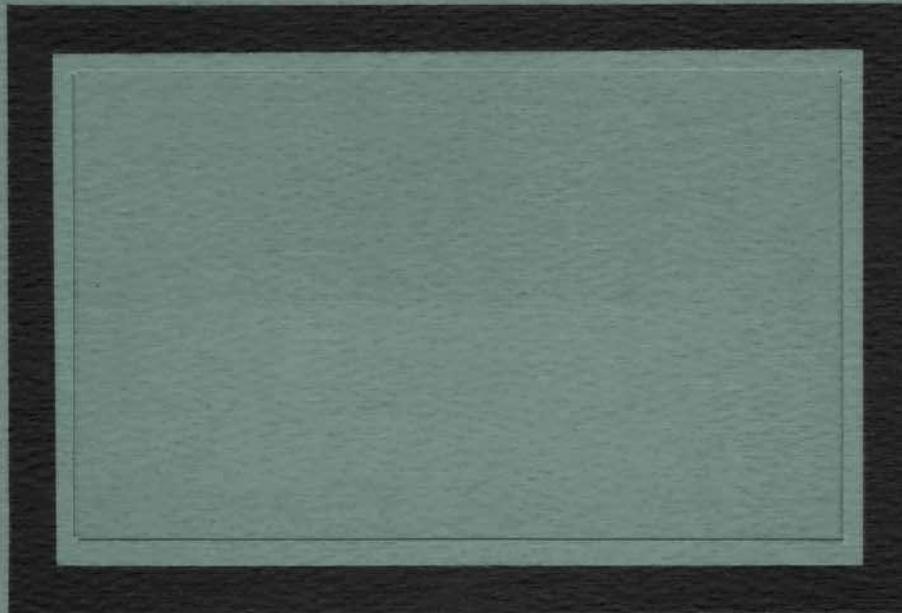


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How Free is "Free Checking"?

Paul F. Jessup

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HOW FREE IS "FREE CHECKING"?

Paul F. Jessup<sup>\*</sup>

Whether or not to offer "free checking" accounts is a question confronting many bankers. The number of banks choosing to offer such accounts has almost tripled in the last five years. Despite such growth, there has been little, if any, examination of the principal costs and benefits of free checking. Therefore this article develops a cost-benefit framework for evaluating various dimensions of so-called "free checking" and demonstrates why bankers and bank regulatory officials should explore practical alternatives to proliferation of free checking.

Reviewing "Free Checking" Accounts

Free checking is not new to some banking customers who, as members of special groups, have received free checking account privileges. By custom, many banks waive service charges for churches and charitable organizations. Lawyers also frequently receive free checking privileges.

What is new is the spread of free checking to broader categories of customers, with many banks now willing to waive service charges for all individual customers. Often the service is not completely free from a customer's viewpoint. Some banks require minimum or average balances in a checking account before it qualifies for zero service charges. Other banks require their customers to qualify for free checking by also qualifying for a credit line, maintaining minimum time or savings deposits, or using the bank's credit card. Various combinations of such eligibility requirements

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\* The author is Professor in Residence at the Federal Reserve Bank of Minneapolis, on sabbatical leave from the Graduate School of Business Administration, University of Minnesota. The views expressed in this article are those of the author and not necessarily those of the Federal Reserve System.

are possible. While many banks thus impose eligibility requirements, a recent survey reports that about one-eighth of all banks provide completely free checking accounts to all individual customers (6).<sup>1/</sup>

What motivates banks to offer some form of free checking? Two recent articles (9, 10) provide answers to this question. A principal stimulus is the spur of competition.

Small new banks frequently introduce some form of free checking to their service area. Such banks generally have smaller proportions of service-charge revenues than do larger, more established banks in the market. By offering free checking, a small bank seeks to attract cost-conscious depositors, thus increasing its potential earning assets. It should expect that the income from such assets, or from providing related services to the new customers, will exceed its costs of servicing such free checking accounts.

Other banks, sensitive to a reduced growth rate or potential loss of depositors, typically respond by also offering their version of free checking. At times a bank anticipates that a competing bank is about to begin offering free checking; and so it quickly offers its own version in order to preempt the anticipated competitive move.

In summary, free checking is a form of price cutting spurred by actual or potential competition.

Other motives for offering free checking are possible. With the recent rise in interest rates, banks have aggressively sought funds to increase their earning assets. Regulation Q prohibits payment of explicit interest on demand deposits and sets maximum interest rates on most categories of time and savings deposits. In such a financial environment, some depositors

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<sup>1/</sup> Such parenthetical numbers are keyed to References at end of article.

are likely to switch funds from nonearning demand deposits to earning financial assets. (Whether demand deposits for the total banking system would decline depends largely on Federal Reserve policy.) To forestall such deposit withdrawals, some banks may begin to offer free checking as a form of implicit interest payment to depositors. Also some banks offer free checking to attract new depositors who also are potential customers for other of the bank's services. A bank seeking to project an innovative image as part of a total marketing strategy also is likely to introduce free checking and then aggressively advertise its action.

Whatever the precise motive or combination of motives, however, once a bank introduces free checking it is likely to evoke a competitive response by other banks in its market. Its anticipated short-run competitive advantage thus can lead to unanticipated longer-run consequences for the nation's financial system.

#### Contributing to Increased Bank Profits?

A bank should examine the probable long-run consequences before deciding whether to introduce free checking or to respond quickly to such a move by a competing bank. Key elements of such a profit analysis can be summarized in a general equation for marginal profits:

$$\Delta \text{ Revenues} - \Delta \text{ Costs} = \Delta \text{ Profits}$$

(where  $\Delta$  is defined as change)

This general framework is applicable to increases and decreases in profits. From the decision maker's view, however, the principal question is: Will changes in revenue exceed changes in costs such that profits will increase?

What major changes can be expected in revenues? Immediately the bank will lose much of its revenue from traditional bank service charges,

especially per-item charges. The extent of such lost revenue will depend on the bank's account structure, previous schedule of charges, and the proportion of existing accounts that convert to free checking. To offset part of this lost revenue, the bank may decide to increase its schedule of penalty charges for depositors who fail to maintain adequate balances, write checks against insufficient funds, or request special services, such as stop payment orders.

Other revenue components will increase if the move to free checking results in increased deposits and depositors. (A more complete analysis would focus on whether the rate of deposit growth is likely to increase.) Increased deposits are a source of funds, much of which the bank can invest in earning assets in order to generate additional revenue. The increase from new depositors should be expected to more than offset the probable decrease by some existing depositors who trim the average size of their accounts now that free checking provides no earnings credit to offset per-item charges. Also new depositors are prime customers for other revenue-producing services of the bank, such as loans. These additional net revenues may be sought indirectly by cross-selling to the new customers or directly by linking eligibility for free checking to depositor use of other services of the bank. Thus the focus is on increasing total bank revenues by attracting new customers to the bank.

What major changes can be expected in costs? If the number of accounts increases as planned, then handling costs are likely to increase. Much of the account processing is mechanized. Unless there is excess capacity, however, the bank will have to add new equipment and possibly expand its facilities. If, instead, the processing is contracted to a large correspondent bank, its effective charges are likely to increase as the volume increases. Furthermore,

employee costs will likely increase, not only for tellers but also for staff to process the greater number of checks, especially the exception items. These costs increase even if the account activity of new depositors is similar to that of existing depositors. As will be shown, costs can further increase sharply if many customers begin viewing check writing as a "free good" and thus substantially increase the number of checks they write. Banks moving to free checking may seek to shift some costs to their depositors by requiring them to pay the printing cost of checks that were previously provided free.

Whether the changes in revenues and costs will result in increased profits depends largely on whether a bank succeeds in attracting many new customers without major increases in total handling costs. The success of this strategy further depends on how quickly competing banks are likely to respond with their versions of free checking. If the response is rapid, it is difficult to foresee much shifting of accounts among the banks. Each bank then experiences less net revenue and probably faces increased costs, especially if average account activity increases.<sup>2/</sup>

Bankers sometimes assert that average account size did not change markedly after their bank instituted free checking. The inference is that depositors, on average, do not reduce their accounts even when balance requirements become zero or minimal. This focus on average balances obscures several important features of the potential impact of free checking.

Customers have various motives for holding nonearning demand deposits. Monetary theory usually cites three principal motives: transaction, precautionary, and speculative. Thus, for example, the customer who chooses

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<sup>2/</sup> Using a model framework and simulation techniques, John H. Boyd (1) evaluates several pricing strategies for retail checking accounts. He notes, moreover, several deficiencies as possible areas for future research.

to keep \$2,000 in his demand deposit as a working balance to meet anticipated transactions and unforeseen needs and opportunities is unlikely to reduce this average balance substantially just because his bank offers him free checking with zero balances. He is likely to maintain such a balance even if he pays nominal service charges, unless, of course, he is sensitive to the fact that a competing bank conveniently offers him the opportunity to hold a similar desired balance at lower or zero cost. When most banks in a market area offer free checking, depositors will maintain account balances near personal desired levels; and there is little reason to expect much account shifting among banks.

The measure of average balances also obscures other relationships. An arithmetic average is likely to be heavily influenced by the minority of very large accounts maintained by depositors to meet their personal motives. In this event, substantial changes in the average dollar amount of small accounts is likely to weigh little in an arithmetic average of all accounts. Rather than rely on broad averages, bankers should examine changes in accounts categorized by deposit size.

Focus on average account size also neglects to examine changes in account activity likely to result from free checking. Increased activity can result in higher costs -- not only for individual banks but also for the broader financial system.

#### Creating a "Free Good"

From the viewpoint of the depositor, free checking provides him with a "free good." As long as he continues to meet the zero or minimum eligibility requirements and avoids possible penalty charges, he is free to write as many checks as he wishes. This view is encouraged by bank advertising that stresses unlimited checking privileges. There is no upper limit

or any disincentive to check writing. From a customer's perspective, each check he writes is a free good with its cost to him slightly exceeding zero only if he considers the actual printing cost per check.

Use of a free good is likely to proliferate, especially when banks encourage customers to write as many checks as they want. Since the cost to the customer is zero, any convenience benefits to him are net benefits. Yet other costs arise from a good that is free only to the user. Proliferation of checks, especially small ones, affects not only individual banks and check clearing systems, it affects other sectors of the economy.

Paradoxically, as banks increasingly offer free checking, banking officials express concern about possible swamping of check processing systems. An official of the Federal Reserve System notes that "the number [of checks] is growing at an average compounded annual rate of 7%, which would add up to 43 billion checks by 1980, a doubling of the volume during the decade of the '70s" (8, p. 35). Addressing a recent Regional Convention of the Bank Administration Institute, a banker sets as a goal, "What we are really saying is that we would like to take the check volume which is estimated to be 44 million [sic] checks annually in 1980, and restrain it to a level which we can manage. I believe the best we can expect by 1980 will be an annual check volume of somewhere between 26 billion to 27 billion checks, which would be an increase of 20% over the 1971 figure but would require the elimination of 18 billion checks annually by 1980. Much research, investment and innovation will be necessary to hold down to this figure" (11, p. 29). To hold down check writing as it becomes a free good is analogous to King Canute's commanding the tides not to advance up the beach.

Evaluating Costs and Benefits

To evaluate the broader consequences of free checking, it is necessary to expand the perspective beyond that of individual customers and their banks. Such broader perspective is outlined in Exhibit 1, a simplified model of check clearing networks.

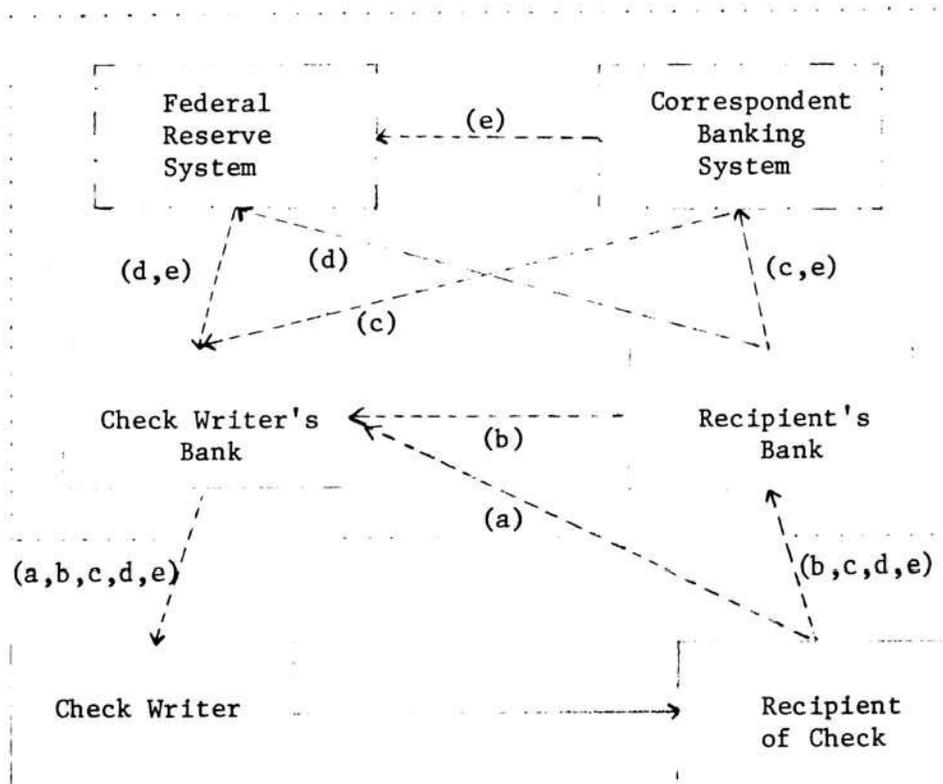
Avoiding extensive detail, the most direct path of check clearing is (a), wherein both the check writer and check recipient are customers of the same bank. The clearing process is internal, at some positive cost to the bank. The other paths involve a check's being handled by other institutions, singly or in combination. For example, in this simplified model, path (e) is the most circuitous, the check flowing from the recipient, to his bank, to one or more correspondent banks, to the Federal Reserve System, to the check writer's bank, and ultimately back to the writer as a cancelled check. Despite mechanization, costs of such circuitous check clearing are positive and comparatively high.

Recent studies attempt to measure various costs of check clearing, both on direct and fully allocated bases. In reviewing such studies and reporting on the Atlanta Payments Project, two coauthors conclude that "the present system also has a basic inequity built into the clearing mechanism; i.e., a bank which receives a check drawn on another bank bears a significant cost for clearing that item, yet receives little of the revenue. It is unclear how, if at all, the bank recovers this expenditure" (2, p. 19).

Depositors write checks for a multitude of purposes. Often they would be willing to pay a service fee to write checks involving, for example, large amounts to be sent long distances and for which proof of payment is desirable. That customers will willingly pay for such check writing services is evident from the demand to purchase money orders. In other cases

EXHIBIT 1

MODEL OF CHECK CLEARING NETWORKS



- — — Paths of check clearing
- ..... Check clearing system
- . - Subsystems with component elements

depositors write checks when the cost to them is zero, but they would hesitate to do so if required to pay for the service. Although unable to quantify the number of checks written because of the zero or nominal cost to the writer, it is noteworthy that 43 percent of checks written involve dollar amounts of less than \$25 and 72 percent involve dollar amounts of less than \$100 (5, Table 4). Moreover these proportions, reported in 1970, antedate the recent surge of free checking.

Exhibit 2 is a summary cost-benefit framework for evaluating free checking as it affects diverse participants in the payments system. Exhibit 2 does not claim to identify or measure all facets of a complete cost-benefit analysis, but it does seek to highlight principal elements in such an analysis. The framework is most applicable to payments by check that might as conveniently be paid in cash, such as small purchases from neighborhood businesses.

Because the cost to him approaches zero, the check writing customer probably receives net benefits. Whether the customer's bank achieves net benefits is doubtful, especially when it is just one of many competing banks offering free checking. Recipients of many small checks are likely to incur incremental net costs, some part of which they may try to shift back to all customers in delays at check-out counters and in somewhat higher prices. Components of check clearing systems incur higher costs from handling a proliferation of small checks. Correspondent banks may try to shift back some of these increased costs to banks for which they process checks. The Federal Reserve System processes checks for its member banks, but as its handling costs increase, ceteris paribus, this results in a reduced contribution to the U.S. Treasury. In summary, it is difficult to postulate any

circumstances by which, when examined across participating publics, the benefits of free checking can exceed its costs. Probable beneficiaries are companies that print checks and produce check processing equipment, but against this must be weighed the social costs of transporting and storing checks and microfilm, items that are not readily recyclable.

The general conclusion that free checking imposes a cost burden relates to the fact that it is a "free good" only from the user's perspective. There is no pricing system operating to equate the marginal cost of check writing to its marginal benefits. A zero marginal cost places no constraint on use that imposes costs on other participants in the payments system. They, in turn, may try, however imperfectly, to shift their additional costs to others, but not necessarily to writers of free checks. Why should such a system endure?

#### Exploring Alternatives

Viewed broadly, free checking is economically wasteful because it levies an inappropriate charge on the check writer and imposes additional costs on others. How can use of small checks be discouraged in cases where they provide small benefits to writers and impose costs on others?

Recipients of checks can discourage small checks by insisting on cash, imposing a service charge for small checks, or offering small discounts for cash payments. In the latter two cases, a customer is free to write a check but only by paying the cost of a service charge or a foregone discount. With the spread of automatic cash dispensing equipment, many depositors will find it convenient to pay small bills in cash, given a disincentive to pay by check.

Free checking is an outgrowth of imposing Regulation Q on a competitive banking system. Prohibition of explicit interest payments on demand

EXHIBIT 2

A COST-BENEFIT FRAMEWORK FOR EVALUATING "FREE CHECKING"

<u>Check Writing Customer</u>	<u>Check Writer's Bank</u>	<u>Recipient (esp. businesses)</u>	<u>Check Clearing System</u>
<u>Costs</u>	<u>Costs</u>	<u>Costs</u>	<u>Costs</u>
1) Cost of checks 2) Possible opportunity cost of minimum balance 3) Possible cost if penalties are incurred	1) Opportunity cost of foregone service charges 2) Increased handling costs	1) Delays at check-out counters 2) Probable per-item costs in depositing checks at banks 3) Funds not immediately available, in contrast to receiving cash 4) Costs of processing bad checks a) Can be reduced by higher costs of initial screening b) Follow-up on returned checks c) Write-offs	1) Handling a) Transportation among system components b) Proofing and encoding c) Recording d) Microfilming e) Processing exception items f) Reconciling discrepancies 2) Possible losses due to theft and fraud (such potential losses often can be reduced by incurring increased security costs)
<u>Benefits</u>	<u>Benefits</u>	<u>Benefits</u>	<u>Benefits</u>
1) Convenience, if checks are readily acceptable 2) Avoid carrying cash 3) Convenient record keeping	1) Possibly increased revenue from penalty charges or credit overlines 2) Possibly increased revenues from other bank services	1) Possibly less security costs in handling checks rather than cash	1) Possibly less costs of handling cash 2) Others??

deposits leads to competition to pay implicit interest, such as convenient facilities, premiums, and free checking. The cost burden of free checking is added reason to reexamine the merits of prohibiting payment of interest on demand deposits.<sup>3/</sup>

If permitted to pay some interest on demand deposits, in a competitive market some banks will price checking account services more consistently with their handling costs. A depositor choosing to write few checks will earn positive interest while another depositor with similar balances who chooses to write many small checks will find his interest earnings offset by per-item service charges. The latter thus must pay for his check writing activity.

If prohibition of interest payments on demand deposits must continue, another alternative is to instate some form of activity charges on checking accounts. Such action should impose realistic user charges to discourage checks of marginal utility to the writer. Banks cannot collude to set common service charges. There is, however, precedent for price regulation by legislation and regulatory interpretation. Regulation Q, for example, has been interpreted to limit "excessive" payment of implicit interest by such means as absorption of exchange charges and free premiums. More recently the Board of Governors of the Federal Reserve System has proposed to constrain NOW (Negotiable Order of Withdrawal) accounts in Massachusetts and New Hampshire. Inviting comments, the Board proposes for the present:<sup>4/</sup>

1. "To permit the payment of interest only on the minimum (or average) balance in such accounts, and

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<sup>3/</sup>Three recent surveys of Regulation Q and demand deposits are (3), (4), and (7).

<sup>4/</sup>Federal Reserve Press Release dated September 14, 1973.

2. To require that the bank impose a service charge on all NOWs written by the depositor in excess of 10 items per month. This would not preclude service charges on the first 10 items.

As an alternative means of constraint, the Board is considering requiring, if interest is to be paid:

1. That the number of NOWs a depositor writes not exceed 15 per month, and
2. That there be a minimum, or average daily balance of \$400 in a NOW account.

This alternative, the Board said, might be further conditioned...to require a service charge on items in excess of 15 per month."

Whatever the Board's final decision, such proposals demonstrate how regulation can be used, if judged necessary, to constrain withdrawal activity in deposit accounts.

Looking further ahead, the cost burden of free checking is likely to be ameliorated as the nation moves toward an electronics payments system, particularly if it incorporates point-of-sale terminals. Until such time, the cost burden of free checking exists -- and will probably increase. Now alerted to broader dimensions of free checking, others are invited to extend the cost-benefit framework of this article, test it empirically, and examine new alternatives to the unnecessary proliferation of a costly "free good."

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