# Discussant Comments from Richard C S Evans (Citibank) on the NBER paper 'Financial Inovation and Financial Fragility' by Gennaioli, Shleifer and Vishny June 17th 2010

The model in this paper arrives at now very self-evident truth that, if the market becomes aware of new loss information (for example having 'chosen' to disregard a deep recession environment in their original investment decision), prices will fall a lot, especially if prices are based on minimum values in a recession. That's an extreme characterization of the market, but panic-driven pricing of debt instruments in 2008 indicates that it can be true in a crisis. The ability of investors, banks, and rating agencies to mis-estimate extreme downside events has been seen in multiple situations, including junk bonds (late 1980s) and other historical events noted by the authors.

I have two main comments to make on this paper and the model it proposes, as well as some thoughts on where this analysis might take us and the financial regulatory community.

Firstly, one of the presumptions in the model laid out in this paper is that product innovation, and the consequent financial instability, is driven by investors seeking supposedly strong and safe cash-flow instruments. However, whilst it is clear that investors would prefer new perceived safe cash flows with higher returns over safe known cash flows with lower returns, I wonder if there is another dynamic at work here, namely that investors and the investment process has become much more, indeed increasingly, institutionalised. Such a trend, often reinforced by legislation such as the obligatory saving that must be directed to the superannuation fund management industry, has created a large and growing category of investors that are not sceptical, risk-minimizing and innovation-avoiding private individuals but risk-taking fiduciary investment fund managers who need to achieve industry-leading and alpha-creating returns. Yes, there is 'local thinking' which proves to be false and underestimates risks even amongst such professionals, just as there is with the product-creating intermediaries. Indeed I would suggest that there is also a significant degree of almost conscious risk-denial and therefore that part of this financial fragility story centres around the creation and operation of institutional investors and the investment vehicles that they offer.

Contrast the ability and willingness of an individual investor to hold what turn out to be much more risky assets through a crisis period (perhaps borne out of inertia as well as the lack of a need to mark an individual's personal investment portfolio to market) with that of an institutional investor whose very business proposition and very existence depends on a mark to market valuation of the risk assets.

(At a personal level, and a risk manager at that [!], I think back on my own behaviour and ability and willingness [conscious in my case, as well as some inertia because of tax implications and time and compliance constraints] to hold some of my damaged low-risk investments through the 2008 crisis and achieve significant recovery in 2009/10, compared to those of funds that I had invested in, some of which have liquidated and closed out at significantly impaired valuations).

So I suggest that it may not just be 'local thinking' that creates this investor behaviour, but the changing nature of what we define as 'investors'. And this would lead onto an important debate as to what role the regulators should have with institutional investors, especially if the institutions are offering supposedly risk-less products to retail clients. Much of the focus of the regulators has been around the offering of risky investment vehicles, such as hedge funds, and limiting their scope. Instead the focus ought to be on all institutional fund managers offering a wide array of low risk products, not just the money market funds that the authors identify, and as well as on their medium risk products that include such new instruments as their low risk component.

Secondly, a key point that's not made in this paper is that there's a big difference between the expected value of financial instruments and the price, particularly if the price is set at the minimum value in a recession. This difference also has important regulatory implications. The short-term price is set by panicky investors, who consider only the recession value. That pricing causes losses throughout the system. A rational expectations valuation, even with a high discount rate, will produce a much higher estimate of value.

A key role of a regulator is to ensure that panic pricing does not create the appearance of insolvency when the underlying assets have substantial value in excess of the market price. That is particularly true given the power of the 'bear raid', which was graphically seen in both the debt and equity markets in 2008. The goal of the 'bear raider' is to buy something of value for a price near zero. If holders can be forced to sell, both investors who have been surprised and intermediaries who can be both surprised and lack capital capacity, the 'bear raider' profits and the financial system loses. Regulators are the financing source of last resort to prevent this.

The increasing MTM focus of regulators blinds them to the important difference between price and value. During a crisis, if regulatory financing is on a pure MTM (namely price) basis, rather than a rational expectations (namely value) basis, regulators become the ally of the 'bear raider', forcing intermediaries such as the banks that they regulate to sell valuable assets at a loss. This will really weaken the financial system.

Some work by my colleagues at Citi shows that stressed debt spreads are very poor indicators of actual default losses, overstating them by as much as 6 to 7 times. We need to be sure that the implications of this difference are understood by regulators and acted upon.

Overall, I would endorse the direction towards which this paper takes our thinking. Of course we need to be careful not to stifle financial innovation and the ability of financial intermediaries to distribute risk across the financial system as a whole. We need risks to reside outside the banking system, otherwise the amount of regulatory capital now being mandated to be held by banks will be so large as to cause massive economic contraction.

The question that is posed seems to be how regulators might control or limit the creation of new supposedly low risk investment products (or claims). They can do this either directly, by edict and product approval rules, or more probably by indirect means such as by imposing much higher capital obligations on the creators and distributors of such new financial products, namely the regulated banks.

The direct way was mentioned at the Squam Lake Report conference yesterday where new product endorsement was likened to the FDA and the drug-testing and approving process. I don't think that analogy works because, in the case of drugs, if certain drugs are forbidden, they are forbidden for all. In the case of financial products, one may try and forbid them for some investors but they can often end up accessing the product, either knowingly or maybe more likely unknowingly, through third party investment vehicles. An individual investor may be deemed unsuitable to buy AAA tranches of RMBS securities, but the low risk money market type funds that such an investor can access could very well be deemed sophisticated enough to buy such products.

The proposal which seems to have most credence today is that the main answer is the indirect route for controlling new product creation and centres around forcing banks to keep ‘skin in the game’ by obligating them to hold significant parts of the new products themselves. This is meant to provide a natural check, but of course assumes that the banks and their regulators also have a correct understanding of the true downside risks (which history shows has not happened in the past!).

This paper’s conclusion, along with the two main observations I have made, suggests that this may not be correct solution. The intermediaries are just as prone to ‘local thinking’ and unrealistic expectations as anyone else. Indeed, the ‘more skin in the game’ route could even exacerbate instability next time around if the MTM rules are such that the banks hold even more new low-risk products on the next occasion when this cycle of innovation, excess creation and unwind takes place.

Therefore, I suggest that the focus be firstly on the end buyers of new low risk financial claims, namely the institutional investment community and the incentives and the product offerings that they are able to sell. And secondly the focus should be on the creators and intermediaries of such new claims, mainly the banks, and the MTM rules that govern them. For both sets of players, is there a way in which this boom/bust cycle could be broken by not only limiting the intermediaries and investors capacity to hold them but also by agreeing with regulators ‘up front’ with regard to collateral haircuts and balance sheet valuation if the assets are funded long term? Then low risk claims, even if not riskless, can be valued on long term value and not on a short term MTM basis, which is vital for financial stability in a bear market.