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Rethinking Deposit Insurance on Brokered Deposits

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Abstract
In a bid to understand how the Federal Deposit Insurance Corporation (FDIC) can aid in promoting financial stability, economists have recently called the definition of core deposits into question. Deposit insurance is extended to core deposits because they represent the stable funding base that the banking system relies on for liquidity. The criteria used by the FDIC to determine whether a funding source is insurable are not consistent with any objective criteria available to define core deposits. Herein I assess current FDIC criteria and whether the kinds of deposits currently insured are good candidates for coverage. I find brokered deposits to be particularly ill-suited to insurance. The FDIC could further promote banking-system stability while simultaneously reducing potential costs by ending its extension of insurance to brokered deposits.

Keywords: deposit insurance, banking regulation, Dodd-Frank Act, brokered deposits

INTRODUCTION

The dollars in our wallets are maintained by the Federal Reserve, and as the sign on the door to every Federal Deposit Insurance Corporation (FDIC) insured depository institution (IDI) reminds us, our "deposits are backed by the full faith and credit of the United States government."[1] For most purposes, currency in circulation is a perfect substitute for funds deposited in an IDI to the extent that both serve as the final means of settlement for debt obligations. How perfect a deposit substitutes for currency depends on the solvency of the IDI. The FDIC safeguards the nation's depositors by pledging to pay out all insured deposits in the event that the private depository is met with illiquidity or insolvency.

Depository institutions pay premiums into a deposit insurance fund which is used by FDIC to pay for any losses caused by an insolvent bank. Most of these losses are the insured deposits held by a failed bank, as well as any administrative costs of liquidating its assets to settle its liabilities. As a result, defining which deposits qualify for insurance is of prime importance for the FDIC's operations and fiscal health.

One contentious category of deposit covered by the FDIC is the brokered deposit. In 1984[2], the FDIC moved to eliminate "pass-through" insurance coverage for brokered deposits, i.e., insurance coverage on qualified fiduciary or custodial accounts. This rule was later thrown out by the United States Court of Appeals for the District of Columbia Circuit[3] as it did not comply with the statutory deposit insurance mandate, and has since been debated (pp. 175, 291, 435, and *passim*).[4] Despite the nature of these deposits, insurance coverage of brokered deposits by the FDIC persists. As a compromise, in 1989 Congress passed the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA),[5] in part to prohibit IDIs that failed to meet capital requirements from accepting brokered deposits (p. 412).[6] Today the FDIC insures both

those deposits held by the banking system deemed to be "core" and also those that are brokered (provided that appropriate capital levels are maintained).[7]

Section 1506 of the Dodd-Frank Act[8] of 2010 required that a study be commissioned on core deposits and brokered accounts. For the purposes herein, there were two important goals of this study.[9] First, Congress wanted to reassess the definition of a "core deposit" used for the purpose of calculating the insurance premium assigned by the FDIC.[10] Second, a closer look at the relationship between core deposits and the larger US economy was warranted, particularly concerning any stabilizing effects that could accrue to the banking sector by redefining core deposits.[11]

In this paper I look at the fundamental reason why deposit insurance exists, and to what extent different deposit accounts should be insured. I construct alternative criteria to gauge the appropriateness of a funding source's coverage by the FDIC and conclude with some further policy changes that could reduce the costs of insurance and promote the stability of the banking sector, as well as the broader financial arena.

WHY DEPOSIT INSURANCE?

Congress established the FDIC in 1933 as a response to widespread bank failures during the Great Depression. In a bid to restore confidence in the financial system, the Federal government pledged to safeguard deposits through deposit insurance. The Federal Deposit Insurance Act of 1933 (FDIA) requires the payment of deposit insurance "as soon as possible" to mitigate any disruption caused by a bank failure.[12] These payments are enabled through the deposit insurance fund, backed by an emergency line of credit from the US Treasury if necessary. To date, no depositor has ever lost a penny of insured deposits in the FDIC's history, and payouts to insured

depositors generally occur within one business day (p. 11604).[13]

Today´s modern banking landscape is shaped by fractional-reserve banks. Acting as depository institutions these banks are obliged to pay out a sum of deposit liabilities on demand but hold only a fraction of the necessary funds as highly liquid assets (i.e., reserves) to meet these momentary demands. One unfortunate side effect of a fractional-reserve banking system is the omnipresent possibility of bank illiquidity owing to the disconnect between the sum and maturity of its liabilities versus its assets.[14] A bank takes on deposits that are payable on demand while financing these liabilities with assets (typically loans) of longer maturity. Using short-term deposits to fund longer-term investment projects leaves a bank open to the risk that new funding will not be renewed (or rolled over), thus rendering it illiquid. A bank will not generally be exposed to the illiquidity that the maturity mismatch generates so long as withdrawals are largely uncorrelated. Given the law of large numbers, on any given day only a small percentage of total depositors demand their funds. There remains a possibility, however, that a sufficient number of depositors will claim their funds simultaneously and, as a result, the bank will become illiquid. The mix of illiquid assets with liquid liabilities can give rise to runs by depositors fearful of suffering a loss on their deposited funds. This incentive holds regardless of the actual financial position of the bank, as any fractional-reserve bank will be exposed to illiquidity and cannot perfectly predict when and to what extent depositors will make withdrawals.[15]

The FDIC provides deposit insurance to make insured depositors whole and hence mitigate the possibility of a bank run. By guaranteeing a deposit to a sufficient amount, the FDIC has not eliminated the possibility of a bank run but has greatly reduced the likelihood because no depositor need worry that his funds will not be paid back on demand and at par value.[16]

While deposit insurance reduces the apparent problem of depositors withdrawing their

funds en masse, it creates the secondary problem of moral.[17] Removing the threat of losses diminishes the incentive for a depositor to monitor the financial position of his bank. (Perhaps unsurprisingly, the first states in the United States to experiment with mandated deposit-insurance plans were also those with poorly capitalized, state-chartered banks.[18]) In response, the FDIC also undertakes a supervisory, regulatory and enforcement role in the financial system to minimize potential payouts. It does so through two avenues, one active and the other passive.

The FDIC actively monitors the risk-based capital ratios of insured banks, as do the other regulators of IDIs, i.e., the Federal Reserve Board and the Office of the Comptroller of the Currency. When a bank's capital ratio falls below 8 percent, it is given a warning. A drop below 6 percent can result in prompt corrective measures being triggered, that may result in, e.g., a mandated change of management or other corrective action. Finally, when an IDI's capital ratio falls below 2 percent, it is termed "critically undercapitalized," the institution is closed, and the FDIC is appointed as the receiver of the bank. In this role the FDIC must resolve the failed institution and pay out the guaranteed amount to insured depositors.[19]

The FDIC also passively limits the activities by IDIs by restricting the types and amounts of liabilities that it will guarantee. By mostly limiting insurance to "core deposits," it leaves large depositors and holders of noncore deposits exposed to potential losses. This exposure creates an incentive for these depositors (and lenders) to monitor a bank's investment portfolio, and to allocate funds to only those banks deemed sufficiently strong to make good on their liabilities. It is critically important that the FDIC accurately define which bank liabilities constitute core deposits, an ongoing process debated more on the merits of which insurance policies can stabilize deposits as opposed to searching for those deposits which require insurance coverage because of either the fractional-reserve nature of banking, or the risky practice of maturity

mismatching with deposits. For many types of deposits, a sufficient amount of insurance must be included to reduce the incentive for a bank run, but guaranteeing too many noncore deposits will reduce the incentive for depositors to aid in the monitoring of depository institutions which results in an unnecessary increase in moral hazard.

WHAT ARE CORE DEPOSITS?

In the normal course of business, even as some bank customers add to or withdraw from their accounts, a significant part of the money on deposit remains untouched. These stable deposits represent "core deposits," which banks use to fund their lending operations. Core deposits are defined through convention in the Uniform Bank Performance Report (UBPR) (p. 4).[20] As such, core deposits typically include demand deposits, negotiable orders of withdrawal (NOW), automatic transfer service (ATS) accounts, money-market demand accounts (MMDAs), and most savings and time deposits under $250,000.[21]

From the fractional-reserve bank's perspective, core deposits represent a mostly stable funding base due to the fact that they are less interest-rate sensitive than other assets (p. 5).[22] The key problem facing such a bank is balancing the maturity mismatch between its on-demand liabilities and its longer-dated assets. Since core deposits show little fluctuation in their redemption demands, they provide the bank with predictable "costs," as well as a measure of customer loyalty. Core deposits, thus, provide an element of stability to the otherwise potentially destabilizing activity of maturity transformation.

Because of the importance of the deposits for both depositors and banks, the FDIC insures all accounts that are categorized as core deposits. Doing so removes the incentive for depositors to monitor the financial positions of their banks, however, and can potentially breed

destabilizing forces. To mitigate these destabilizing forces, as well as to limit the amount of potential payouts it is obliged to make, the FDIC has guaranteed, since its inception, deposits only up to a finite amount, as shown in figure 1.

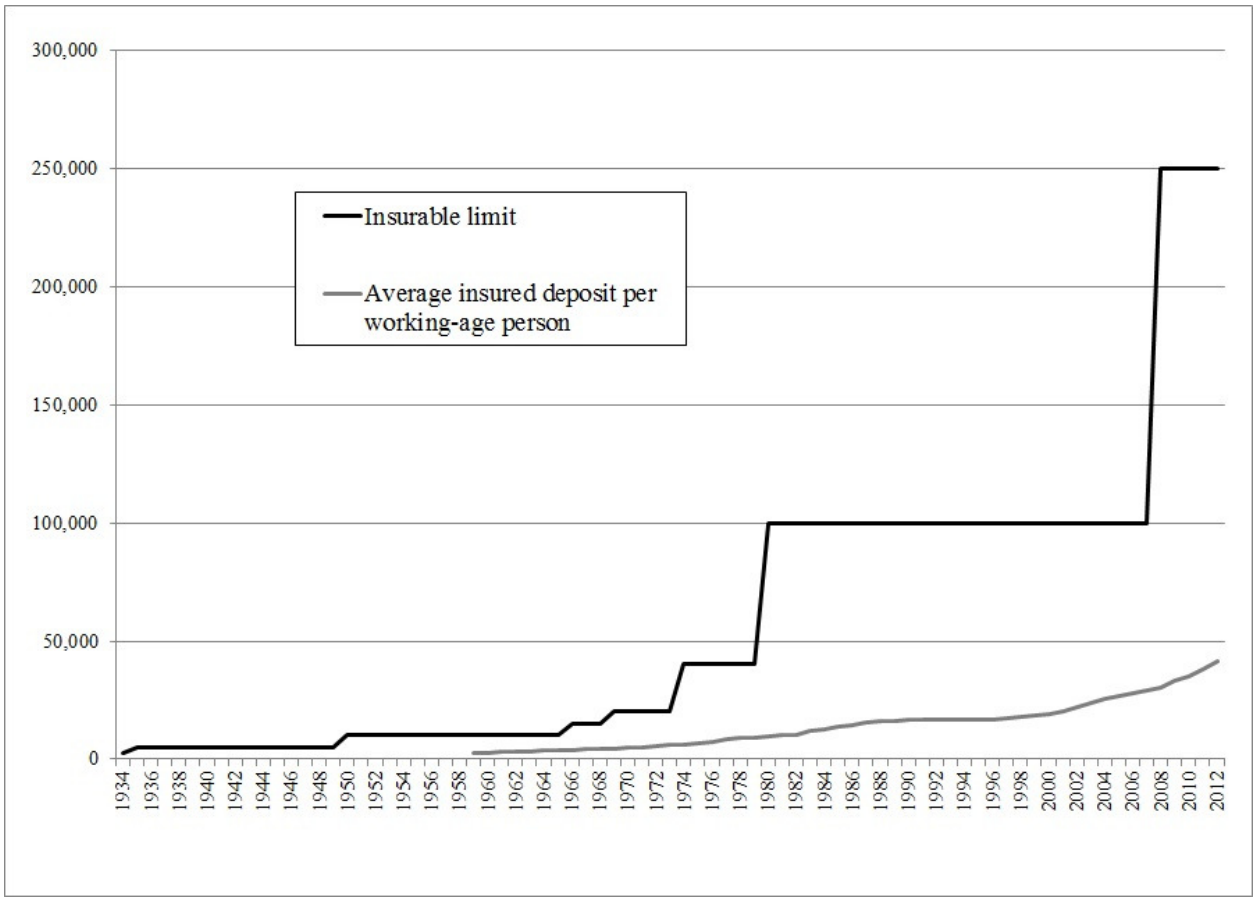

Figure 1: FDIC Insurable Limit per Bank and Average Insured Deposit per Worker[23]

The insurable limit has always ranged somewhere between 300 and 900 percent GDP per capita. (The lowest insurable limit was 377% of GDP per capita in 1966; the highest occurred in 1935 at 870% of GDP per capita.) The onset of the crisis in 2008 ended the longest continuous period that FDIC deposit insurance had undergone in the United States without an increase in the

insurable limit. The insurable limit per bank has also always exceeded the average insured deposit per capita. As of year-end 2012, the maximum insurable limit was $250,000 while the average working age American held only $41,312 in insurable deposits. Clearly only a very few Americans are able to make use of the insurable limit that FDIC provides.

The comparison between how much insurance the FDIC provides and the needs of the average working-age individual is better matched when adjusted for price inflation, as in figure 2, but still shows a similar disconnect.

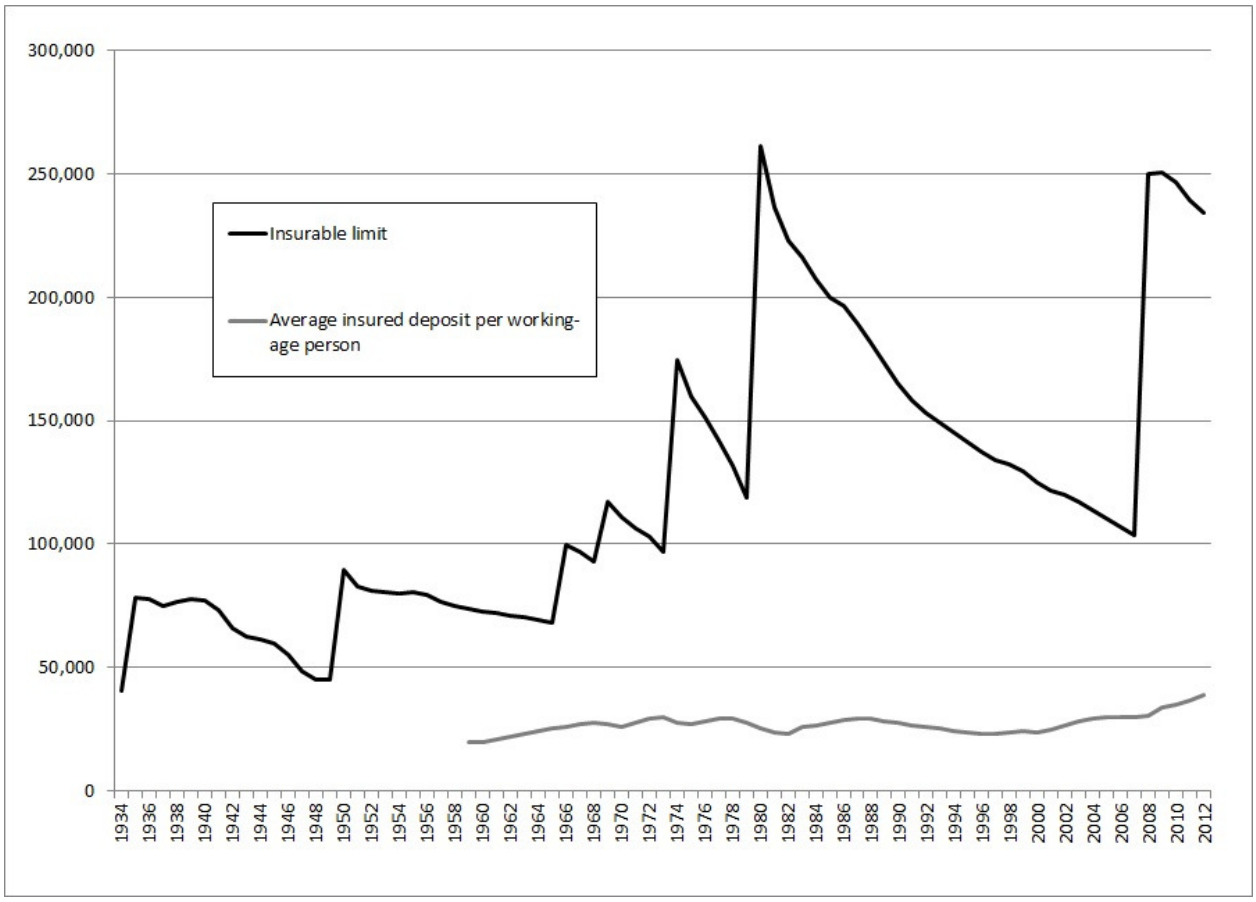

Figure 2: Inflation-adjusted FDIC Insurable Limit per Bank and Average Insured Deposit per Worker[24]

The inflation-adjusted size of the average deposit per working-age American has changed little

over the past 50 years. Expressed in terms of 2008 dollars, the range has varied between a low of $19,442 in 1959 to a high more recently of $38,730 in 2012. The 150 percent increase in the nominal insurable limit in 2008 to $250,000 was a large increase in nominal terms, though the resulting maximum insurance limit was still less, in inflation-adjusted terms, than in 1980. Since the FDIC's inception in 1934, the nominal insurable limit has increased a hundredfold, which represents a 600 percent increase when adjusted for inflation.

One fact stands out when looking at the evolution of insurable limits over time, both in nominal and inflation-adjusted terms: in both cases, the FDIC today provides deposit coverage far in excess of its original level of coverage. Furthermore, this is not a new phenomenon. This has been the case since clear data on insured funds began in1959.

BROKERED DEPOSITS

Those funds the FDIC labels as core deposits *mostly* coincide with the scope of insured accounts. In one significant exception, the FDIC has traditionally extended insurance to a deposit base that does not meet its own definition of core deposits: brokered deposits.

Brokered deposits arise when a third party places a client's money on demand or in short-term loans. A common example of such a transaction would be where several individuals deposit a small sum of money with their broker. The broker in turn compiles these small deposits into one large-denomination deposit which is then invested or deposited into an investment vehicle. The economies of scale available through this practice enable small depositors to earn higher interest rates on their deposits than would otherwise be feasible, and as a consequence the practice also opens a new funding source to banks from depositors attracted to these higher returns. Under current FDIC rules, only well-capitalized banks (i.e., those with a capital ratio

above 10 percent) are allowed to solicit or accept brokered deposits. Banks that do accept these funds have access to an alternative pool of funding, as well as a reduction in handling costs by reducing the number of depositors for a given amount of deposits. Together with core deposits, brokered deposits comprise a bank's deposit base.

While brokered deposits may augment a bank's liquidity position, they represent a tenuous funding source. As these deposits are generally more interest-rate sensitive than generic deposits, their stability (in terms of both turnover and likelihood of remaining deposited with a bank) can be unstable. The FDIC has acknowledged these problematic aspects of brokered deposits, but it has created only a partial solution. Since the FDIC views a blanket prohibition on the use of brokered deposits as unduly restrictive, it has reached a compromise by insuring brokered deposits up to a limit of $250,000 per *broker* per bank (pp. 3-4).[25] One effect of this limit is to temper the amount of deposit brokering any one broker can intermediate. As a result of this, a bank accepting a brokered loan is not overly exposed by sudden withdrawals instigated by the broker (either directly through the broker moving his depositors' funds to a different bank or indirectly through depositors withdrawing their money due to a loss of trust in their broker). By the end of Q1 2011, $562.3 billion of brokered deposits provided funding to the banking system (table 2). Of these, almost 85 percent ($477 billion) are insured by the FDIC.

Table 1. Brokered Deposits Held by IDIs (as of March 31, 2011)[26]

Size of bank	Number of banks	Total brokered deposits ($ bn.)	Share of domestic deposits (%)
Under $1bn.	6,904	47.1	14.9
$1–$10 bn.	563	104.7	13.7
$10–$50 bn.	71	122.7	12.0
Over $50 bn.	36	287.8	59.4

Fewer than half of all FDIC-insured banks report holding brokered deposits, and these brokered accounts are concentrated in the largest banks in the country—those with assets greater than $50 billion. Thus, the main beneficiaries of insured brokered accounts are the country's largest banks. These banks have the most diversified deposit base and are thus the least in need of deposit insurance.

Because the beneficiary banks of these brokered deposits are also the country's largest banks, there is the ever-present danger that the "too big to fail" issue will lead to less-prudent asset management than would otherwise be the case. Brokered deposits are an attractive but also tenuous and potentially unstable funding source. While insurance grants benefits to banks when deposits are concentrated and susceptible to correlated withdrawals, brokered deposits can span geographic, industry, and demographic divides. This results in significantly less correlation between the redemption demands of their deposits. Consequently, banks taking brokered deposits are less in need of insurance to remove the incentives for depositors to withdraw funding in light of the expectation that other depositors will also do so.

At the same time, the typical depositor in a brokered fund is wealthier than the standard holder of a conventional deposit. Due to their status as a form of investment, brokered deposits are usually funded by individuals already meeting their demand to hold a cash balance through another deposit. In this way, insurance on brokered deposits is regressive, because the benefits accrue primarily to wealthier investors at the expense of more common deposit holders. This benefit is a subset of the larger wealth transfers inherent in deposit insurance. Well-run banks will be overcharged for their deposit insurance because of this one-size-fits-all policy, while poorly run banks will be undercharged.[27]

Insuring brokered deposits gives a benefit to the bank holding them because the insurance

provides an unnecessary guarantee to depositors. On the one hand, these deposits are not primarily undertaken as an uncertainty hedge, as is the case with other deposits. Brokered deposits instead represent a demand to remain liquid while still participating in a potentially lucrative investment. In distinction, core deposits are not undertaken with the primary goal of earning the depositor profit but instead with the goal of providing a safety blanket should an unforeseen event arise. On the other hand, there is no significant naïveté concerning the potential risks involved with brokered funds on the side of depositors. While they may not personally understand the risks involved in a fractional-reserve deposit account, their brokerage surely does. Since all brokered funds go through, by definition, a financial intermediary (i.e., the broker), depositors are in effect outsourcing the understanding of how the deposit-taking side of the financial system functions. Therefore, there is no significant knowledge gap that must be protected via deposit insurance.

Deposit insurance exists to provide a safe deposit vehicle for unsophisticated savers and to stabilize depositories against runs.[28] In the case of brokered deposits the first criterion is not relevant – brokers provide the level of sophistication necessary to understand the relevant risks, in addition to the fact that wealthier and more financially savvy individuals are typically the demographic using a brokered deposit. The second criterion is also not relevant to the extent that brokered deposits are potentially destabilizing as a funding source. Extending deposit insurance to them motivates banks to hold a higher share of their core deposits as brokered funds than would otherwise be the case, and thus expose the FDIC to potential payout losses as a result.

As the FDIC subsidizes both brokerages and banks accepting brokered deposits through its insurance, we may expect such deposits to be accepted by banks in excess of what is prudent. The risks of banking instability are increased as a consequence, as brokerages entice their clients

to partake in this guaranteed "investment", causing bank funding to shift to this relatively lower-cost (though less stable) funding source. Indeed, banks that have failed since 2008 have relied more heavily on brokered deposits than on their conventional core-deposit base (p. 36).[29] The rationale is simple—large quantities of brokered deposits can be collected, in part due to the higher interest rate banks can offer depositors (by investing the proceeds in riskier assets coupled with decreased management costs), and depositors have little incentive to assess the broker or the bank's stability because the funds are FDIC insured. While these problems also exist to various degrees with core deposits, the economies of scale offered by brokered deposits and their tenuousness as a funding source breed instabilities. Brokered deposits are relied on for quick liquidity, but they can also reverse quickly, leading to a liquidity crisis that drains deposit-insurance reserves.

WHAT QUALIFIES A DEPOSIT FOR INSURANCE?

Given that brokered deposits do not appear to satisfy either of the goals of deposit insurance, it is instructive to reassess them in light of the actual criteria used by the FDIC to evaluate whether a deposit is core. In this regard the FDIC has five characteristics that are useful in evaluating whether a source of bank funding is a core deposit and consequently whether it qualifies for insurance (pp. 49-52).[30] These criteria are important, as they determine the relevant trade-off between the amount of deposits insured by the FDIC and the degree of residual monitoring activity by uninsured depositors.

1. *Interest rates.* IDIs that offer higher interest rates on core deposits are generally riskier (p. 49).[31] It is for this reason that under FDIC regulations any IDI that is not well-capitalized

can offer no more than the "national" rate plus 75 basis points on deposits of similar size and maturity.[32] If interest rates are high relative to the industry, a bank may be taking on undue risks and require sanctions by the FDIC or removal of deposit insurance coverage from its products.

2. *Whether deposits can be gathered quickly in large amounts.* Deposits that can be gathered quickly, as is the case with Internet-based and high-interest-rate products, are unstable in the sense that they can also leave the bank quickly. Although the FDIC makes no distinction in the manner that funds are obtained when assigning insurance, recent comments indicate a hesitation in extending insurance to products that can be gathered quickly and in bulk (p. 50).[33]
3. *Customer relationship.* Deposits received based on a customer relationship are more stable than those that do not go through this time-consuming exercise. Although there are difficulties in identifying what qualifies as an adequate client-banker relationship (e.g., does "relationship" refer to the duration of association, or the depth?), the FDIC generally views a deposit based on a customer-banker relationship to be more stable than one obtained through a third-party (pp. 50-51).[34]
4. *Liquidity.* Uninsured deposits have the ability to exacerbate liquidity problems in a weak bank because frightened depositors may shift their uninsured deposits to more stable accounts. The corollary holds true as well. Highly liquid assets that can be easily drained from a bank are good candidates for insurance to remove the incentives that could lead to en masse redemptions.
5. *Time to maturity.* A deposit with a low time to maturity (or few restrictions on early withdrawal for a time deposit), has an increased probability that depositors will withdraw

it from a weak institution. Financial products with shorter maturities (or those closer to maturity) are more easily redeemed, and as such they can benefit from insurance to remove the incentive individuals have to withdraw them too quickly from their bank.

Setting criteria for deposit insurance coverage is crucial to safeguarding core assets, which are systemically important to the bank's liquidity position, while not creating a sense of complacency. Since the defining characteristics of a currency substitute are that it is redeemable on demand and at par value,[35] any criterion addressing these issues would shed light on the demand by depositors for insurance. (This includes criteria 4 and 5, as well as criterion 1 to the extent that deposits do not necessarily represent an interest-bearing transaction).

The FDIC must consider the trade-off between the amount of deposits to insure and the increased monitoring activities it will need to undertake to replace those depositors unconcerned with their bank's liquidity. The FDIC chooses the insurable limit in making this decision (while implicitly assuming that larger deposit holders are more financially literate and understand the risks involved), but an alternative metric would be a direct assessment of the depositor's knowledge of the undertaking. While no easy measure exists to gauge depositor knowledge directly, certain accounts that are channeled through a financial intermediary (such as an investment advisor or deposit broker) signal a greater knowledge of the risks involved.[36] As such, a deposit made in such circumstances would not require insurance, or at least would not necessarily fall prey to the self-fulfilling panic described by Diamond and Dybvig.[37] None of the FDIC's current criteria measure for depositor financial literacy, but by focusing on the client-banker relationship, criterion 3 comes close to the extent that bankers are presumed to be more financially literate than the average depositor and a closer relationship signals a sharing of this

literacy.

To set criteria from the opposite side of the transaction, one would need to look to the determinants of how stable and important the deposit is to the financial stability of the bank. Criteria 1, 2, 4, and 5 all measure how stable the deposit is within the corpus of the bank's assets, and as such help to determine how important it is that they be insured.

However, some of the criteria to assess whether a source of funding qualifies for deposit insurance are less reliable. Relying on the method that procures funding, as in criterion 2, obfuscates the issue of whether the funding is stable by instead focusing on how quickly it can be gathered or shed (it answers the question "is this deposit in need of stability?" instead of the more relevant "is this deposit stable?"). Criterion 3 begs the question by claiming, paradoxically, that insured deposits are stable, but also that they consequently require insurance to maintain their stability. Whether a funding source is a candidate for insurance should depend on its stability as a stand-alone uninsured deposit, not whether it would be more stable if insured (as it almost assuredly will).

While determining what deposits should be insured poses no significant theoretical problem, practical issues plague the actual decision. If deposit insurance did not result in moral hazard, for example, there would be no significant cost to insuring a deposit, save for administering the insurance fund. Banks would not partake in riskier behavior under the perceived backstop that insurance provides, and thus their probability of illiquidity or insolvency would not be altered. To the extent that depositors would lose the incentive to make a run on their bank, the deposit fund would be drawn in a reduced number of cases due to reasons, mostly exogenous to the banking sector (e.g., natural disasters, wars, or famines which cause a spike in the redemption demands of depositors).

Since moral hazard does exist, and can only be imperfectly tempered through regulatory solutions, the FDIC must rely on depositor monitoring to operate effectively.[38] Whether this monitoring comes directly, e.g., from depositors selecting better-capitalized banks, or indirectly, e.g., from banks maintaining well-capitalized positions based on reputational concerns, is of little import. A relevant concern for any deposit-insurance plan is identifying those depositors most at risk and those deposits most systematically important to a well-functioning financial system.

CORE DEPOSITS AND BANKING STABILITY

The amount of core deposits held in a bank is closely related to its probability of default. Banking failures are associated with higher levels of brokered deposits (p. 5),[39] and firms more dependent on them have lower post-insolvency resolution values.[40] Neither of these points is new or surprising to the FDIC – as far back as 1983 Congress discussed policies to counter these negative effects, the result of which was the Demand Deposit Equity Act of 1983 (see especially pg. 322 for discussion pertaining to bank failures and post-insolvency resolution). Two points bear mentioning in this regard: (1) when brokered deposits are substituted for core deposits, banks face an elevated default probability (p. 36),[41] and (2) a greater percentage of deposits held as core deposits (i.e., substituting core for brokered deposits) reduces the loss to FDIC in the event of failure (p. 38).[42] This first point is well-known as the failure of many thrift institutions in the 1980s is commonly cited as caused by an over-reliance on brokered deposits.[43] A shift in funding from core to brokered deposits increases bank instability and, with it, raises FDIC resolution costs for these failed institutions.

Indeed, the FDIC has recognized the instability that insured brokered deposits produce (app. 8).[44] In particular, it notes four aspects of the problem: (1) brokered deposits allow banks to

attract large volumes of funds from outside their natural market area, irrespective of their knowledge of these new markets; (2) insurance provided to brokered funds eliminates the need for depositors to analyze the viability and sustainability of the underlying financial institution; (3) reduced market discipline results, because a link is severed between the providers of funds and their end users; (4) insured funds allow for poorly managed and illiquid institutions to function longer than market forces would generally dictate, thus increasing FDIC resolution costs.

Insuring deposits allows for greater ease of substitution between currency and deposit accounts. Because insurance stabilizes the demand for deposits, banks benefit through greater ease in planning their lending operations (pp. 36-37).[45] The cost of providing the benefit of security to depositors and simplified planning to depositories is a reduction in private-sector monitoring of liquidity and solvency, as well as the potential costs of resolving failed institutions. In continuing to insure brokered deposits, the FDIC not only opens itself up to larger potential losses through insurance claims, but it also promotes banking-sector instability through decreased depositor discipline.

The Independent Community Bankers of America (p. 2)[46] notes that due to the broad definition assigned to brokered deposits, depositors utilize local, community banking services less as brokers shift their funds to larger markets. Clients can deposit their money at arm's length (i.e., without first establishing a relationship with their bank or broker) through brokered accounts, while lacking knowledge of how their deposits will be spent. This severs the depositor-banker relationship, which the FDIC recognizes is important in building a stable funding base.[47] While attractive to depositors, this increases potential losses on the FDIC through insurance claims, and it also increases the pressure on local banks to find a deposit base to service the

needs of their communities. The standard deposit base that local depositors would have provided is instead brokered into what is more akin to an investment than a standard deposit. Insurance extended to brokered loans gives these depositors undue risk-adjusted returns, while simultaneously placing increased pressures on local banks to secure funding.

The American Bankers Association (p. 1)[48] holds that the FDIC should avoid classifying deposits based on the channel through which they are obtained and should instead focus on the specific characteristics of the deposit. This would require a rewriting of the criteria the FDIC uses to assign insurance to a financial product. It would have the benefit of focusing attention on the question of *why* certain financial products should be insured instead of on the proximal results of such insurance.

In looking for new classification criteria to use in determining which deposits should be insured, the FDIC should take a closer look at some of its own conclusions from its recent assessment of core and brokered-deposit funding.[49] While most of the FDIC's response to section 1506 of the Dodd-Frank Act has been to more effectively monitor the core deposits of the banking sector, an alternative exists. By limiting its deposit coverage of some financial products, the FDIC can garner the aid of private investors in monitoring bank stability. Such private-sector monitoring is notably absent in today's environment, where high coverage limits on a wide range of financial products remove the incentive for private agents to take an interest in their bank's stability. In particular, removing FDIC insurance coverage from brokered accounts would solve five problems:

1. Brokered deposits represent a riskier use of money than a standard deposit in another type of insured account (p. 68).[50] Depositors are not concerned primarily with the safe return

of their funds (as is the case with demand deposits) but rather with seeking a higher risk-return trade-off (p. 17).[51] To the extent that the FDIC removes the risk of the deposit, the depositors will seek the highest returns possible. For the bank accepting brokered deposits, this implies a search for the highest-yielding investments, which are typically associated with elevated risk levels.

2. Because depositors in brokered accounts seek greater returns, holding them accountable for losses would avoid promoting risky investment activity. Spreading the costs of FDIC insurance among all depositors (and potentially taxpayers) reduces the accountability of these original depositors to their losses. It also skews the risk-return trade-off by reducing (or eliminating) risk while not compromising the expected return.[52]
3. Removing insurance from brokered accounts would hold brokers accountable to their clients in reporting the real risk of investing in riskier activities. Brokered deposits might still be an attractive option due to the increased return they can potentially offer, but the risk-reduction provided through insurance would be removed. Deposit insurance guarantees that the original deposit will be repaid, so at present there is no threat of the loss of principle to the depositor. As a result, the depositor's emphasis may be placed solely on maximizing gains instead of on balancing that goal with minimizing losses. As of Q3 2013, 80.07% of all brokered deposits (almost $600 billion) were eligible for insurance.[53] Removing insurance from brokered deposits would have the effect of putting these funds on a level playing field with the other $150 billion of uninsured brokered deposits (these represent brokered deposits made above the insurable limit). Since 20% of the brokered market can currently compete without insurance there is evidence that the remaining 80% could also do so.

4. Removing insurance from brokered deposits will still allow banks to utilize them as a funding source, as is currently the case with the $150 billion of uninsured brokered deposits. The only difference will be that to obtain funding through this channel, banks, brokers, and depositors will have to be accountable for potential losses. Thus, no funding options are removed from the banks' existing scopes of operations, as long as the risk profiles can be justified relative to other investments.
5. The FDIC already recognizes that brokered deposits are not stable enough to be included in the calculation of core deposits and contribute to increased probability of bank insolvency and higher resolution costs to the FDIC (app. B).[54] In part the reliance of banks on brokered deposits comes from the belief among depositors that they offer superior risk-return profiles compared with more conventional investment funds. Without insurance on brokered deposits, depositors could not earn the higher rates of return that accompany them and would have to contend with either smaller deposits at a lower interest rate which better reflects their demand to hold a cash balance, or personally take on more risk by pursuing an uninsured deposit or investment. The role of the FDIC is to secure those deposits that provide a substitute for holding currency, not to mitigate investment risk. Eliminating insurance on brokered deposits would entice investors to hold their cash requirements in core deposits, thus strengthening banks' balance sheets. Alternatively, removing insurance may encourage individuals to move their deposits into more conventional investments, thus removing the illusion of stable funding from the banking system. Instead of investing directly in equity or debt markets, brokered depositors currently turn to the banking sector to make their investment decisions. One unfortunate result is an unwarranted emphasis on debt financing as banks loan out these

deposits in their roles as financial intermediaries. Without the advantageous risk-adjusted returns of brokered accounts, equity investments would be stimulated at the expense of debt finance.

CONCLUSIONS

An adequate core-deposit base is necessary to promote bank stability. Insurance is extended to core deposits to ensure this stability by reducing the threat of a bank run. Insurance is also traditionally extended to brokered deposits. Unfortunately, the continued role of the FDIC in insuring brokered deposits removes market discipline and increases instability at the taxpayers' expense. Insuring these deposits may also harm the competitiveness of the banking industry to the extent that large banks are the primary receivers of brokered deposits and thus the beneficiaries of the safety blanket that extending deposit insurance to these funds provides. If the FDIC were to cease insuring brokered deposits, banks would have to rely on a stable deposit base to finance their lending activities.

Deposit insurance reform is contentious, in part because of the overlapping regulatory frameworks that govern its provision and the conflict these bring to a strict economic analysis. It is an unfortunate side effect of this that changes to the regulatory structure of banking, and deposit insurance in particular, only appears when banking crises threaten the stability of the larger financial arena.[55] The recent recession provides one such opportunity to reassess whether all deposits are created equally, and therefore are all equally good candidates for insurance coverage.

The reliance on brokered deposits ebbs and flows counter-cyclically. In 2007, just before the recession commenced, brokered deposits were a relatively unattractive option for depositors

and accounted for approximately 6.25% of total deposits. As the crisis intensified the rush to insured safety ensued with brokered deposits increasing to 8.65% of total deposits by Q1 2009. Note that this does not represent a rush to safety in the sense that depositors were fearful that their principal would be lost, but rather a rush for the higher risk-adjusted returns made possible by placing money in an insured brokered deposit earning a greater nominal return than a standard deposit. As of Q3 2013 brokered deposits accounted for 6.71% of all deposits, a figure which has steadily increased since late 2011. This rise can be attributed to depositors seeking higher returns in the prolonged low-interest rate environment on standard deposit accounts. This increase also exposes the FDIC to increased risk as depositors capitalize on the attractive risk-return profile that brokered deposits provide and which might not be possible if one was directly exposed to the risk of illiquidity or insolvency.

The Great Recession of 2008 demonstrated that the quality of the banking sector's assets is subject to sudden reversals. This creates regulatory problems when relying on assets to assess a bank´s stability. One alternative is to focus on banking-sector liabilities. From the banking sector's standpoint, these liabilities—whether deposits on demand or short-term loans—are problematic because banks become illiquid and eventually insolvent if too many depositors redeem them simultaneously. Brokered deposits in particular represent a troublesome area because they fulfill none of the criteria that the FDIC has established as necessary for a funding source to qualify for insurance. Notably, such a conclusion runs counter to the Demand Deposit Equity Act of 1983.[56]

The FDIC can streamline its operations and promote a more stable financial sector by correctly identifying which funds *should* qualify for insurance. Insuring only those deposits identified as being both germane to a bank's maturity mismatch *and* deposited by an individual

with the motive of having on-demand availability would hold banks accountable for the full costs of offering risky "deposit-like" products, while simultaneously removing the subsidized gains to depositors holding these "deposit-like" accounts. To the extent that brokered deposits appear similar to core deposits yet lack the same uncertainty-hedging motive, removing them from the list of insurable funds would promote banking-sector stability by strengthening bank balance sheets.

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REFERENCES AND NOTES

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[2] See 49 Fed. Reg. 13003 (April 2, 1984) (effective on 1 October 1984).
[3] See FAIC Securities, Inc. v. United States, 768 F.2d 352 (D.C. Cir. 1985).
[4] Committee on Banking, Finance and Urban Affairs. 1985. Impact of brokered deposits on banks and thrifts : risks versus benefits, (hearing before the Subcommittee on General Oversight and Investigations of the Committee on Banking, Finance, and Urban Affairs, House of Representatives, Ninety-ninth Congress, first session), July 16.
[5] Pub.L. 101–73, 103 Stat. 183.
[6] X12 C.F.R. § 337.6. cf. Dreyfus, J., A. Saunders and L. Allan (1994) Deposit Insurance and Regulatory Forbearance: Are Caps on Insured Deposits Optimal? *Journal of Money, Credit and Banking* 26(3), part 1: 412-38.
[7] The capital measure terms are defined in the following regulations: FDIC—12 C.F.R. part 325 , subpart B; Board of Governors of the Federal Reserve System—12 C.F.R. part 208 ; Office of the Comptroller of the Currency—12 C.F.R. part 6 ; Office of Thrift Supervision—12 C.F.R. part 565 .
[8] Pub.L. 111–203, H.R. 4173
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[10] Pub.L. 111–203, H.R. 4173, sec. 1506(a)(1)
[11] Pub.L. 111–203, H.R. 4173, sec. 1506(a)(4)
[12] See FDI Act, 12 U.S.C. 5 1821(f).
[13] Federal Register (2013) Deposit Insurance Regulations; Definition of Insured Deposit, proposed rules, 78(33): 11604–11609, http://www.federalregister.gov/articles/2013/02/19/2013-03578/deposit-insurance-regulations-definition-of-insured-deposit
[14] Note that this problem is not apparent in full-reserve banking systems, as advocated in Huerta de Soto (2006: chap. 9) and Bagus and Howden (2013; forthcoming). Kotlikoff (2010) provides a similar proposal by advocating that a full-reserve be held in the form of highly liquid debt securities, such as government bonds. See Huerta de Soto, J. (2006) *Money, Bank Credit and Economic Cycles*, trans. M. A. Stroup (Auburn, AL: Ludwig von Mises Institute); Bagus, P, and D. Howden (2013) Some Ethical Dilemmas with Modern Banking. *Business Ethics: A*

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[16] Historical alternatives to dealing with the common bank run without insurance exist—including the suspension of convertibility of deposited funds, clearinghouse loans to finance short-term illiquidity and banks cross-guaranteeing each others' deposit bases. See Selgin and White (1997), Timberlake (1984), Calomiris (1989), Hartley (2001). See : Selgin, G., and L. H. White (1997) The Option Clause in Scottish Banking, *Journal of Money, Banking and Credit* 29(2): 270–73. Timberlake Jr., R. H. (1984) The Central Banking Role of Clearinghouse Associations, *Journal of Money, Credit and Banking* 16(1): 1–15. Calomiris, C. W. (1989) Deposit Insurance: Lessons from the Record, *Economic Perspectives*, Federal Reserve Bank of Chicago, 13 (May–June): 10–30. Hartley, J. E. (2001) Mutual Deposit Insurance: Other Lessons from the Record. *Independent Review* 6(2) (2001): 235–52.

[17] While the literature more commonly focuses on increased risk taking by bankers as the consequence of the moral hazard of deposit insurance, Ely (1999) looks at "regulatory moral hazard." Any deposit-insurance fee will be paid by solvent banks, which are also not able to easily avoid paying such fees. As a consequence, regulatory diligence will have a tendency to decrease, because it will always be paid by surviving banks, which effectively cover losses from bank insolvencies caused by lax regulatory policies. Ely, B. (1999) Regulatory Moral Hazard: The Real Moral Hazard in Federal Deposit Insurance," *Independent Review* 4(2): 241–54. See also Bhattacharya, S., A. W. A. Boot, and A. V. Thakor (1998) The Economics of Bank Regulation, *Journal of Money, Credit and Banking* 30(4): 745–70, and Thies, C. F., and D. A. Gerlowski (1989) Deposit Insurance: A History of Failure, *Cato Journal* 8(3): 677–93.

[18] Economides, N., R. G. Hubbard, and D. Palia (1999) Federal Deposit Insurance: Economic Efficiency or Politics?," *Regulation* 22(3): 15–17.

[19] It is questionable how effective the FDIC is in distinguishing between bank illiquidity and insolvency. Kaufman (1999) finds that over 90 percent of emergency lending during the US S&L crisis in the 1980s went to institutions that subsequently failed. See: Kaufman, G. G. (1999) Do Lender of Last Resort Operations Require Bank Regulation?" (paper presented at the American Enterprise Institute conference, Is Banking Regulation Necessary?, in Washington, DC, October 27).

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[21] While essentially identical to the common demand deposit, the NOW account is a remnant of Regulation Q. Active until July 2011, Regulation Q mandated that interest could not be paid on demand deposits. NOW accounts were structured to comply with Regulation Q while still providing an interest-bearing deposit account. Regulation Q once allowed for an "artificially sharp distinction between no-yield money and no-check savings," which in turn allowed the Federal Reserve more defined control over the money supply. (Garrison 2009: 190). This sharp distinction was no longer necessary as monetary policy moved from money-supply targeting to interest-rate targeting under the Volcker Fed. See: Garrison, R. W. (2009) Interest-Rate Targeting During the Great Moderation: A Reappraisal," *Cato Journal* 29(1): 187-200.

[22] FDIC[9]

[23] Source: FDIC[9]. Worker is here defined by someone between 15-64 years of age.

[24] Source: FDIC[9]. These figures are adjusted for CPI measured inflation, using 2008 as the base year.

[25] Federal Deposit Insurance Corporation (FDIC) (2013) "Your Insured Deposits", http://www.fdic.gov/deposit/deposits/insured/print/yid_english.pdf

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[32] 12 C.F.R. § 337.6(b)

[33] FDIC[9]

[34] FDIC[9]

[35] Huerta de Soto.[14] See also: Bagus, P., and D. Howden (2009) The Legitimacy of Loan Maturity Mismatching: A Risky, But Not Fraudulent, Undertaking, *Journal of Business Ethics* 90(3): 399–406.

[36] It could be that deposit brokers are only more capable at seeking out higher interest rate products than common depositors are, in which case there would be no gain in financial knowledge by using a broker. At the same time, most brokers, financial planners and investment advisors must go through an accreditation process to obtain their license which involves readings or classes pertaining to the functioning of financial markets and the risks involved in specific products.
[37] Diamond and Dybvig[15]
[38] As an example of imperfect regulatory solutions on deposits, many financial products now offered by banks are direct responses to bypassing remnant legislations, e.g., sweep accounts to avoid reserve requirements or NOW and ATS accounts to avoid Regulation Q.
[39] Government Accountability Office (2013) Financial Institutions: Causes and Consequences of Recent Community Bank Failures, (testimony before the *Committee on Banking, Housing and Urban Affairs, U.S. Senate*, June 13), http://www.banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=703ee6fe-c8cb-4c7f-a5f1-773f2ab117b8
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