large depositors, leading to a withdrawal of funds both from the bank concerned as well as other banks or an increase in risk premiums impounded in the cost of funds. These types of contagion effects among banks have been documented elsewhere by Aharony and Swary [1] among others.[13] Moreover, considerations of default or country risk have been ignored. Finally, the calculations are based on aggregate positions of U.S. banks relative to aggregate capital, thereby reflecting the risk to the average or "representative bank." Individual banks (or outliers) that are in financial distress may have incentives to take excessive risks through foreign currency market speculation in a gamble to return to solvency. There is some evidence that this strategy lay behind Franklin National's foreign currency operations in 1973–74 (see Rose [12]). Using the disaggregated positions of individual U.S. banks (if available) might provide greater insights into the riskiness of foreign currency operations.

[13] The effect of adverse information on depositors' confidence has been amply demonstrated in the recent (May 1984) runs on Continental Illinois and Manufacturers Hanover banks.

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DISCUSSION

JAMES A. BRICKLEY*: Grammatikos, Saunders and Swary examine U.S. bank exposure to interest rate and exchange rate risk from foreign currency operations. They conclude that U.S. banks are not choosing optimal foreign currency port-

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folios. However, for the "average bank", this choice does little to increase the probability of bank failure.

Throughout the paper, foreign currency operations are judged for mean/variance efficiency and risk-adjusted performance using, as a risk measure, the variance of returns of the foreign currency portfolio. My major concern with the paper is that the authors do not justify the choice of this risk measure. Existing finance theory suggests that the variance of the currency portfolio may not be of particular concern to either bank shareholders, regulators or managers.

Theory suggests that stock markets price nondiversifiable risk. In a market without transaction costs, the hedging policies of banks, with regard to interest rate and exchange rate risk, are irrelevant (see Gurel and Pyle [1]). It is difficult to envision a setting, even with transaction costs, where shareholders will have much concern with the variance of one small aspect of the bank's portfolio.

Regulators are interested primarily in the risk of deposit insurance payouts. In this context, the risk of a bank's currency position is a function of its covariance with the overall portfolio insured by the regulatory body. Therefore, regulators, like shareholders, should not be particularly concerned with the variance of the currency portfolio.

Managers may be concerned with variance risk. However, most managers will be concerned with the variance of a broader portfolio than simply the currency portfolio. Perhaps the only managers directly concerned with the variance of currency portfolios are the managers of these particular portfolios.

In summary, I found the paper to be interesting and well-written. However, I think the authors need to show why the variance of a currency portfolio is an appropriate risk measure for either shareholders, regulators, or managers.

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