measure the margin of safety provided by a borrower.

There is a fall back to the margin of safety as given by cash flows, in that units may have assets that are irrelevant to their basic operation: government bonds in the balance sheet of US corporations in the immediate post war period are an example. These assets can be used to meet financial commitments without compromising the capacity of the firm to operate. It should be noted that collateral, other than such superfluous assets, is a fall back for the lending unit, but their need to seize the collateral means that assets which have not been able to generate sufficient cash flows to satisfy debt servicing requirements are obtained. This is why bankruptcy of a borrower almost always implies a net loss by the lending institution. So called work outs of units that cannot satisfy debt commitments are often preferred by banks because even if all of a debt is not recovered in a work out a higher proportion may well be realized than by bankruptcy.

The proposal continues with: "negative shocks to internal net worth will increase the premium and depress firms' investment and production." A short fall of cash flows relative to payment commitments and a rise in payment commitments relative to cash flows are the two ways in which such shocks can take place.

Payment commitments on inherited debts increase if there is some short term financing of long term positions and the interest rate rises: the borrower was speculating on interest rates. See my characterization of financing postures as hedge, speculative and Ponzi, with those who need to refinance positions regularly are s

peculative financing units: banks are speculative financing units, especially when they finance through CD's and commercial paper.

A short fall of cash flows can result from a downturn in aggregate demand: the downturn can be absolute as in a recession or relative to some optimistic readings by lenders and borrowers of prospective cash flows. One problem in a market economy is that the waves of optimism and pessimism in evaluating prospects of borrowers and lenders may be synchronized. Animal Spirits characterize both borrowers and lenders.

In a system with banks there is a layering of borrowings and lending based upon margins of safety. Banks are highly levered organizations, business borrowers are not so highly levered. A shortfall of cash flows relative to payment commitments by firms may mean that the non performing assets in bank portfolios increases: cash flows to banks fall short of anticipated cash flows. This both lowers bank profits and net worth: banks become less credit worthy.

The response of banks to the emergence of non performing assets is either to shore up the margin of safety in their portfolio or to "go for broke". (See Jerry Haenwick at George Mason, once with Fed.) Recall that banks are heavily leveraged. They are 5% to 8% equity institutions. A 1% loss on assets per year is often built into the interest rate pattern: the interest rate on a contract includes the equivalent of an insurance premium which varies among loans as a function of the risk class. The negotiations between borrower and lender that lead to a financing commitment can be considered as revolving around the risk class of the borrower.

If a bank's losses rise to 2% of assets per year, then the bank loses .9+% of its equity - it becomes a 4+ to a 7+% equity / assets organization. Such a lowering of equity means that banks become more reluctant to lend at risk. In a world where there is a secure asset, such as cash or short term government debt, banks adjust their portfolios to decrease their exposure: i.e. to protect their equity base. Symmetrically lenders to the bank raise their rates and the market value of the banks equities decrease. (Deposit insurance means that depositors do not raise their required rates)

Non performing assets lead not just to a decrease in borrowers net worth, a decrease in lenders net worth and in their willingness as well as in their ability to lend occurs. (Much of the above, without the wisdom gathered from observation over the past decades can be found in both my John Maynard Keynes and Stabilizing an Unstable Economy.)

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end HPM

Paragraph 2

Fazzari was a colleague of mine at Washington University.

I need a supervision on the Euler Equation approach

para 3 no comment

para 4

Central bank may have a powerful effect

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HPM:

Recall argument on Banker's reluctance. Central bank may have a powerful effect in choking off credit but it may be powerless to get credit extended if banks have taken hard hits to their net worth or profitability because of non performing assets. A crunch can lead to a subsequent reluctance to lend. Takes time and balance sheet rebuilding to affect recovery of bank's willingness to lend. Once again Keynes noted that business men's willingness to borrow may recover well before banker's willingness to lend.

Note an asymmetry between a loss of net worth due to interest rates changing and a loss of net worth because of non performing assets. If the net worth of a financial institution is decreased because interest rates increase then the financial institution will be eager to make loans (short term?) at the current higher interest rates - may also change from long term fixed interest loans to long term loans at floating interest rates. If the net worth is decreased because of non performing loans then a reevaluation of the risks involved in lending takes place which affects the terms upon which credit is available. That is interest rates increasing does not lead to a change in underwriting standards whereas a run of non performing assets does change underwriting standards.

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para 5 no comment
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para 6 HPM

The lowering of interest rates in the United States has enabled banks and insurance organizations to sell off foreclosed real estate at better prices now than earlier in this recession.

para 7 HPM

Note that you speak of the transmission mechanism of monetary policy, which implicitly assumes that monetary policy is potent. As "money" becomes a smaller part of the financial mix and as banks decrease in importance or change from being organizations whose liabilities are money to organizations whose liabilities are not necessarily money monetary policy cannot be assumed to be powerful.

para 8. HPM

The cash flow argument applies to consumers. In a financially open world it also applies to governments.

para 9

no comment

para 10

HPM

There are serious questions as to whether Walrasian based models, which assume the existence of at least one equilibrium, post script

It seems as if in the United States the set up which regulates banks is moving onto the legislative agenda. This is a rationalization which is long overdue, but the issue of why regulate will come up. If this happens the monetary versus the credit view of banking and finance may well be on the agenda.

HPM
Bergamo
Nov 28, 1993