Results of Senior Financial Officer Survey on Bank Investment Contracts[1]

To elicit information on the rapidly growing market for bank investment contracts (BICs), a Senior Financial Officer Survey of fifty-one banking organizations was conducted by the Federal Reserve in March-April 1990.[2] BICs and their insurance industry counterpart, guaranteed investment contracts (GICs), form the guaranteed contract market. Guaranteed contracts are generally long-term, fixed-horizon agreements between the issuer and (typically) a defined-contribution pension plan.[3] The standard BIC or GIC calls for a lump-sum deposit by the plan and may allow subsequent withdrawals or deposits by plan participants.[4] An important feature of most guaranteed contracts is that all funds, including any net deposits, are paid a predetermined return for the period that they are invested with the issuer. Most BICs are issued with a single, fixed interest rate that covers the initial deposit and all additional deposits allowed during the life of the contract. As a result, BICs expose depositories to contingent liability risk.

This Senior Financial Officer Survey attempted to address four areas: (A) the size and growth of BICs; (B) how BICs are priced and marketed; (C) the risks and contingencies of BICs; and (D) the reporting of BIC deposits on the Report of Transactions Accounts, Other Deposits and Vault Cash (FR 2900).

The survey panel was selected with the hope of capturing all institutions that are major participants in the BIC market.[5] Thus, although twenty-six of the fifty-one respondents reported that their institutions had BIC liabilities outstanding as of the time of the survey, and five additional respondents said that their institutions planned to begin offering BICs during 1990, one should not infer that approximately one-half of all banks issue BICs.

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[1] Prepared by the Division of Monetary Affairs (J. Feinman) and the Division of Research and Statistics (R. Rosen) of the Board of Governors of the Federal Reserve System.
[2] A copy of the survey questionnaire and responses is attached as Appendix A.
[3] According to one source, 80 to 90 percent of the buyers of GICs and BICs are defined-contribution pension plans such as 401(k) plans.
[4] A contract that does not allow withdrawals or deposits after the initial deposit is called a "bullet" contract and is virtually identical to a certificate of deposit. Although, as the survey shows, bullet contracts account for only a fraction of BICs, they do provide a useful means of comparing contract rates across maturities and institutions.
[5] Some respondents mistakenly provided information on Municipal Investment Agreement Contracts (MIACs) along with, or instead of, information on BICs. Appendix B provides a brief discussion of MIACs.

The survey responses suggest that bank involvement in the guaranteed contract market has grown rapidly, and that this growth is expected to continue. Banks offer contracts that range widely in size, maturity, yield and other features. For example, although few institutions completely prohibit additional deposits and withdrawals on all of their BICs, the extent to which these deposits and withdrawals are allowed varies widely across banks. At domestic banks, BICs from defined contribution pension plans are covered by FDIC pass-through deposit insurance to the ultimate beneficiary of the pension plan and are typically reported as large personal time deposits on the FR 2900.

A) Size and Growth of BICs

The size of the guaranteed contract market at the end of 1988 has been estimated at $150 billion, with roughly $30 billion in new contracts written in 1988 alone.[6] Evidence indicates that the market expanded about another 15% in 1989, with banking organizations continuing to increase their share of the market at the expense of insurance companies, in part as a result of aggressive bank marketing efforts.

At the surveyed institutions, BICs grew rapidly in 1989, jumping from about $2.3 billion at the end of 1988 to $7.5 billion by year-end 1989 (Table 1).[7] Roughly one-quarter of the increase in BICs in 1989 was due to new entrants into the market; the balance was accounted for by eleven institutions that had entered the market in 1988.[8] The robust expansion of BICs is expected to continue in 1990, with respondents anticipating further net growth of about $3 billion.

Although many banks entered the guaranteed contract market for the first time in 1989 with a small amount of BICs, these institutions plan to push forward aggressively in 1990 (Table 2). Nevertheless, it appears that in the near future a few large banks will continue to write the majority of the dollar volume of BICs.

In general, there is a wide disparity of contract sizes, both across and within banks (Table 3). There also appears to be a small positive relationship between a bank's average contract size

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[6] "Rethinking GICs," Institutional Investor, January 1989, pp 119-122.
[7] Henceforth, unless otherwise noted, all data are for the twenty-six banking organizations that reported having BICs at the time of the survey.
[8] The average dollar increase at these eleven institutions was much larger than the median, reflecting large increases at a number of small institutions.

and its total dollar value of BICs outstanding, possibly owing to the tendency of the big players in the BIC market to get the largest contracts. Although contract length varied from one month to thirty years, nearly all respondents reported their most common contract length as less than or equal to three years, with no discernible relationship between contract length and volume of BICs outstanding (Table 4).

B) Pricing and Marketing of BICs

Although BICs held by defined contribution pension plans are currently eligible for FDIC "pass-through" insurance up to $100,000 per plan participant at each bank,[9] six respondents (26 percent) indicated that their BIC deposits were <u>not</u> covered by pass-through insurance.[10] Five of these respondents represent foreign banking operations that do not accept retail deposits and are thus not required to participate in the FDIC insurance program. One respondent at a domestic institution opts not to handle the paperwork necessary to have their BICs qualify for pass-through insurance.[11]

Only three of the twenty respondents that believed their institution's BICs were covered by pass-through insurance said that they "stressed" the pass-through insurance when marketing BICs. Several depositories who did not stress the insurance coverage did, however, indicate that they "referred" to the coverage in their marketing efforts. Overall, the importance of deposit-insurance in the marketing of BICs is difficult to gauge from the survey results.

Most BICs offer a predetermined, fixed interest rate for the life of the contract. In fact, nineteen institutions (73 percent) had <u>no</u> floating-rate BICs. Of the seven institutions who had floating-rate BICs at the time of the survey, one had only a single contract outstanding and the other six banks issued between two and twenty-five percent of their BICs with a floating rate.

The floating-rate BIC contracts seemed to be priced off a variety of different money market instruments, including Treasury notes and the London Interbank Offering Rates. In general, there was no discernible pattern in the choice of instruments off which BICs were priced. Indeed, some banks gave quotes using different base rates.

[9] For more information on pass-through insurance, see FDIC. "Findings and Recommendations Concerning ‘Pass-Through’ Deposit Insurance," a report to the Congress, February 1990.
[10] Note that one respondent failed to provide information on FDIC pass-through insurance.
[11] This does not eliminate the need for this institution to pay FDIC insurance premiums on BICs.

The guaranteed contract market also is characterized by a notable range of rate quotes for bullet contracts of similar maturities. On one-year contracts, for example, the lowest rate quoted by the respondents was 8.34%, 85 basis points below the highest rate quoted, 9.19% (Table 5). To some extent, differences in rates may occur because relatively few bullet contracts are actually sold and additional contract features at an institution offering a low bullet rate may be less expensive than similar features at an institution offering a higher bullet rate. The median rate on one-year contracts was 8.67%, 32 basis points above the average of the one-year Treasury Bill rates for March 29 through April 2, 1990 and 30 basis points above the mean of the one-year GIC index average rates (published by T. Rowe Price) for March 29 through April 2, 1990.[12] As the contract maturity rises, however, GIC rates tend to exceed BIC yields, perhaps reflecting the relative prevalence of long term assets on the balance sheets of insurance companies. Banks, by contrast, may have an advantage at the shorter-end of the market because of their relative preponderance of short-term assets.

C) Contingent Liability Risk

The potential for contingent liability risk in guaranteed contracts arises when contracts permit deposits or withdrawals to be made after the initial deposit (or allow the size of the initial deposit to be determined after the contract is signed). The commitment to an interest rate (or interest rate schedule in the case of a floating-rate contract) is made prior to the time that the exact pattern of any additional deposits and withdrawals is established. For example, some contracts permit pension plan participants to move funds between the guaranteed contract and other pension plan investments. Consequently, if interest rates rise during the life of a contract, plan participants may shift out of the guaranteed-contract portion of their pension plan with its fixed interest rate, into other investments. Similarly, if interest rates fall, there may be an incentive for plan participants to shift into the guaranteed-rate portion of their plan.

Discretionary withdrawal and deposit features are an important feature of many guaranteed contracts, in part because of uncertainty regarding the level of investment in a pension plan. Pension plan participants may desire to withdraw funds from their plans for a

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[12] Most responses to the survey were taken on March 29, 1990, though some banks responded over the next two business days.

variety of reasons, including retirement or disability, firing, or financial hardship. In addition, the net level of deposits in the guaranteed-contract portion of a pension plan may be a function of relative performance of alternative investment vehicles, especially those within the pension fund. A guaranteed contract that permits some additional withdrawals and deposits after the initial deposit allows the pension plan organizer to shift the risk from the uncertain funding flows to the contract issuer, who might be better able to hedge the contingent liability risks.

Responses to the survey indicate that only one respondent had no BICs with either additional deposit or withdrawal features. The survey results also suggest that provisions for withdrawals are typically more common than clauses allowing additional deposits in BICs (Table 6). Furthermore, although every institution that permits additional deposits also allows withdrawals, not every depository that allows withdrawals also permits additional deposits.

Of the sixteen institutions that permitted additional deposits, eleven capped the size of the deposit accretions. Generally, additional deposits were limited to less than twenty-five percent of the contract size, with the median cap at 13.75 percent. By contrast, only seven of the twenty-five institutions that allowed additional withdrawals put a cap on the quantity permitted.[13] At five of the seven, the limit varied from contract to contract.

To reduce the likelihood of large losses from interest rate arbitrage, depositories typically permit additional deposits for only a short period of time after the initial deposit. The median window during which additional deposits are allowed is six months—about one-sixth of the median contract length—with no bank having a typical window length of over one year. Pension plans are able to permit relatively unfettered deposit flow in the presence of short window periods by signing a series of overlapping contracts, crediting net deposits to the contract whose window is still open.

Contingent liability risk arising from BICs can be mitigated if the contingent liabilities are hedged. Only seventeen of the twenty-five respondents at institutions with contingent liability risk claimed, however, to hedge the contingency. These institutions used a variety of hedging vehicles, including interest rate swaps, forward rate agreements, options, and futures markets. Of the eight respondents who said that their institutions did not hedge, some claimed

[13] Eleven of the thirteen institutions volunteering information on the conditions under which withdrawals were permitted stated that withdrawals at book value were allowed only for plan benefit payments or employer-directed actions such as firings (but not necessarily including mass layoffs or plant closings).

that they bid only on "safe" contracts (e.g., pension plans with relatively stable cash flow patterns), thus eliminating the need for hedging.

Another question addressed whether banks use BICs to fund specific assets. Only six respondents (23 percent) said that their institutions used BICs as a funding vehicle for specific assets, the most common of which were mortgage-backed securities and credit-card receivables.

D) Reporting of BIC Transactions

To ensure the accurate and consistent calculation of the monetary aggregates, it is essential that banking institutions properly report their BIC balances as deposit liabilities on the Report of Transactions Accounts, Other Deposits and Vault Cash (FR2900). More than 80 percent of respondents who currently have BIC liabilities report these liabilities predominantly as personal deposits. Very few of these institutions categorize any of their BICs as nonpersonal, and when they do, they typically report them as time deposits with original maturities in excess of 1-1/2 years, thus freeing them from reserve requirements. Finally, the vast majority of BICs are reported as deposits in excess of $100,000 and are thus not included in M2.

Appendix A
Responses to the Senior Financial Officer Survey
on Bank Investment Contracts, March 29 - April 2, 1990

A bank investment contract (BIC) is a (non-transferable) deposit liability issued by a bank and generally purchased by a pension fund sponsor of a defined contribution plan such as a 401(k). BICs are similar to guaranteed investment contracts offered by insurance companies.

1. **a) Does your institution currently have BIC liabilities outstanding?**

   YES: 26 respondents (51 percent)

   NO: 25 respondents (49 percent)

   b) Does your institution plan to issue BICs during the rest of 1990?

   YES: 31 respondents (61 percent)

   NO: 20 respondents (39 percent)

Proceed with the remainder of the survey only if the answer to at least one part of question 1 is yes.

2. **In your answers to the following questions, will you be providing information for your individual bank or for your entire bank holding company?**

   INDIVIDUAL BANK: 20 respondents (77 percent)

   HOLDING COMPANY: 6 respondents (23 percent)

A. These questions pertain to the size and growth of BICs.

3. **Approximately what were your institution's total BIC balances at the end of 1989? *Do not include other guaranteed contracts that are not booked as deposits, such as contracts backed by mortgage-backed securities.***

   See Tables 1 & 2

4. **Approximately what were your institution's total BIC balances at the end of 1988?**

   See Tables 1 & 2

5. **About what do you expect your total BIC balances to be at the end of 1990?**

   See Tables 1 & 2

6. **List the most common contract size, the average contract size, and the range of contract sizes for BICs at your institution.**

   See Table 3

B. These questions pertain to the pricing, marketing and maturity of BIC deposits.

Question 7 pertains to banks with foreign branches and to foreign banks.

7. **Are your institution's BICs covered by pass-through FDIC deposit insurance?**

   YES: 17 respondents (65 percent)

   NO: 6 respondents (23 percent)[14]

   N/A or no answer: 3 respondents (12 percent)

Question 8 pertains to all institutions with at least some BIC balances covered by FDIC insurance.

8. **Does your institution stress the deposit insurance pass-through when marketing BICs?[15]**

   STRESS: 3 respondents (15 percent)

   DO NOT STRESS: 16 respondents (80 percent)

   N/A or no answer: 1 respondent (5 percent)

9. **a) About what percentage of your institution's BICs feature a floating rate?**

   0 PERCENT: 19 respondents (73 percent)

   1-25 PERCENT: 6 respondents (23 percent)

   26-99 PERCENT: 0 respondents

   100 PERCENT: 1 respondent (4 percent)

[14] One respondent answering no represented a domestic bank holding company.

[15] Does not include six institutions answering "no" to question 7.

b) If you offer a floating rate, what rate(s) do you use to determine the interest rate paid to depositors?[16]

LIBOR: 2 respondents (29 percent)

TREASURIES: 4 respondents (57 percent)

BOTH: 1 respondent (14 percent)

10. a) What rate is your institution currently offering on new BIC contracts? List the date along with the rate quotes and give the rate for 1, 3, and 5 year bullet contracts, if possible.[17] ***The rates can be given as spreads above or below Treasury rates, LIBOR, or other rates.***

See Table 5

b) How does this rate compare with current rates offered by your institution on CDs of comparable size and maturity?

HIGHER: 2 respondents (8 percent)

SAME: 10 respondents (38 percent)

LOWER: 8 respondents (31 percent)

MIXED: 1 respondent (4 percent)

N/A or no answer: 5 respondents (19 percent)

11. List the most common maturity, the average maturity, and the range of maturities for BICs at your institution.

See Table 4

C. These questions pertain to the risk and contingency of BIC contracts.

For questions 12-15, if appropriate, give separate answers for fixed-rate contracts and floating rate contracts.

[16] Does not include institutions with no floating rate contracts.
[17] Bullet contracts are BICs that have no provisions for additional deposits or withdrawals after the initial deposit.

12. About what proportion of your institution's BIC contracts allow:

a) additional deposits by plan participants?

See Table 6

b) withdrawals by plan participants?

See Table 6

13. a) If you allow additional deposits, is the amount capped at a certain limit?[18]

YES: 11 respondents (69 percent)

NO: 4 respondents (25 percent)

N/A or no answer: 1 respondent (6 percent)

b) If so, what is the typical limit as a percentage of the total contract size?

1-25 PERCENT: 6 respondents (55 percent)

26-50 PERCENT: 1 respondent (9 percent)

51-75 PERCENT: 0 respondents

> 75 PERCENT: 1 respondent (9 percent)

OTHER: 2 respondents (18 percent)

N/A or no answer: 1 respondent (9 percent)

c) What is the typical length of the window?[19]

1-3 MONTHS: 3 respondents (25 percent)

4-6 MONTHS: 3 respondents (25 percent)

7-9 MONTHS: 1 respondent (8 percent)

10 MONTHS-I YEAR: 4 respondent (33 percent)

> 1 YEAR: 1 respondent (8 percent)

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[18] Includes only respondents that allow additional deposits on at least some BICs.
[19] Includes one institution currently without any contracts that allow additional deposits.

14. **a) If you allow withdrawals, is the amount capped at a certain limit?**[20]

YES: 7 respondents (28 percent)

NO: 16 respondents (64 percent)

SOMETIMES: 2 respondents (8 percent)

b) If so, what is the typical limit as a percentage of the total contract size?

0-50 percent: 5 respondent (55 percent)

50-99 percent: 0 respondents

OTHER: 4 respondents (44 percent)

15. **If you allow withdrawals or additional deposits, how do you hedge the contingent liability?**[21]

DO NOT HEDGE: 8 respondents (32 percent)

HEDGE: 17 respondents (68 percent)[22]

16. **a) Do you use BICs as a funding vehicle for certain specific assets?**

YES: 6 respondents (23 percent)

NO: 20 respondents (77 percent)

b) If so, which assets are you most likely to fund with BICs?

Responses include credit card receivables, mortgage-backed securities, other asset-backed securities, and commercial loans.

D. These questions are concerned with how your institution reports its BIC deposits on its <u>Report of Transactions Accounts, Other Deposits and Vault Cash</u> (FR 2900).

17. **Does your institution report its BICs predominantly as personal or nonpersonal deposits?**

PERSONAL: 21 respondents (81 percent)

NONPERSONAL: 3 respondents (12 percent)

BOTH: 2 respondents (8 percent)

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[20] Includes only respondents that allow withdrawals.
[21] Includes only institutions allowing additional deposits or withdrawals.
[22] All respondents included multiple answers or answered "other."

The responses to questions 18 and 19 are presented together:

18. **What is the approximate amount of BIC balances currently reported in each of the following categories for personal deposits?**

19. **What is the approximate amount of BIC balances currently reported in each of the following categories for nonpersonal deposits?**

PERSONAL DEPOSITS ONLY:

All Time Deposits: 20 respondents (77 percent)

76-100% Time Deposits, 1-25% MMDAs: 1 respondent (4 percent)

NONPERSONAL DEPOSITS ONLY:

All Time Deposits with an original maturity of more than 1-1/2 years: 2 respondents (8 percent)

BOTH PERSONAL AND NONPERSONAL DEPOSITS:

76-100% Time Deposits, 1-25% MMDAs, 1-25% Time Deposits with an original maturity of more than 1-1/2 years: 1 respondent (4 percent)

76-100% Time Deposits, 1- 25% Time Deposits with an original maturity of more than 1-1/2 years, 1-25% Time Deposits with an original maturity of less than 1-1/2 years: 1 respondent (4 percent)

76-100% Time Deposits, 1-25% Time Deposits with an original maturity of more than 1-1/2 years: 1 respondent (4 percent)

20. **Of those BIC balances that are reported as time deposits, (either personal or nonpersonal), what is the approximate amount that are:**

Greater than $100,000: 24 respondents (92 percent)

Most greater than $100,000, some less than $100.000: 1 respondent (4 percent)

N/A or no answer: 1 respondent (4 percent)

Appendix B
Municipal Investment Agreement Contracts

Some survey respondents mistakenly provided information on Municipal Investment Agreement Contracts (MIACs) along with, or instead of, information on BICs. A MIAC is a contractual arrangement between municipal bond issuers and financial intermediaries designed to house the proceeds of a municipal bond issue pending withdrawal of said proceeds for purposes specified by the bond resolution (e.g., funding student loans and building schools and bridges). Essentially, MIACs bridge the gap between the settlement of a municipal bond issue and the expected payment schedule for the purposes of the bond. Deposits received under these agreements by a financial institution typically exceed eighteen months in original maturity and carry withdrawal schedules based on estimates of student loan demand, construction expenditures and the like. On the surface, therefore, these agreements look very much like large nonreservable CDs with rolling maturities and none of the risk or contingency of BICs.

As a practical matter, however, early withdrawal penalties cannot be structured into many of these municipal agreements, in part because of rating agency concerns. Consequently, depositories are exposed to the risk of early withdrawal, much as in the case of BICs, though they are not exposed to the possibility of additional deposits. Any MIAC that does not carry the early withdrawal penalty language of Section 204.2(f)(3) of Regulation D, moreover, is reservable, even if it has an original maturities in excess of eighteen months.

Although MIACs have some characteristics in common with BICs and, in fact, were confused with BICs by a number of respondents, MIACs were excluded from this survey, which was designed specifically to examine questions related to BICs.

Table 1
BIC Balances At Respondents
($ millions)

	Total Balances	Mean	Median	Number of Responses
1988[23]	2,328	212	60	11
1989[24]	6,304	573	260	11

Memo:

	Total Balances	Mean	Median	Number of Responses
1989[25]	7,547	302	65	25
1990[26]	10,384	472	273	22

Table 2
Distribution of BIC Balances Across Respondents
(Number of respondents)

	0	$1 million - $49 million	$50 million-$249 million	$250 million and greater	Number of Responses
1988	15	5	2	4	26
1989	1	11	6	8	26
1990[27]	0	3	8	10	22

23 Respondents who reported having BICs outstanding at the end of 1988.
24 Respondents who reported having BICs outstanding at the end of 1988.
25 Respondents who-reported having BICs outstanding at the end of 1989.
26 Expected. Four respondents with BICs at the time of the survey did not respond to this question.
27 Expected. Four respondents with BICs at the time of the survey did not respond to this question.

Table 3
Size of BIC Contracts at Respondents
March 29 - April 2, 1990
($ millions)

	Mean	Median	Number of Responses
Most common size	13	11	20
Mean size	13	12	25
Minimum size	4	2	26
Maximum size	59	30	26

Table 4
Length of BIC Contracts at Respondents March 29 - April 2, 1990
(years)

	Mean	Median	Number of Responses
Most common length	3.4	3.0	21
Mean length	3.0	2.9	23
Minimum length	1.2	1.0	25
Maximum length	7.3	5.0	25

Table 5
Selected Interest Rates For Bullet Contracts
From Senior Financial Officer Survey,
March 29 - April 2, 1990
(Percent)

BICs

	Mean	Low	Med.	High	Number of Respondents	Memo: Treasury Rates[28]
1 -year	8.74	8.34	8.67	9.19	16	8.35
3-year	8.94	8.74	8.94	9.17	17	8.67
5-year	8.89	8.12	8.92	9.26	16	8.63

Memo: GICs[29]

	Index	Low	High
1 -year	8.37	8.01	8.68
3-year	9.09	8.72	9.29
5-year	9.24	8.89	9.47

Table 6
Proportion of Respondents Permitting Additional Deposits or Withdrawals

	Number Permitting	Mean*	Median*
Additional deposits	16	36%	32%
Withdrawals	23	77%	85%

* Proportion of contracts at respondents allowing additional deposits or withdrawals

[28] Average rates for March 29 - April 2, 1990.
[29] Average rates for March 29 - April 2, 1990 as given by T. Rowe Price.