DISCUSSION

ROBERT HEINKEL*: This paper by Chan-Mak is an ambitious examination of a very important question: deregulation. Chan-Mak employ a welfare analysis, which is the correct way to account for the effects of regulation. We know that regulation affects both how the economic pie is sliced, and how big the pie is; welfare analysis is designed to view the problem in this way. Chan-Mak is also notable for the inclusion of a large set of regulatory tools, not just one or two. And, Chan-Mak is unusual in that they have offered reasons why deregulation is being considered now; for example, they suppose that there has been a favorable shift in the risk-return trade-off characterizing bank investment opportunities. It seems reasonable to suppose that some environmental changes have occurred to encourage deregulation.

However, some propositions leave me with an uncomfortable feeling about model construction. For example Proposition 1 improves the bank's investment opportunity set, resulting in higher deposit interest rates. I would think that this would follow from banks raising deposit rates to keep savers from moving funds from deposits to other investments; but savers are infinitely risk-averse and so hold no risky assets. Only banks are allowed to use the capital markets. Also, in Proposition 3, Chan-Mak must use perfect competition among banks to claim impotence of Regulation Q. However, there are no bank marginality conditions in the model to dictate bank behavior; the assumption of a representative bank makes it impossible to examine interactions within the banking system.

Other questions of modeling lead me to summarize my concerns about assumptions and thus implications of the model in three points. First, there are very extreme preferences (risk-neutral bank shareholders and infinitely risk-averse savers) and no one to hold assets with expected returns between α and β.

Second, deposits provide no services, so insured deposits are just a riskless asset. Thus, Chan-Mak should have $r^0 = \alpha$ in equilibrium; however, nothing in their model requires this. If $r^0 \neq \alpha$, then we should see massive shifts in or out of deposits. But, the Chan-Mak model holds deposits *constant* at one. Interest-rate-sensitive bank liabilities is a major reason for disintermediation, a phenomenon that has led to calls for deregulation. By fixing deposits, Chan-Mak cannot examine this important aspect of the banking environment.

Finally, Chan-Mak assume risk-neutral banks with no perceived failure costs, leading to some uncharacteristic bank behavior. Result 1, for example, claims that banks hold only the riskiest allowed assets. I have yet to be rejected for a bank loan because I was not risky enough! Unfortunately, the Chan-Mak model collapses without regulation, and this leads me to question implications based upon partial deregulation.

Overall, however, the Chan-Mak paper is an innovative attempt to model a very complex economic circumstance with very important welfare implications. This paper is a very good first attempt and will certainly spur more innovative and inciteful work, hopefully some by Chan and Mak.

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