

# Commentary on 'Financial Factors in Business Fluctuations'

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This paper reflects one of the important trends in macro thinking about corporate finance: There is an internal economic life of the firm where the most important decisions—employment, investment, production—are made. The players within the firm are the salaried managers of the firm and the workers. Quite separately, there are wealthy individuals and institutions who provide finance for these activities. These wealthy individuals trade with each other claims on the operations run by managers in organized securities markets.

It's a fact of life that in an economy like that of the U.S., there are relatively few wealthy managers. So there always needs to be a bridge between managers and wealth which is held either in the form of institutions or by a relatively small number of very wealthy individuals who haven't the managerial skills or time to "run their own show." This bridge—the interaction between the managers and the wealthholders—involves some difficult problems of incentives and moral hazard, which are very well developed in this paper. I endorse both the example given here in the paper, and the general principle it illustrates: that although the managers are playing with the wealthholders' wealth, wealthholders would like managers to make decisions as if they were deploying the managers' own wealth. That bridge and its implications for macroeconomics—in particular, for the transmission of gyrations of financial markets into the real economy—is what this paper is about.

What has emerged from **thinking** about this situation is what I call the "back-to-the-wall" school of finance theory. Contributions in

various forms have been made by Jensen, **Meckling**, Stiglitz, **Greenwald**, Gertler, **Hubbard** and others. The idea is that the managers should control a certain amount of genuine equity—the managerial or so-called internal equity. It is their own equity in the sense that the managers get to keep the fruits of their entrepreneurial successes and, as well, must pay for their failures. If the managers are to see themselves as equity-holders, they must not have a draw on the wealth of the wealthholders, nor must they surrender their profits to the wealthholders.

A key idea in the back-to-the-wall school, again which was well developed in this paper, is the so-called *finance* contract. The finance contract governs the relation between the wealthholder on the one hand and the managers on the other. The derivation of this finance contract and the identification of its characteristics is the major theoretical contribution of this school. The derivation in Gertler-**Hubbard** of their theoretical model is a perfect example of the finance contract and the kinds of principles and results that you get from posing this finance contract question. In their example, the wealthholder is called a banker and the manager is called an entrepreneur. The general flavor of their results is that the payments made by the managers to the wealthholders should be as insulated as possible from the success or failure of the firm. So in contrast to the traditional view of what it means to be a shareholder, which is to have residual claim of what's left over from the operation of the firm, the back-to-the-wall theory says that this type of equity doesn't make sense from the point of view of the intended incentives. That is, traditional equity is not the type of contract that emerges from this framework. In fact, the whole thrust of this research is that even if the finance contract is, in principle, written as equity, it should actually resemble debt as much as possible. So the back-to-the-wall theory strongly endorses either explicit debt or the equivalent, which is "equity" that functions like debt.

Because of the need to make the finance contract have debt-like features, the distinction between debt and equity is not a hard and fast one. In general, the solution to the problem of the **wealthholder**-manager relationship is a finance contract which has debt and equity elements.

For the sake of illustration, I identify below some real-world applications of back-to-the-wall finance principles:

1. The loan agreement between a bank and a firm should give the bank full value in the event of adverse developments and should not have any extra repayment or sweeteners in the event of success. Not only should the marketable assets of the firm be pledged, a major point of **Gertler and Hubbard**, but the personal assets of the managers should be pledged as well. In every situation I know of involving a small business and a bank, the bank extracts security interest in the homes and other assets of the managers, which is exactly in line with this idea that there should be a noncontingent pledge that there be no effect to the equity interest of the bank whatsoever. That is, the bank should get its value out no matter what happens just as the entrepreneurs get to keep the proceeds of their successes.

2. In a start-up situation, the incentive problems are particularly acute. If you look at the **kind** of a deal a venture capitalist (the wealthholder) should make with the entrepreneurs, it has the following character: the venture capitalists should have a full liquidation preference and the principals should invest all of their personal wealth, including all available house equity.

3. For a publicly traded firm, you have a new and different set of principles because there the funds at stake are coming from a huge set of shareholders who receive their value through dividends, net redemption of shares, and similar techniques. All of these payment methods taken together—primarily dividends—should be insulated from the results of the firm's operations. In other words, dividends should be smooth and the commitment of managers to pay dividends should be independent of the success of the firm. Dividends should really be like interest payments with some long-term flexibility. A cut in a dividend should be an act of desperation on the **part** of the firm rather than simply routinely **making** the shareholders have a residual claim on the firm. Again, I would assert that this is a much better model of dividend payment than the traditional residual-claim-of-shareholder model.

4. Even better than smooth dividends, is that wealthholders hold debt rather than equity. So the back-to-the-wall school offers a very strong endorsement of junk bonds and other high leveraged investment.

5. The managers' internal equity must be protected against takeover or preserved in **the event** of a takeover. Back-to-the-wall theory does not support the **general hostility** of finance economists to measures

that defend the corporation against hostile takeovers. Those measures are part of the way the managers are given effective ownership of the internal equity.

The macro implications of the back-to-the-wall finance theory constitute the basic subject of the Gertler-Hubbard paper. While there's relatively little space in the paper devoted to the general topic of this conference—the effect of the stock market crash on the substantive decisions of the firm—I think what is said is exactly on the point.

The first task here is to explain why **Tobin's** celebrated q-theory does not apply—firms do not expand aggressively when their market values exceed the reproduction costs of their assets (as in the spring and summer of 1987), nor do they contract when market value falls. There's no better illustration of that than what appears to be the total insulation of substantive activities of firms from the collapse of the stock market. The back-to-the-wall theory explains why the decisions made by managers are insulated from the valuation of the essentially fixed payments the managers are committed to making to shareholders. What happens when the stock market crashes is that the wealthholders trading with each other put a lower value in the same essentially fixed payment stream that the managers committed themselves to make. Such trading has no impact on the managers' commitment, which is still to provide the same flow of dividends and interest payments and therefore has no substantive effect within the firm. But the gyrations can still occur in securities markets.

A second and very important point that Gertler and **Hubbard** make in the paper is noting a contrast between the 1987 collapse in the stock market and the Great Depression. Two things happened in the Great Depression that did not happen this time around which are central with respect to the back-to-the-wall theory. One is that a class of wealthholders, especially important for smaller firms—namely banks—was devastated. If you wipe out a set of **wealthholder-intermediaries** who are specialized in being half of a partnership for an important class of firms, not surprisingly, the managers who do not have the wealth themselves can't go on. So you'd expect a very sharp substantive response, whereas nothing like that happened in 1987. Second, the internal equity—the managerial equity—was wiped out in the depression by deflation. It appears that the nature of the commitment between managers and wealthholders is to nominal payment streams; interest is invariably set in nominal terms and I believe

that dividends are set in nominal terms as well. There is a **commitment** to nominal dividends which wipes out managerial equity if the price level declines sharply as it did in the depression. So I see all that as fitting in very well to the back-to-the-wall story.

Finally, the other type of macro implication which **was** worked on in great detail in this paper deals with the exaggeration of investment and other responses that occur in the back-to-the-wall situation. In part, back-to-the-wall theory is seen by an emerging school of macroeconomics (both G-H and this discussant are members of that school) as central to an explanation of the boom and recession character of overall activity. Gertler and Hubbard's theme is that "imperfections" in capital markets described by the back-to-the-wall theory contributes to output volatility, especially to investment volatility.

Gertler and **Hubbard** describe that situation as one involving imperfections but I would point out that I think using the term imperfection is a little off the point. Of course, firms operating under back-to-the-wall principles are not as efficient as those in an ideal economy where investors are costlessly fully informed. But the appropriate comparison is to other solutions to the practical problems of letting managers deploy other people's wealth, such as government control of investment. For example, the Soviet Union solves this finance contract problem in a different way by having investment controlled by the central government. But I assert that this is even worse than the back-to-the-wall solution. The basic incentive problem here is not one just of a capitalist economy, it's very much one of a socialist economy as well. And this type of answer, it seems to me, is really saying that our way, the back-to-the-wall way is a constrained option and, in that case, I think calling it an imperfection is only relative to an unobtainable situation. In sum, the "imperfection" looks pretty good.

Gertler and **Hubbard** present empirical work intended to support the back-to-the-wall theory against alternatives. Their basic premise is that only a fraction of firms is governed by the principles of back-to-the-wall finance. These are the firms that pay out a relatively small fraction of earnings as dividends; the group tends to contain smaller firms. G-H find that output and investment volatility are higher in the back-to-the-wall group and that investment is more tightly linked to cash flow. Although I find these results mildly supportive of the

thesis, I question the basic premise. There is just as much reason for the shareholders in a large, mature corporation to keep their managers' backs to the wall as there is for the bankers of large firms.

The acid test of the back-to-the-wall theory is the following: what happens within a firm if there is a \$1 million windfall? According to standard theory, nothing happens substantively within the firm. The \$1 million is passed on as part of the residuals to the shareholders and the windfall has no effect on investment, employment or output. According to back-to-the-wall theory, the \$1 million is an addition to managerial equity. Because back-to-the-wall **principles** require that managers earn above the market rate on their invisible (soft capital) investment, any windfall gets turned into soft capital and has a substantial effect on output, investment and employment. In the version of this that I believe in, the **Gertler-Hubbard** version, managers are equity constrained and use it to buy more capital; therefore, there's an increase in the capital stock and in the output and the employment of the firm, as a result of the windfall. That's the acid test. That's the empirical work that should be done. I have my doubts about the work that's actually been done, but if something like that could be done, we would really be able to find out some of the answers to these questions.