Banks risk all by sticking together

The 2008 financial crisis and its aftermath have stimulated research aimed at better scientific understanding of banks and their risks of failure, drawing on insights from fields such as ecology, epidemiology and engineering.

The latest work, by a UK-US group, appears in Proceedings of the National Academy of Sciences. It highlights the “regulator’s dilemma” – that making individual banks safer may increase the risk of disaster for the financial system as a whole.

“We use a simple model to illustrate an idea that, on reflection, people understand instinctively,” says David Rand of Harvard University’s evolutionary dynamics programme. “When many banks do the same thing, simultaneous bank failures become very likely.”

An individual bank may believe that it is pursuing a low-risk strategy through diversification – but the systemic risk will be magnified if all big banks diversify in the same way, the authors say.

“You want the banks to be diversified, but in different ways, so that the conditions that would cause one bank to fail would be different from the conditions that would cause another bank to fail,” Rand says.

Regulators should therefore promote “diverse diversification”, encouraging each bank to pursue a risk strategy distinct from its competitors.

The authors are putting their conclusions to banks and regulators, who are thinking much more about the stability of financial systems as a whole than they were before the crisis.

“We believe this can be achieved without a central authority directing the banks in particular areas,” says Nicholas Beale, director of Sciteb, a London strategy consultancy.

A regulatory scheme could give an incentive to systemic diversity, by basing the amount of capital a bank is required to hold on the extent to which its investment strategy contributes to systemic risk.