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Stealing Deposits

Deposit Insurance, Risk-Taking, and the Removal of Market Discipline in Early-20th-Century Banks

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Deposit insurance spread throughout the world in the latter half of the 20th century as a result of external and internal political pressures favoring its adoption. The International Monetary Fund, the European Union, and the World Bank have all endorsed deposit insurance. Despite its overwhelming political support, there is a large empirical literature suggesting that the moral-hazard costs of deposit insurance have outweighed its liquidity-risk-reduction benefits. These papers show that deposit insurance is among the most important contributors to the unprecedented waves of banking crises that have washed over the world during the past four decades. The separation between policy recommendations and economic studies begs the question of whether empirical studies may have failed to properly control for the other contributing influences that produced both the rise of deposit insurance and banking instability.

Most studies of deposit insurance are based on cross-country comparisons or comparisons across time within countries that contrast the behavior of insured banking systems with uninsured banking systems. Despite attempts by authors to control for factors that coincide with the creation or expansion of deposit insurance through explicit controls or through instruments that explain the creation of deposit insurance, it is conceivable that some of the positive association between deposit insurance and increased bank risk may reflect exogenous increases in risk that encourage the passage of deposit insurance. If true, then the risk-creating effects of deposit insurance would be exaggerated.

Our research examines a near ideal environment from the standpoint of identification—the state deposit insurance experiments of the early 20th century in the United States. These systems installed deposit insurance for unit state-chartered commercial banks that operated in parallel to the uninsured system of national banks (i.e., unit banks that were chartered by the comptroller of the currency) within the same states and to uninsured state and national banks operating in bordering states. Mitigating the omitted variable problem embodied in cross-country studies, the period thus allows for the study of insured and uninsured depository institutions operating at the same time and place as well as under the same legal system, currency, and language.

We employ detailed information about the locations, economic environments, and bank-level balance sheet characteristics of insured and uninsured banks for many states and years. Specifically, we implement a difference-in-difference-in-difference model that measures the

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effect of deposit insurance on insured banks controlling both for the change in uninsured banks in the deposit insurance states and for the change of uninsured banks in other states. Moreover, because several of the laws were passed in the same year but implemented in different subsequent years, we are able to use placebo tests to determine whether a region-specific economic shock was responsible for changes in banks' and depositors' behavior in addition to the passage of deposit insurance, or alternatively, whether changes in behavior were the consequence of deposit insurance.

Our findings not only corroborate the prior literature on the moral-hazard consequences of deposit insurance but also show how the introduction of deposit insurance created systemic risk. We find conclusive evidence that deposit insurance caused risk to increase in the banking system by removing the market discipline that had been constraining uninsured banks' decision-making. Depositors applied strict market discipline on uninsured banks when evaluating whether to place their deposits in those banks but seemingly ignored the financial soundness of insured banks. Insured banks thus were able to use the promise of insurance to compete away deposits from uninsured banks. Because they were constrained only by regulatory standards (i.e., a minimum capital-to-deposits ratio; a minimum reserves-to-deposit ratio; and in some cases, a maximum interest rate paid on deposits) that often proved inadequate to prevent insolvency, insured banks raised their loan-to-asset ratios, reduced their cash reserves, and kept their capital ratios close to the regulatory minimum.

Insured banks seemingly were betting on the permanence of agricultural price increases that had occurred during World War I, and depositors seemingly believed in the insurance systems' ability to protect them. Deposits flowed most strongly into insured banks located in counties where the price rises had the biggest effect. As banks most often used those deposits to fund new loans, the implementation of deposit insurance allowed an asset price bubble to quickly form. When prices reversed in the early 1920s, the insured banking systems collapsed and left depositors with losses.

NOTE:

This research brief is based on Charles W. Calomiris and Matthew S. Jaremski, "Stealing Deposits: Deposit Insurance, Risk-Taking and the Removal of Market Discipline in Early 20th Century Banks," NBER Working Paper No. 22692, September 2016, http://www.nber.org/papers/w22692.