Comment on «Systemic Aspects of Risk Management in Banking and Finance»

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At first sight HELLWIG might appear to be taking up a non-issue: Why should economists at all care about risk management at the company level? Standard finance theory suggests that the allocation of risk be disregarded at the company level because it can be dealt with more efficiently at the investor level. According to the theory, companies should strive to develop projects with a positive net present value and invest in them no matter what risk implications they have for company capital. Investors in financial markets will take care of risk diversification and the optimal allocation of non-diversifiable risk. From this perspective, risk management at the company level seems to be a waste of resources. FROOT, SCHARFSTEIN and STEIN (1993) provide arguments why this view might be oversimplified and why the issue might be worthwhile. In banking, an additional reason to monitor risk taking might be the incentives given to managers by less than adequate regulation.

Reading HELLWIG’s paper was a pleasure and stimulating. I agree with its main conclusion that more resources should be devoted to the research of excessive risk taking by banks and also with two important propositions of chapter 3, namely that the distinction between credit risk and market risk should be abandoned and that the risk of the banking system as a whole should be taken into account. By pointing at the risk of the aggregated banking system, HELLWIG introduces a meaningful notion of systemic risk. I disagree, however, with the view that capital requirements cannot be a useful instrument of banking supervision.

Several notions of risk are currently in use by market participants and regulators. Some of them are relevant in the context of the paper, others are not. Let me sort some of them out:

Irrelevant notions of risk: HELLWIG rightly criticizes regulators for distinguishing credit risk from market risk. I would even go a step further and postulate that risk need not be distinguished according to the source. To a depositor only the consequences of adverse events matter, not their causes. The only justification for making a distinction would be if different causes would require different treatments or if the distinction helped understand the nature of risk.

HELLWIG states that banks should not assume any non-diversifiable risk. I doubt that it matters whether a bank is left with diversifiable or non-diversifiable risk. This is not to say a bank should not try to diversify its portfolio. To the contrary, risk diversification is essential to a bank because diversified risk ceases to present risk. But if a bank takes

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a loss or even fails, it does not matter whether the reason is specific or market risk. The
term non-diversifiable risk, as it is used by HELLWIG, might give rise to misunderstand­
nings. Presumably, what he means by undiversifiable risk is not necessarily the beta of a
bank’s stock, but the risk inherent in a bank’s portfolio. Although, in a capital market
equilibrium, a bank might not take on any diversifiable risk, this clarification seems
important.

This brings me to two relevant notions of risk: The first one is the risk given by a
bank’s overall portfolio of assets and liabilities. To make the notion meaningful, assets
and liabilities need to be measured at present values. As long as the probability of
insolvency is low, this risk equals the risk of capital. The second one is the same risk,
but defined for the entire banking system.

HELLWIG mentions three strategies how to reduce the threat of a banking crisis: Shift
the risk from banks to their borrowers, to their lenders or to a third party. He seems to
be suggesting to banks to shift risk to their depositors, because this strategy does not
impose any credit risk on banks. This strategy is worth exploring. One wonders why
banks are not yet widely adopting it. The reason might be the costs of writing the
necessary contingent contracts and high risk aversion of depositors compared to other
agents. HELLWIG’s proposal is similar to the narrow bank proposal (see LITAN, 1987 and
PIERCE, 1991) insofar as it would lead to highly safe banks, which do not require much
capital, and liquidity transformation would take place outside the banking sector. Unless
one shares HELLWIG’s concern that intermediation margins are too low to cover what he
calls undiversifiable risk, one can imagine a fourth possibly profitable strategy not
mentioned, namely to shift risk to shareholders. This possibility is illustrated in graph 1.

HELLWIG’S proposal would restrict banks to points on the line close to the origin. If it

Graph 1: Capital requirements as a function of capital risk
were feasible to measure risk and capital correctly, then adequately capitalized banks could take on more risk. SHELDON (1995) proposes that regulators should set a maximum probability of default across banks. Banking regulation along such a line would allow banks to accommodate a potential demand for liquidity transformation; and hence, offer them a richer set of business strategies.

Graph 2: Capital to asset ratio of selected bank groups

HELLWIG mentions several reasons for the increased tendency of banks to fail. One reason not mentioned is the reduction of the capital to asset ratio over the past decades (see graph 2). It is interesting to note that big Swiss banks experienced a more pronounced reduction in the capital ratio than cantonal banks, which traditionally are state owned and guaranteed. According to a broadly held view, the cause of the increased leverage is the regulation of banking, particularly the introduction of explicit and implicit guarantees. Without them, banks would not have been able to acquire such a stock of deposits without paying a significant risk premium.

A major reason why HELWIG has reservations against capital requirements are the concerns that arise in a dynamic context. He states that the recapitalisation of a bank might be difficult in times of stress. This is certainly true. But the concerns that arise in a dynamic context can be mitigated by allowing shares which are not fully paid in. Besides that, a single solvent bank can raise its capital ratio by liquidating assets.

In my view, the paper is a valuable contribution to the discussion taking place amongst scholars and regulators on this topic. It carefully distinguishes the different risk reducing strategies and introduces the idea of risk of the banking system in the aggregate, which certainly deserves further attention.
REFERENCES


FRANKE makes the point that incentive schemes for bank managers generally have similar characteristics as options. While bank managers share profits of their employer, they usually do not share losses. This may lead managers to take excessively high risks. FRANKE therefore wonders whether regulators should look at incentive mechanisms as well as capital adequacy rules.

HELLWIG agrees that incentive mechanisms for managers may be important from the perspective of regulators. Particularly, incentive schemes should take risks into consideration as well as profits.

CROCKETT emphasizes the distinction between diversifiable and undiversifiable risk. But he argues that the distinction between insurable and uninsurable types of risk may be problematic in the sense that it suggests a perfect separability of the two. In reality, however, we observe a wide spectrum rather than just the two extremes and perfect insurance is often not feasible.

HELLWIG agrees that the criterion of insurability is not a question of black or white and that there is a variety of «shades». Although the law of large numbers may not apply in the strict sense, some types of risk can still be reduced to a certain extent. He points out that there is a fundamental difference between a situation where one only shifts risk between parties and a situation where risk can more or less be eliminated through diversification.

BALTENSPERGER comments that the dynamic aspects mentioned by HELLWIG constitute a valid point but that the paper is overemphasizing them. Bank capital can be seen as a special form of inventory; it is costly and rebuilding it is a possibility. Moreover, capital protects from «bad luck» and therefore has value. The higher the initial capital stock of a bank, the better this protection against financial losses.

HELLWIG responds that capital can well serve as a buffer. But, like in the usual inventory model, the long run behaviour is virtually independent of the initial stock. That is when the dynamic aspects become important. Especially, the question of how capital can be rebuilt is crucial. Furthermore, HELLWIG refers to the figure of speech that «minimum reserves are not reserves». The same argument holds for capital adequacy rules. He concludes that the current state of knowledge about the dynamic implications is still very limited.