Comment on INTERBANK LENDING AND SYSTEM RISK

by Raghuram G. Rajan

In much of the recent debate on payment system risk, it has been assumed that the ultimate goal is a system with zero risk. Hence the debate has largely focussed on how to achieve this goal at the lowest transaction cost; for instance, should the Fed step in as a counterparty to all interbank transactions, much in the nature of a futures exchange? Should interbank claims be senior to all other claims so as to make the payment system secure?

The paper by Rochet and Tirole seeks to shift the terms of the debate. Rather than take as given the goal of immunizing the payment system from risk, it suggests a trade-off. Minimizing ex post risk to banks has the collateral effect of taking the most effective monitors of a bank—other banks—out of the monitoring function. As the paper argues, the banking system may be riskier as a result. Furthermore, there are other channels, which the paper does not explore, through which banking system risk could increase when payment system risk is reduced. For instance, if interbank risk exposure is eliminated by making claims of banks on a distressed bank senior, it increases the exposure of less informed lenders to the distressed bank, which could increase the possibility of panics.

Having refocussed the question, the authors ask how an optimal system would minimize risk and disruption ex post while preserving the ex ante incentives to gather information and exercise judgment. The paper first shows why banks may want to insure against situations of illiquidity by holding liquid assets or contracting for central bank assistance. As in Diamond (1991) or Holmstrom and Tirole (1995), the necessity of providing bank management the incentive to run the bank well leads to a situation where a bank suffering an adverse “liquidity shock” is solvent (there is a future stream of positive rents the bank generates) but illiquid (the bank cannot raise funds from outsiders against these rents because if the rents are promised away, the bank will be run into the ground).

Rochet and Tirole then argue that when banks can monitor each other, allowing banks to be exposed to each other’s liquidity shocks will enhance their incentive to monitor. While the intuition is straightforward, they derive a number of interesting implications. First, if a bank does not monitor other banks, it does not make sense to

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bail it out simply because other banks are exposed to it (that is, a policy of “Too Big to Fail”). Rather, direct assistance should be provided to the exposed banks to the extent determined by the optimal mechanism. Second, the optimal mechanism may sometimes require that a solvent bank with exposure to other illiquid banks be closed down. This is a way to ensure that it has the ex ante incentive to monitor. But to the extent that the central bank cannot commit to let/force such banks to close down, it may be optimal to have no interbank risk exposure whatsoever. Finally, monitoring spillovers between banks may lead to situations where closures are optimally intertwined. Essentially, the idea is that the rents a bank gets from its business operations may also give it the incentive to monitor other banks, and in turn, improve their operations. A shock to the bank’s business operations not only gives it a lower incentive to run its business well, but also reduces its incentive to monitor other banks. This can reduce the performance of neighboring banks also, making it optimal, under extreme circumstances, for the entire system to close down.

As could be expected from two of the foremost economic theorists, this is indeed a thought-provoking paper. I will focus my comments on what I think fruitful extensions of this work could be. That so many issues can be explored in the context of the model speaks to the richness of the model and the value of the theoretical exercise the authors have undertaken.

Banks undertake many kinds of transactions with each other, of which intra-day payments are only one. Others include interbank overnight loans in the Fed funds market and transactions in the over-the-counter market. These transactions differ tremendously in their frequency and the degree to which counterparties have the opportunity to monitor each other. For instance, the frequency of payment transactions is very high, as also is the likelihood that counterparties are relatively unrelated. In such a market, it may make sense to guarantee the transactions against credit risk simply to avoid repeated wasteful monitoring. By contrast, lender-borrower relationships may be much more stable in the overnight federal funds market. The issues the authors address may be more pertinent here. Also, it would be interesting to explore whether further segmentation of risk exposure, even within this market, is possible. For instance, one could think of forming subgroups of banks who interact frequently with each other. Interbank exposures within subgroups would not be guaranteed, while exposures between subgroups would be guaranteed. Whether such an arrangement (reminiscent of clearinghouses) leads to arbitrage possibilities or moral hazard is an issue worth exploring.

The discussion of “Too Big to Fail” is also intriguing. The authors raise the possibility that the failure of a bank could lead to reduced values in the banks it monitors. But another reason why authorities may adhere to a policy of “Too Big to Fail” is that the extent and location of the liabilities of a large bank are rarely publicly known. The potential failure of a large bank then creates uncertainty about which banks have exposure to it. This uncertainty slows transacting in all credit sensitive markets and creates substantial economic loss. It is important that regulators resolve uncertainty quickly. But as the authors point out, it may be more efficient for the central bank to guarantee payment to the exposed banks rather than bail out the dis-
tressed bank. But what would the central bank guarantee? Only the existing nominal liabilities of the distressed bank? What about potential exposures such as loan commitments and guarantees offered by the distressed bank that, often, have a discretionary, negotiable component? In other words, the value of the bank-by-bank exposure may be hard to determine, and could be gamed by the exposed banks once a blanket guarantee has been issued. A second problem relates to issues discussed in the paper. When a bank faces closure, it has little incentive to monitor its borrowers. Moreover, its borrowers have little incentive to repay since the bank’s threat of withholding future loans is weak. Thus there are spillover and feedback effects associated with distress that affect the bank’s clients and the bank itself but are unrelated to interbank lending. Moreover, propagation from one bank to another could take place through common distressed firms rather than through interbank loans. The paper offers a new starting point to investigate when a bank becomes “Too Big to Fail,” but clearly further work is possible.

A variety of regulatory interventions are proposed by the model. Solvent but illiquid banks have economic value and should not be liquidated even though private markets would not fund them. By contrast, regulators sometimes should let solvent banks go under if they have substantial monitoring responsibility and have failed to deliver (whether it be because of bad luck or lack of effort). Thus regulators have to be overly lenient or harsh relative to the private markets on a case-by-case basis. This, I think, is unrealistic. Experience, at least in the United States, has shown that what gives regulators a vertebral column with which to resist politicians is either strict rules or clear objectives. Regulatory discretion is even more harmful in countries that do not have the ex post scrutiny of regulatory actions that is undertaken in the U.S. by the vibrant financial press and academia. It would be interesting to explore what the optimal solution is when regulators can only operate at extremes—bail out all banks that are solvent or close down all banks that are solvent or close down all banks that are illiquid.

In summary, the paper is an important first effort to tackle the issue of interbank risk and offers a rich set of possibilities for future research.

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