

Bank Capital Requirements: A Conversation with the Experts

On November 18, 2011, the Federal Reserve Bank of Cleveland invited three academic experts on bank capital requirements to talk with Bank economists and officials about their research. During a break in the presentations, Executive Vice President and Chief Policy Officer Mark Sniderman sat down for this interview with the experts.

Sniderman: Anat, maybe you can talk with us a little about bank capital—what it is and some of the most common misunderstandings about it.



Anat Admati, the George G.C. Parker Professor of Finance

and Economics at Stanford University: People don't know quite what that word [capital] means. People use this word differently elsewhere. Basically, capital should be thought of as equity, first and foremost. Think of buying a house with, more or less, a down payment of your own money, and how much you use that versus borrowing. The capital question is whether the bank should fund with just borrowing, borrowing, borrowing, and how much of the total investment should be funded with what's called "own money," or equity. That's what capital is.

The confusion arises when people sometimes say that the banks have to "hold capital" or "set aside capital" in a reserve. They use these words, "reserve" and "hold" and "set aside," that suggest this money is somehow a rainy day fund, as if the money cannot be lent or cannot be used. And that's the big fallacy.

What we're talking about is not promising as much, not taking on as much debt to fund your lending—it's how you raise your money. It's all about the funding; it's not what you do with it. So on the side of the bank, there is no holding or setting aside of any sort. It's basically just forcing the banks to borrow less to fund what they do.



Richard (Rick) Carnell, Professor of Law at Fordham

Law School: It's just the amount by which your assets exceed your liabilities. It's like your equity in the house is the amount by which the value of the house exceeds what you owe on it.

Admati: It's your cushion. It's your retained earnings plus equity that you have. And if the value of the assets goes down, you won't go into distress or trouble; you might still be able to pay your debt back.

Sniderman: Bob, maybe you can tell us about whether there are differences in terms of how banks have debt and equity versus other kinds of companies that are not banks?



Robert (Bob) McDonald, Erwin P. Nemmers Professor

of Finance at Northwestern University: When you compare banks to companies that are not banks, you see very different patterns of debt and equity usage. You have companies like Apple, which essentially has no debt, whereas most banks will have something like 90 to 95 percent of their assets financed by debt. If you were to ask why that's the case, one consideration is that some of banks' debt basically serves as money. If you have a deposit, for example, then that takes the place of money for you. And if you look at banks as a whole, something like 80 percent of assets are deposits.

But at the same time, there are other reasons for banks to be so highly levered. One of them is the fact that the banking system is heavily regulated, heavily protected by the government. This reduces the cost to banks of raising funds as debt and causes them to increase their usage of debt. That's one of the reasons you see high debt-to-asset ratios.

Sniderman: *There's a lot of talk these days about what the right amount of debt for banks ought to be. There's a general perception that banks should have more equity and less debt.*

Rick, *how should we be thinking about the proper ratios of equity for banks? Where do we begin?*

Carnell: I think we need to begin with first principles, which is how much equity, how much of a shareholder's investment, would market participants expect if there were no federal deposit insurance and there were no expectations of government bailouts. If we were in a fully free market with our banking sector, except that we have the Federal Reserve there to meet immediate needs for cash, how much equity would market participants be looking for?

That's very different from the usual debates about capital, where the starting point is the capital levels that we're used to. Bankers are used to capital levels where bank debts can amount to 96 percent of the bank's total assets. So you have \$24 in debt for each dollar of equity. That's in terms of the regulatory minimums; what you actually see is higher than that.

But the question is whether required capital levels are high enough. The failures and near failures that we've seen in the banking system suggest that they're not. The fact that the taxpayers had to come forward with guarantees and cash bailouts is an indication that we have been subsidizing the banking system by not demanding high enough capital in banks.

What we want to do is get bank capital up to where it would be without the subsidy.

Sniderman: *If we look at the nonbank sector—the Apples of the world are the extreme with no debt at all, all equity—we'd be talking about 50 percent debt to equity, because that's kind of the average for nonbanks.*

Carnell: That's a different business, though.

Sniderman: *But we're not talking as high as 50 percent; we're not talking as low as 4.*

Carnell: That's right. Historically, people have said that the return on bank assets is more predictable than the return on the assets of an industrial company. But the nature of banking is such that I would not expect 50 percent equity in the usual bank. But it ought to be a challenging question.

Sniderman: *History suggests that we should be thinking about higher equity standards. One of the common refrains you hear is that equity is very expensive and that asking lenders to have a lot more equity in their financing structure is going to lead perhaps to less lending, and it's not a good time to be doing this. Anat, you've written a lot about this. What are your thoughts?*

Admati: There's no restriction, as I said before, about lending. So the issue becomes whether the cost of doing business will somehow increase. Now, bankers talk about return on equity and they seem fixated on this concept, which other companies are not fixated on. The thing about return on equity is it doesn't really measure anything unless you adjust for risk. And risk includes how much debt you take. The risk per dollar invested is much higher the more you 'lever' on it. With leverage, you have a higher risk on the equity and therefore a higher required return because the equity holders bear more risk.

If you were to reduce the amount of leverage, reduce the dependency on debt, then the appropriate return on equity *should* go down, and that would be the appropriate return. If shareholders want to take the risk, they can borrow on their own account, they can buy the margin, they can get their own leverage and their own higher return on equity if they're willing to take risk. That's how it works in the financial markets.

There is no entitlement for anybody to get a particular return on equity. If they generate value on their assets, then the equity—however leveraged it is—will earn the appropriate return.

There isn't anything magical about an unadjusted return on equity. The return on equity is supposed to represent the risk to which the equity is put. The more risk and leverage there is, the more should be the expected return on equity. If you can do better than that, then you're probably generating a better return than the next guy. That's what you want to do—generate the higher return on equity relative to the risk that your equity is exposed to.

McDonald: If we're talking about anything, we should be talking about return on assets.

Admati: Right, or some risk-adjusted return on assets. In other words, investors cannot be looking at raw return on equity, because when they do that, they encourage managers to take on risk, not necessarily bring in value. That's a very dangerous yardstick to use. No matter who the shareholder is, that's not a good way to compensate managers. It's not used anywhere else. Investors, if they are diversified, should look at their return on their entire portfolio. And if banks have a lot of indebtedness, it makes the system very fragile. Then all investors lose on their entire portfolio, which I think we've all experienced in the last few years! If you look at your overall portfolio, we did not do very well allowing the banks to be so thinly capitalized. I suggest we do a little better next time.

Sniderman: *Thank you.* ■



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James Thomson and Joe Haubrich. 2011. "Keeping Banks Strong: Countercyclical Capital Requirements." *Forefront*, Federal Reserve Bank of Cleveland (winter).
www.clevelandfed.org/forefront/2011/winter/ff_2011_winter_07.cfm