# **Discussion**

### Paul Beaudry

Since Georges Dionne's study takes the form of a survey, my role as commentator is less clear-cut than usual. However, I should begin by asking whether the coverage is adequate, that is, has the author reviewed the relevant literature. The answer here is an unqualified yes. Dionne summarizes and discusses over one hundred papers, with a large portion of them written in the past few years. This is a comprehensive survey that provides an excellent introduction to anyone interested in bank risk regulation.

I should also ask whether the organization of the survey is optimal, that is, has the author presented the material in a way that is of greatest use to the reader. The answer obviously depends on the reader, but in my opinion, the survey could have benefited from being more analytical and narrower in scope. I would have preferred to see the material organized within a simple framework that could then be used to classify the papers reviewed. The survey as it stands is so vast, however, that it is difficult for the reader to remember all the elements discussed.

#### A Review of the Review

The survey begins by outlining the particularities of banks relative to other financial institutions. For example, there are two important features of banks. On the one hand, they offer an extremely liquid asset to the market—the demand deposit. On the other hand, they invest in projects that require evaluation and monitoring. These two aspects reflect the role of banks in the pooling of two types of risk: production risk as lenders, and depositors' liquidity risk as borrowers.

The survey focuses substantially, as does the literature, on the implications of the pooling of depositors' liquidity risk. As is well known, the pooling of depositors' liquidity risk, and the resulting supply of demand deposits, can give rise to a bank run. If such a run can create a systemic risk, it suggests the need for an institution like deposit insurance or a lender of last resort. However, if a government introduces such an institution, it reduces the incentives of banks to avoid financing excessively risky projects, which, in turn, may result in a systemic risk. Hence, a trade-off emerges between insuring banks against bank runs and creating the proper incentives for banks to select projects. At the least, this trade-off suggests that the potential use of capital regulation as a complement to insurance is preferable to the use of flat premiums as the means of paying for deposit insurance.

The case against flat insurance premiums is simple, since economic efficiency dictates that banks should internalize the price of risk, and, hence, they should face different insurance premiums when investing in different classes of risk. In contrast, the case for capital regulation in addition to variable insurance premiums is much more subtle, and this is discussed at length in the survey. Dionne highlights at least two reasons presented in the literature for capital regulation. First, it may be that perfect pricing of risk is impossible because of information problems, and therefore complements to variable insurance premiums are needed. Second, the insurance agency may have incentive problems, especially if it is backed by taxation. However, the author is not entirely convinced of the merits of capital regulation, and argues in favour of better insurance pricing as a means of favouring stability and efficiency in the banking system. In particular, he points out that there is very little evidence supporting the view that capital-adequacy regulation decreases risk. Instead of favouring more capital-adequacy regulation in the banking system, Dionne suggests (i) continuing to improve insurance pricing; (ii) maintaining the search for complementary instruments to insurance, for example, governance instruments; and (iii) pursuing empirical work to determine what is effective in reducing risk.

## **Alternative Organization**

The literature reviewed by Dionne places too much emphasis on bank runs as the main source of problems in the industry. Even in the absence of bank runs, the issue of bank regulation would likely still be with us, since, as I see it, the main difficulty with the system is one of delegated monitoring. As long as banks gather savings from many small investors and invest these savings in hard-to-evaluate options, there is a need for the delegated monitoring of banks, since it is not efficient for each depositor to evaluate a bank risk exposure. In such a situation, therefore, there will be a demand for

intervention resulting from a desire for delegated monitoring. Hence, I believe that the survey would gain by posing the central problem as one of delegated monitoring, as opposed to a trade-off between bank runs and bank incentives.

Many of the papers in the survey address the issue of regulation as a principal-agent problem. This could have been further used as a means of organizing the discussion. In particular, it would have been useful (to me, at least) to have an explicit presentation of a baseline model of the incentive problem in the banking sector, and then emphasize how various papers differ in terms of this specification. I see at least two advantages for adopting a slightly more analytical presentation. First, it would provide a framework for discussing new challenges in the banking sector. For example, as international risk-shifting possibilities continue to evolve, such a framework would help to determine how such changes may affect incentives and optimal responses. Second, the framework could allow us to better articulate the various trade-offs involved with capital-adequacy regulation.

### **Conclusions**

This survey offers an excellent introduction to the literature on bank risk regulation, and I recommend it highly. I think that it would be useful, however, to build on this work to produce a more analytical summary.