

Federal Deposit Insurance and Deposits at Foreign Branches of U.S. Banks

Should the Federal Deposit Insurance Corporation (FDIC) charge insurance premiums on deposits in foreign branches and International Banking Facilities (IBFs) of U.S. banks? Such a proposal has appeared as one of many possible changes to the Federal deposit insurance system, but the issue has received relatively little attention.¹

This article airs the issues involved in an extension of the FDIC premium to foreign branches without taking a position on the question. Levying premiums on these deposits would alter the distribution of premium charges significantly. But as this study shows, how equitable the proposed redistribution would be depends on how one views key characteristics of FDIC insurance coverage. Further, the change could have important repercussions for the competitive structure of banking inside and outside the United States.

The nature of the proposal

Several proposals have been made to include deposits at foreign branches of U.S. banks in the base used to compute FDIC insurance premiums. These proposals

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would not, however, extend FDIC insurance coverage to foreign branch deposits. For this article, foreign branch deposits are defined to be both the deposits of foreign and U.S. residents booked at U.S. banks' offices located overseas and foreigners' deposits in IBFs and Edge Acts located in the United States. Deposits by foreigners in domestic offices of U.S. banks are already covered under the FDIC insurance system.

This article considers a general version of the proposals. Banks would pay a gross premium rate of one-twelfth of 1 percent on deposits at their foreign branches, the same rate as on deposits at their domestic offices, but would receive no FDIC insurance coverage on these deposits.²

Proponents of imposing FDIC premiums on foreign branch deposits identify two major benefits from the proposed change: a fairer division of the FDIC premium burden and an improved competitive position for small banks relative to large ones. This article will analyze the proposal only in light of these two goals. Equity and competitiveness are desirable characteristics of an effective deposit insurance system, but not its overriding goals. The primary purpose of deposit insurance is to provide a safety net for depositors in the event of a bank failure and thereby to protect the integrity of the

¹*Recommendations for Change in the Federal Deposit Insurance System*, Working Group of the Cabinet Council on Economic Affairs (January 1985), and *Deposit Insurance in a Changing Environment*, Federal Deposit Insurance Corporation (April 15, 1983)

²Banks pay the gross premium rate on their deposits, but the FDIC has always rebated a portion of it at the end of the fiscal year. The gross premium rate less the portion rebated is the net, or effective, premium

banking system. Equity and competitiveness are also not the only goals that have been put forward in the broader discussion of deposit insurance reform

The two goals represent separate issues, which can and should be analyzed separately, as they are in this article. Analysis may suggest accepting one goal but not the other. Considering the goals separately is meaningful because a deposit insurance scheme can be designed to accomplish both goals, or one goal without the other.³

The first goal, a fairer division of the premium burden, is a matter of equity. The relevant issue is the relationship between the burden borne by an individual bank and the benefits accruing to the bank and its depositors.⁴

The second aim, improved competitive position for small banks, focuses on the *marginal* cost of deposit insurance, the premium rate on those liabilities that banks use to adjust their funding on a short-run basis. Here the analysis concentrates on the limited issue of whether large banks face such significantly lower marginal deposit insurance costs under the present premium arrangements that they have a competitive advantage over smaller banks in pricing loans.

This is not the only bank competitiveness issue raised by deposit insurance. Another, perhaps more important issue relates to depositor perceptions of how deposit insurance coverage applies in practice. Small bank representatives generally maintain that they are at a competitive funding disadvantage because the public views insurance of large bank deposits as more extensive. The cost consequences of *perceptions* of deposit insurance coverage are different from the cost consequences of the deposit *base* for insurance premiums and are not examined here.

A fairer distribution of premiums

The first goal of the proposed extension of the premium base is to produce a fairer distribution of the premium burden. And the proposal does substantially redistribute the burden toward large banks. But the proposal's equity

depends on how one views the insurance coverage—this is a matter open to considerable debate. Differing views involve distinctions on two crucial issues: how extensively uninsured deposits are covered and how banks of different types are treated in the event of a failure.

The distinction concerning coverage can be described in terms of limited *de jure* versus more comprehensive *de facto* insurance coverage. *De jure* insurance coverage may be used to denote the insurance explicitly provided by law, which is limited to \$100,000 for each depositor.⁵ *De facto* insurance coverage, in this discussion, refers to the protection uninsured depositors perceive they have, since they may actually suffer no losses when the FDIC merges or sells, rather than liquidates, troubled institutions. The need to economize and conserve FDIC resources requires minimizing the cost of handling troubled institutions. In the vast majority of cases this has resulted in purchase and assumption arrangements that have maintained the value of all deposits. Even in circumstances where a merger or sale of assets cannot be arranged, other considerations, such as fears of systemic risk and the desire to avoid interruptions in depositor service may lead the FDIC to provide more than the legally required deposit protection.

A second distinction involves perceptions of how the FDIC treats banks of different types, particularly in the event of a failure. If all banks receive the same treatment, the system may be termed *unified*. But if banks fall into two groups according to their size, for example, with uninsured liabilities treated differently if they fail, the system should be described as two-tiered or *dual*.

To highlight the role of these distinctions in evaluating the proposal's equity, this article examines two very stylized versions of the deposit insurance system. Actual FDIC practice lies somewhere between them. It is important to remember that far more often than not, the practice here and abroad is to merge or sell failing institutions rather than to liquidate them. Thus, uninsured depositors have generally not suffered losses in bank failures. Moreover, the decision to merge or to liquidate is made on a case-by-case basis according to the specific circumstances of the troubled bank, and not just on the basis of a bank's size, as these highly stylized versions of coverage might suggest. Therefore, some uncertainty about the extent of *de facto* coverage exists for all banks, regardless of their size. The case-by-case approach means that depositors probably would

³For example, it could be achieved through a combination of lump-sum and marginal insurance premiums

⁴This article focuses on one aspect of the fairness of the distribution of premium charges—the relationship of the premium base to insured deposits. There are other aspects of fairness that the proposal does not address and which therefore are not discussed here. Among them is the extent to which differing riskiness of individual banks should be incorporated into the premium structure.

A second issue is the extent to which deposit insurance is equally valued by the depositors at small and large banks. Depositors can evaluate the creditworthiness of large depository institutions better than smaller ones because more financial analysis and credit evaluation is available for large banks. For small banks, deposit insurance can substitute for this kind of information.

⁵Technically, coverage is limited to the first \$100,000, aggregated over all accounts for each right and capacity of the depositor. This means that an individual can set up separate rights and capacities through joint accounts or trusteeships in addition to his or her individual right and capacity. For corporations, the ability to establish additional rights and capacities through joint tenancy is a matter of controversy.

not perceive the level of *de facto* coverage based solely on the observed frequency of mergers or sales in resolving bank failures

The two very stylized views of the insurance system which emerge from these distinctions are

- **Deposit insurance coverage as a unified system** Depositors at all banks receive the same *de jure* protection of insured deposits and no coverage of uninsured liabilities. A variant of this first view perceives a unified system in which as a general practice uninsured depositors at all banks, regardless of size, receive the same *de facto* coverage of legally uninsured liabilities
- **FDIC insurance coverage as a dual system** Legally uninsured as well as insured liabilities are *de facto*-covered at larger banks, but as a general practice only insured deposits are protected at smaller institutions. Since the dividing line between large banks and small banks is unclear, large depositors have an incentive to evaluate carefully the credit-worthiness of banks holding their deposits

As the next sections explain, each of these stylized views of FDIC coverage leads to a different assessment of the proposed extension of the FDIC premium base. Under the unified system view, the proposal appears to *increase* inequity when coverage is only *de jure*, but as the extent of *de facto* coverage increases, this effect diminishes. Under the dual system view, the effect of the proposal would be ambiguous.

Discrepancy between cost and benefit under the current premium system

FDIC insurance protects the first \$100,000 of each domestic deposit account at premium-paying banks. In return, banks pay a uniform premium rate of one-twelfth of 1 percent on *all domestic* deposits, including that portion of deposits over the \$100,000 ceiling and thus not covered by FDIC insurance.

The FDIC describes this as a "flat-rate" system, because banks pay the same premium on all domestic deposits. But "flat rate" may be a misnomer since it suggests that banks pay a uniform price for insurance coverage. In fact, they do not. Based on the cost per dollar of domestic deposits, a bank that relies heavily on large (over \$100,000) Certificates of Deposit (CDs) for its funding will pay more for its *de jure* coverage than a bank with mostly retail deposits under \$100,000 each. If the deposit insurance system is viewed as unified and *de jure*, treating all banks equally and insuring each depositor only up to \$100,000, then the average large bank may subsidize the average small

Table 1

Share of Large Deposits at Insured Banks

By size of bank, as of June 30, 1984

FDIC-insured banks with assets of	Number of banks	Uninsured domestic deposit liabilities*	Deposits at foreign branches
0 to \$300 million	13,670	10.7	0.1
\$300 million to \$1 billion	453	19.8	0.4
\$1 billion to \$5 billion	201	27.7	7.0
\$5 billion to \$10 billion	34	28.9	14.1
Over \$10 billion	23	22.6	48.3
All FDIC-insured banks	14,381	20.1	18.4

*Calculated as total deposits over \$100,000 (large deposits) less \$100,000 times the number of large deposits

Source: *Call Reports* (June 1984)

bank (assuming that all banks are equally risky), because proportionally more uninsured liabilities are held at large banks (Table 1).⁶ Subsidization may also occur among banks of similar size, since the reliance on uninsured deposits among banks varies. For example, some small banks have substantial uninsured deposit liabilities.

What if the system is viewed as unified but offering partial *de facto* coverage for legally uninsured liabilities? According to the FDIC,⁷ uninsured depositors assume that they have at least partial *de facto* deposit protection because the FDIC tends to arrange the merger or purchase of a troubled or closed bank, rather than its liquidation. If so, then charging insurance premiums on the legally uninsured portion of deposits can be appropriate, but the premium rate should reflect the extent of *de facto* coverage, generally less than for fully insured deposits. Under the current premium arrangements, if there is the same partial *de facto* coverage for all banks, the extent of subsidization of some banks by others becomes unclear. Banks with substantial domestic and few foreign uninsured liabilities still pay more for their coverage than banks with mostly insured deposits, since the premiums do not reflect the different levels of coverage of insured and uninsured deposits, but the disparities are smaller than those under a unified

⁶June 1984 rather than March 1985 data are used because data on insured and uninsured liabilities are collected only once a year on the *Call Reports*. Uninsured liabilities are measured as the excess of each deposit over \$100,000, a somewhat inaccurate measure (see footnote 5 for further reference).

⁷Deposit Insurance, *op cit*

system with *de jure* coverage only. The situation is less clear for banks with substantial foreign as well as domestic uninsured liabilities. The premiums on the domestic uninsured liabilities may be high relative to the partial coverage they receive, but banks pay no premiums on the foreign branch liabilities. Thus, whether these banks pay too much or too little for their coverage depends on the level of *de facto* coverage and the distribution of deposits between foreign and domestic uninsured liabilities.

Adopting the dual system view alters the evaluation dramatically. Some observers have suggested that *de facto* insurance coverage of uninsured deposits at large banks, but only large banks, is widely perceived to be 100 percent. The view is an extreme characterization, but for some it seems to be reinforced by the manner in which the problems of Continental Illinois were handled last year.⁸

Perception is inherently hard to ascertain, however. Reasoning very generally that the disruption and drain on the FDIC's resources in the event of a large bank failure could be too great, depositors may assume that the FDIC would never liquidate in such a case, but would arrange for a purchase or merger into another institution. Large depositors would generally suffer no losses in such a merger.⁹ Under this view, large depositors in large banks may appear to face less risk than large depositors in small and medium-sized banks. But experience shows that at the first sign of trouble, large depositors may quickly shift deposits to another institution. Such behavior is potentially inconsistent with a perception of full *de facto* coverage.

Under the dual system view, the largest banks pay too little for their insurance, because they do not pay premiums on their foreign branch deposits which are covered *de facto*. Meanwhile, smaller banks with substantial uninsured domestic deposits pay too much. How equitable the system is to small banks with mostly insured deposits under such a system is unclear; their premiums per dollar of insured deposits could be higher or lower depending on the distribution of uninsured deposits in the dual system's two tiers. Of course, this analysis ignores any differences in risk among different classes of banks.¹⁰

⁸The sharp rise in rates paid on Continental Illinois' and other banks' CDs during the late spring and early summer of 1984, however, indicates that this perception was not universally held.

⁹A recent proposal by the FDIC to introduce a modified payout (only partial reimbursement) to uninsured creditors could affect these perceptions.

¹⁰But note that the risk-related premium system advocated by the FDIC and the Treasury studies already cited would not correct the discrepancy between the premium base and the amount of coverage.

In summary, then, if one analyzes the current premium arrangements according to the stylized unified system view with *de jure* coverage of legally uninsured liabilities, banks with sizable uninsured domestic liabilities appear to pay more for their insurance coverage than banks with mostly insured liabilities, assuming they are of equal risk. If all banks have some *de facto* coverage, banks with uninsured domestic liabilities and no foreign liabilities still appear to pay more for their insurance coverage. Banks with substantial foreign liabilities, however, may pay more or less relative to other banks depending on the extent of the *de facto* coverage and the distribution between uninsured domestic and foreign deposits. If one accepts the stylized dual system view, small and medium-sized banks with substantial domestic uninsured deposits appear to pay more for their coverage than large banks.¹¹

Redistribution of premiums under the proposal

The proposed extension of the premium base would redistribute premiums substantially (Table 2). Based on March 31, 1985 *Call Reports* data for 14,379 FDIC-insured banks, the major burden of expanding the premium base would fall on the 24 banks with assets of \$10 billion or more; their combined increase in premiums would amount to \$239 million per year. Another 137 banks with assets between \$1 billion and \$10 billion would pay \$35 million in additional premiums. Among smaller banks, 53 have foreign branch deposits and these banks together would pay \$1 million more. The result would be a rise of \$276 million in total FDIC premiums, an increase of 21 percent.

The proposal as a repricing of FDIC insurance

Bringing the deposits of foreign branches into the FDIC premium base can be viewed as a way to reprice the insurance. Comparing the proportion of selected large liabilities before and after foreign branch deposits are included shows how the repricing would work (Table 3).

Under the current premium arrangements, the largest banks pay relatively more for their *de jure* insurance coverage. The *de jure* protection declines as the share of uninsured domestic deposit liabilities increases—and that share is much higher for large banks than for small banks (Table 3, column 1). Adding the foreign deposits to both the uninsured liabilities and the base produces an even steeper rise in the share. Now, the share rises from

¹¹There are more sophisticated ways to measure the degree of subsidization, including incorporating a measure of the institution's riskiness. See, for example, Alan J. Marcus and Israel Shaked, "The Valuation of FDIC Deposit Insurance Using Option-Pricing Estimates", *Journal of Money, Credit, and Banking*, Volume 16, No. 4, Part 1 (November 1984), pages 446-460. But as the sophistication of the methodology grows, the possible objections multiply and uncertainty about the validity of the result increases.

11 percent for the smallest banks to 44 percent for the largest. Under the proposed arrangements, it would range from 11 percent all the way up to 71 percent.

It is not just large banks that currently face this kind of gap between the premium base and insured deposits. At 300 banks, the share of uninsured domestic deposit liabilities in all domestic deposits exceeds 40 percent, the average share of these accounts at large banks. Of the 300 banks, more than half have assets of less than \$300 million, about 1 percent of all banks in that size class.

Under a unified deposit insurance system with the

same partial *de facto* coverage of uninsured liabilities for all banks, to include foreign branch deposits would still leave a gap between the deposit base and insurance coverage. The size of the disparity would depend on how much partial coverage uninsured liabilities received; it would only disappear when *de facto* insurance coverage reached 100 percent. All told, under the stylized unified system view, the proposal would make banks with large deposits pay more for their coverage relative to smaller banks than they do now.

However, if one sees the insurance system as dual, the repricing creates different effects. The size of foreign

Table 2

FDIC Premiums Under the Proposed Extension of the Premium Base

Computed as of March 31, 1985

Group of banks	Number in group	Number with foreign deposits	Millions of dollars				Difference
			Domestic deposits	Foreign deposits*	Current premium†	Proposed premium‡	
All insured banks	14,379	214	1,605,560	330,702	1,338 0	1,613 6	275 6
Banks with assets of less than \$1 billion	14,106	53	789,898	1,422	658 2	659 4	1 2
Banks with assets of \$1 billion to \$10 billion	249	137	490,838	42,044	409 0	444 1	35 1
Banks with assets of \$10 billion or more	24	24	324,824	287,237	270 7	510 1	239 4

*Deposits at foreign branches, Edge Acts, and International Banking Facilities

†One-twelfth of 1 percent of domestic deposits

‡One-twelfth of 1 percent of total deposits

Source *Call Reports* (March 1985)

Table 3

Proportion of Selected Large Deposits in the Premium Base

As of June 30, 1984

FDIC insured banks with assets of	Number of banks	Using domestic deposits as the premium base		Using all deposits as the premium base
		(1)	(2)	(3)
		Uninsured domestic deposit liabilities*	Foreign branch deposits	Uninsured domestic deposit liabilities plus foreign branch deposits
0 to \$300 million	13,670	10 7	0 1	10 8
\$300 million to \$1 billion	453	19 9	0 4	20 2
\$1 billion to \$5 billion	201	29 8	7 6	34 7
\$5 billion to \$10 billion	34	33 7	16 3	43 0
Over \$10 billion	23	43 7	93 5	70 9
All FDIC insured banks†	14,381	24 6	22 5	38 5

*Calculated as all deposits over \$100,000 (large deposits) less \$100,000 times the number of large deposits

†Since the large banks dominate the average, especially after the inclusion of foreign deposits, a comparison of the large bank proportion to the average is not very meaningful

Source *Call Reports* (June 1984)

deposits relative to the base provides an indicator of the amount of excess *de facto* coverage large banks now receive. The foreign branch deposits of banks with assets over \$1 billion are substantial, relative to the present premium base, and jump sharply with bank size (Table 3, column 2); for the top 23 banks, foreign branch deposits nearly equal all domestic deposits. Under the dual system view, these very large banks would wind up paying less for their actual coverage than smaller banks because the FDIC to some extent protects foreign branch deposits of large banks.¹²

Including foreign branch deposits redistributes, but does not eliminate, the discrepancy between the base on which premiums are charged and the deposits covered by insurance, under the dual system view. The revised premium base narrows the gap for any banks viewed as being in the first tier which has some *de facto* coverage, eliminating it only if the *de facto* coverage is 100 percent. But for banks considered to be in the second tier, adding foreign branch deposits has the same effect as the unified system view implies: it creates a sharp rise in large banks' share of uninsured liabilities in their premium base. For the 34 banks with assets between \$5 billion and \$10 billion, the share increases from 34 percent to 43 percent, while for the 23 largest banks, it jumps from 44 percent to 71 percent. Among banks with assets under \$1 billion, foreign branch deposits are so small that including them makes little difference.

To sum up, the proposed extension of the premium base cannot produce an unambiguously fairer distribution of the FDIC premium burden, no matter which of the two views of the deposit insurance system one accepts. These stylized views should help to highlight how differentiation in the treatment of banks and in the extent of *de facto* coverage influence the fairness of the proposed redistribution. Under the unified system view, the proposal only exacerbates the disparity between the premiums paid and the deposits insured, unless *de facto* coverage is thought to be *total*. Even under the dual system view, the change does not fully align premiums with the perceived differences in coverage between the dual system's two tiers of banks because the first tier (with *de facto* insurance) is not distinguished from the group of banks with large uninsured and foreign branch deposits. The proposed redistribution will not be fair to some members of the latter group. An arrangement that imposes premiums by deposit type, rather than bank type, charges some banks for coverage they will not get under the dual system view. Indeed, a full evaluation of the equity of the proposal under the

dual system view would require an explicit definition of the first and the second tiers. The inherently arbitrary nature of such a distinction underscores the extreme character of the dual system view.

Improving the competitiveness of small banks

The second goal of a proposed extension of the FDIC premium base is to improve the competitive position of small domestic banks relative to large ones. To accomplish this, the proposal tries to equalize the marginal cost of deposit insurance across all deposit types for all U.S. banks.¹³

The change would tend to raise the marginal cost of funding for large banks relative to small ones. Applying an FDIC premium to deposits at foreign branches would equalize the marginal insurance cost (but not necessarily the total marginal cost) on international and domestic deposits. Funding costs for U.S. banks in the international markets would increase, because the highly competitive nature of those markets would prevent U.S. banks from passing on much of the increased cost to their deposit customers. If the new relative funding costs then get incorporated into loan pricing, the cost of loans at large banks with access to the Euromarket would rise relative to that of small banks with a purely domestic base. The change would in theory tend to shift market share of total loans and deposits held by U.S. banks toward small banks and away from large banks.

The size of the impact would depend on how much small funding cost differences determine market structure in the banking industry. Research on this question suggests that other factors—such as regulation, economies of scale in providing certain services, and advantages gained by specializing in particular services—play an important role in the structure of competition between large and small banks.¹⁴ This literature emphasizes that local banking markets are small; as a consequence, regulatory control of entry and branching is very important. Further, cost savings may arise from the joint production of several banking services. By contrast, the funding cost advantage of access to the Euromarkets has received little or no weight. Therefore,

¹³Differences in marginal insurance premiums are only a part of the difference in marginal funding costs across banks, so the proposal would not equalize marginal funding costs for all banks.

¹⁴See, for example, George J. Benston, Gerald A. Hanweck, and David B. Humphrey, "Scale Economies in Banking: A Restructuring and Reassessment", *Journal of Money, Credit, and Banking*, Volume 14, No. 4, Part 1 (November 1982), pages 435-456; Thomas Gilligan, Michael Smirlock, and William Marshall, "Scale and Scope Economies in the Multi-Product Banking Firm", *Journal of Monetary Economics*, Volume 13, No. 3 (May 1984), pages 393-405; and Sherill Shaffer, "Competition, Economies of Scale, and Diversity of Firm Sizes", *Applied Economics*, forthcoming. A number of studies are summarized in R. Alton Gilbert, "Bank Market Structure and Competition", *Journal of Money, Credit, and Banking*, Volume 14, No. 4, Part 2 (November 1984), pages 617-645.

¹²Some of these uninsured deposits are liabilities to other U.S. banks, as they are in the domestic market.

small changes in relative funding costs alone are unlikely to have any great effect. Altogether, the degree of competition among banks of similar size is quite possibly greater than that among banks of different size.

Some observers have argued that perceived differences in bank safety are a major factor affecting competition. Since the proposal does not include formal extension of FDIC coverage to deposits at foreign branches of U.S. banks, implementing it should not alter these perceptions.

However, the analysis of the impact of FDIC premiums on market terms and market shares would be different if foreigners and U.S. residents viewed deposits in foreign branches of U.S. banks as effectively having more insurance protection than before, notwithstanding the lack of formal (*de jure*) coverage. Such reassurance could be quite valuable. The normal tiering in the Euromarket suggests that safety may be worth more than 8 basis points, the increase in cost from imposing FDIC premiums on foreign branch deposits.

Extending FDIC insurance premiums to foreign deposits of U.S. banks may not give such a clear signal to market participants, however. Extending the base appears consistent with the dual insurance system view by implying that some *de facto* coverage for large deposits at international banks already exists. But important features of that system remain unspecified, particularly the boundary between banks with some protection of uninsured liabilities and those without it. Foreign branch depositors would be left uncertain about just how much of their deposits would be covered in a bank failure—as is now the case.

U.S. competitiveness in domestic markets and abroad

The proposed change in premium structure could alter the competitive structure of banking in the United States and abroad. To begin with, applying an FDIC premium to foreign branch deposits would raise the cost of external funds. Under the assumption that the FDIC would rebate nothing from the gross premium, the effective rate of premium would be one-twelfth of 1 percent or 8.3 basis points.¹⁵ For banks subject to the 3 percent reserve requirement on Eurocurrency liabilities, the effective cost of external funds would rise 8.6 basis points.¹⁶ These are small changes compared with the daily volatility of Eurodollar rates, for example, which

¹⁵The FDIC rebate has declined in recent years, it rebated only 13.5 percent of the premium to the banks in 1983 compared with as much as 60 percent earlier.

¹⁶For banks subject to reserve requirements on Eurocurrency liabilities, the effective cost of external funds is

$$\frac{i_{ES} + \text{FDIC}}{1 - \text{RR}_{ES}} = \frac{i_{ES} + .083}{1 - .03}$$

where i_{ES} is the relevant Eurodeposit offer rate (e.g., three months),

in 1984 averaged 140 basis points when measured by the standard deviation. However, these small changes are large relative to current Euromarket margins. Further, the change would create a permanently higher average cost of external funds and their effects would tend to persist.

Higher external funding costs could place modest upward pressure on domestic funding costs and lending rates. Applying an FDIC premium to foreign branch deposits would reduce the competitiveness of U.S. banks with foreign deposits relative to non-U.S. banks operating in the Euromarkets. The increased cost of external funds, relative to domestic funds, would lead large banks to adjust their marginal funding from foreign to domestic markets, especially since they might not be able to shrink assets rapidly enough in response to declines in liabilities.

Impact on the market shares of U.S. banks at home and abroad

How much market shares in the Eurocurrency and domestic lending markets change would depend on how market terms responded to a shift in U.S. bank funding costs. While the cost differences would be small, they would be large relative to current Euromarket margins, and since the volumes are large, the size of the impact cannot be determined precisely. However, since the Eurocurrency market is highly competitive, flows might well be significantly redirected.

In the domestic market, higher marginal funding costs could lead large banks to price loans higher, at least on the parts of their loan portfolio with thin profit margins. On loans with higher profit margins, the banks might instead absorb all the funding cost increase. Smaller domestically-funded banks, with lower marginal funding costs, could build up profits or quote slightly lower loan costs. That would push market share toward small banks.

In the Euromarkets where profit margins are already thin, more expensive funds would probably impel U.S. banks to quote less favorable terms. Since U.S. banks form a large segment of the market, foreign banks would find themselves attracting depositors and borrowers in the Euromarkets away from U.S. banks, thus increasing their market share.

Of course, foreign banks would only be willing to expand their Eurocurrency balance sheets at current interest rates if they faced no legal or internal balance sheet constraints.¹⁷ In the short run, such constraints

Footnote 16, continued

FDIC is the premium rate, and RR_{ES} is the reserve requirement on Eurocurrency deposits

¹⁷Another possibility is that foreign banks not now active in the Euromarket would enter. This seems less likely now than it would (p 38)

How Interest Elasticity Affects Deposit Losses

The extent of deposit losses under the proposed extension of the premium base would depend on the interest elasticity of deposits and the level of interest rates. Estimating these losses requires knowledge of depositor interest sensitivity, and the overall level of interest rates. The elasticities are difficult to measure, since the small differences in rates to which banks and depositors respond are not observable without continuous data collection on interest rates over the day. One can only infer that the elasticity is quite high.

Sample computations provide some idea of the magnitude of deposit losses and revenue shortfalls under different assumed depositor interest elasticities and levels of interest rates in the Euromarket (table). Interest elasticities can range from zero (interest insensitivity) to infinity.* The elasticities here reflect a range of low to high, but it is quite likely that foreign branch deposits are even more interest-sensitive than implied by the interest elasticity of ten. The range of the interest rate is representative of Eurodollar rates over the last ten years.

The computations here assume that imposing an FDIC premium on deposits at foreign branches of U.S. banks would have no effect on U.S. domestic rates or on deposit rates at non-U.S. Euromarket banks. If deposit

rates at non-U.S. Euromarket banks fall, their decline would blunt the impact of the FDIC premium.

Only at fairly high elasticities would the deposit losses and FDIC revenue reductions become substantial. The deposit losses range from one-tenth of 1 percent if rates were high and the elasticity low, to about 17 percent at an interest rate of 5 percent and an elasticity of ten. The maximum loss of revenue to the FDIC on the table is \$46 million, still less than one-third of the amount rebated for 1983. Larger declines are possible if the interest elasticity of foreign branch deposits is higher †. The relatively small share of branch deposits in total deposits limits the maximum possible revenue loss through this channel to about 17 percent of revenues, the share of foreign deposits in total deposits.

Assuming no FDIC rebate, not just the foreign but the domestic deposit base could also erode. FDIC revenue shortfalls would eventually require higher FDIC premiums, which would lower domestic deposit rates in the United States. The interest sensitivity of domestic deposits in aggregate is likely to be less than that of foreign deposits, since domestic deposits include small transactions accounts and time deposits with low interest elasticity along with highly interest-sensitive ones. But since the base of domestic deposits is much larger, even modest declines in deposit rates following an FDIC premium increase could produce very substantial revenue losses.

*The interest elasticity gives the percentage decline (increase) in deposits for a 1 percent decline (increase) in interest rates. Interest sensitivity increases as the elasticity rises in value. As it approaches infinity, small changes induce depositors to withdraw all their deposits and invest them in an alternative instrument.

†The revenue losses will increase proportionally with the elasticity (e.g., an elasticity of 20 will produce double the revenue decline of an elasticity of ten).

FDIC Revenue Reductions Under Alternative Interest Rate and Interest Elasticity Assumptions

In millions of dollars

	Assumed interest-elasticity	Domestic deposits	Foreign deposits	Premiums under proposed premium base extension	Reduction of premium from base case
Current (March 1985)	*	1,605,560	330,702	1613.6	*
Interest rates of 5 percent	0.2	1,605,560	329,600	1612.7	-0.9
	1.0	1,605,560	325,190	1609.0	-4.6
	10.0	1,605,560	275,585	1567.7	-45.9
Interest rates of 10 percent	0.2	1,605,560	330,151	1613.1	-0.5
	1.0	1,605,560	327,946	1611.3	-2.3
	10.0	1,605,560	303,144	1590.6	-23.0
Interest rates of 15 percent	0.2	1,605,560	330,335	1613.3	-0.3
	1.0	1,605,560	328,865	1612.1	-1.5
	10.0	1,605,560	312,330	1598.3	-15.3

*Not applicable

could leave foreign banks little choice but to adjust to some of the impact of higher U.S. bank funding costs in larger spreads and higher profit margins. But eventually, accumulated capital from those higher profits would ease the balance sheet constraint and allow foreign banks to pursue a larger market share. Similarly, foreign banks would only expand their balance sheets at current rates if the marginal costs of loan production do not rise too sharply. Credit evaluation and loan servicing costs may be higher for loans to new borrowers than for their normal loan portfolio. This would lead foreign banks to compensate by increasing their spreads charged over LIBOR, possibly eliminating their competitive advantage. But experience and economies of scale may allow spreads to narrow in the longer run.

In summary, the extent to which U.S. banks would lose market share and bid-offer spreads would widen depends mainly on two things: the willingness of foreign banks to increase their Eurocurrency balance sheets, and the interest sensitivity of depositors, borrowers, and lenders. Euromarket participants could, of course, shift their activities to other markets as well as to other agents in the Euromarket. In general, the more willing foreign banks are to increase balance sheets and the more sensitive market participants are to interest rates, the greater U.S. losses in market share would be and the smaller changes would be from current market terms. These effects would be mitigated if depositors perceived greater coverage for their funds in foreign branches or reinforced if depositors became more uncertain of the extent of coverage.

Consequences of a falling U.S. market share

Any reduction of the U.S. banks' share of the domestic or Eurodeposit market would tend to shrink the deposit base on which premiums would be charged, assuming no growth in deposits. The magnitude of the decline is difficult to judge, but the possibility that it could be sizable cannot be ignored.¹⁸ Moreover, the deposit

Footnote 17, continued
have been in the 1970s, when participation in the Euromarket was increasing rapidly

¹⁸The decline in the deposit base does not necessarily have to reflect a shrinking U.S. share of world bank liabilities. Financial innovation, in the form of new non-deposit liabilities, could follow a rise in insurance premiums on Eurodeposits. The proposed premium could also further encourage the growth of off-balance sheet transactions by banks

shrinkage does not imply that the FDIC would immediately need less funds. In the long run the FDIC's exposure should decline along with the deposit base (assuming the deposit base does not fund riskier assets). In the short run, however, its exposure reflects past experience.

Thus, the financing cushion the proposed change would provide to the FDIC may be smaller than expected. With a substantial erosion of the deposit base, revenues from the foreign branch deposits might not be as high as projected (box). Currently, the FDIC rebates the excess premium paid, and this allows some margin for the inevitable error in gauging its needs and revenues. That margin has been disappearing, though, and the rebate has shrunk.

Conclusion

Extending the premium base for FDIC insurance to deposits at the foreign branches of U.S. banks would raise FDIC revenues by 21 percent and substantially redistribute deposit premiums from small and medium-sized banks to large ones. Whether this redistribution is appropriate depends largely on how one views the extent of *de facto* coverage and the unity of treatment of banks of differing characteristics, including size. At one extreme, if one accepts the dual insurance system view that large banks regularly receive more *de facto* insurance protection than small banks, then large banks would in fact be paying more for the effectively higher coverage they receive. At another extreme, if one views the system as unified, the proposal would raise the insurance cost per dollar of insured deposits to all banks with deposits at foreign branches. This is true whether all banks tend to receive the same partial *de facto* coverage of uninsured deposits or none at all. But the proposed change would not eliminate the discrepancy between the premium base and the amount of insurance coverage for all groups of banks, under either stylized view of the system. For many medium-sized and fairly large banks with foreign deposits, the proposal may widen the gap substantially.

The competitive implications of the proposal also raise questions. Equalizing the marginal insurance cost of funds between the Euromarkets and the domestic money markets for U.S. banks would necessarily raise the funding costs of U.S. banks relative to those of other banks in the Euromarkets.

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