Annuity Agreements
of
Charitable Organizations

•

1941 AMENDMENTS
NEW YORK STATE INSURANCE LAW

RATES OF YIELD ON INVESTED FUNDS

MORTALITY AMONG GIFT-ANNUITANT LIVES

NEW STANDARD OF ANNUITY RATES

•

SEVENTH CONFERENCE

WISE PUBLIC GIVING SERIES NO. 45

1941

1941 AMENDMENTS
NEW YORK INSURANCE LAW

RATES OF YIELD ON INVESTED FUNDS

MORTALITY AMONG GIFT-ANNUITANT LIVES, AND NEW STANDARD OF ANNUITY RATES

PAPERS PRESENTED AT
A SEVENTH CONFERENCE ON ANNUITIES, HELD IN NEW YORK CITY, APRIL 29, 1941, UNDER THE DIRECTION OF THE SUBCOMMITTEE ON ANNUITIES OF THE COMMITTEE ON FINANCIAL AND FIDUCIARY MATTERS, TO STUDY AND PROMOTE WISE PUBLIC GIVING

FEDERAL COUNCIL OF THE CHURCHES OF CHRIST IN AMERICA

297 FOURTH AVENUE, NEW YORK, N.Y.

WISE PUBLIC GIVING SERIES No. 45

1941

CONTENTS

THE COMMITTEE ON ANNUITIES

Chairman, GILBERT DARLINGTON, *Treasurer, American Bible Society*

REV. WM. F. FRAZIER, D.D., *Executive Vice President, Board of Home Missions of the Congregational and Christian Churches*

MR. GEORGE A. HUGGINS, *Actuary, Philadelphia Member of Committee on Financial and Fiduciary Matters*

REV. J. EARL JACKMAN, D.D., *Secretary, Unit of Special Gifts, Board of National Missions of the Presbyterian Church, U.S.A.*

DR. GUY E. SNAVELY, *Secretary, Association of American Colleges*

REV. GEO. F. SUTHERLAND, D.D., *Associate Treasurer, Board of Missions and Church Extension of the Methodist Church*

REV. GEO. L. WHITE, D.D., *Field Secretary, Ministers and Missionaries' Benefit Board of Northern Baptist Convention*

REPORTS OF THE CONFERENCES ON ANNUITIES

held under the direction of the

Subcommittee on Annuities of the Committee on Financial and Fiduciary Matters of the Federal Council of the Churches of Christ in America

FIRST CONFERENCE (*Wise Public Giving Series No. 18*)....................April 29, 1927
- Actuarial Basis of Rates
- Administrative Policy
- Legislation and Taxation
- Finding Prospective Donors
- Securing the Gifts

SECOND CONFERENCE (*Wise Public Giving Series No. 31*)........November 9, 1928
- Legislation and Taxation
- Printing and Advertising
- Annuity Rates and Reserves
- Accounting Methods
- Investments

THIRD CONFERENCE (*Wise Public Giving Series No. 34*)..........November 17, 1930
- Annuity Agreements: Cautions and Restrictions
- Uniformity of Rates, Agreements, and Terminology
- Reinsurance of Annuities
- Annuity Agreement Business: Extent and Characteristics
- Taxation and Legislation: Recent Developments
- Administration and Investment of Annuity Funds

FOURTH CONFERENCE (*Wise Public Giving Series No. 38*)............March 17, 1931
- The Trend toward Uniformity
- Uniform Rates
- Legal Reserves
- The Up-to-date Legal Situation

FIFTH CONFERENCE (*Wise Public Giving Series No. 43*)............November 20, 1934
- Investment of Funds for the Safeguarding of Annuities
- Uniform Annuity Rates
- The Mortality among Annuitant Lives
- Federal Taxation of Annuities: Law of 1934

SIXTH CONFERENCE (*Wise Public Giving Series No. 44*) ....October 4-5, 1939
- How to Obtain Annuity Gifts
- The Regulation and Supervision of the Issuance of Annuity Agreements by a Charitable Society
- Rates for Annuity Agreements
- Outlook for Interest Rates
- Securing Annuity Gifts
- What Colleges and Universities Are Doing
- Investment Planning under Revised Insurance Law of the State of New York
- Taxation and Legislation Affecting Annuities

SEVENTH CONFERENCE (*Wise Public Giving Series No. 45*)............April 29, 1941
- Developments in the Regulation and Supervision of the Issuance of Annuity Agreements by Charitable Societies, and the Application of the 1941 Amendments to the New York Insurance Code
- Rates of Yield on Invested Funds under Existing Conditions, and the Probabilities as to the Future
- Rate of Mortality among the Gift-annuitant Lives
- Rates for Gift-annuity Agreements

Price of each Report, Fifty Cents. Send orders and make checks payable to

FEDERAL COUNCIL OF CHURCHES

297 Fourth Avenue :: New York, N.Y.

FOREWORD

THE Seventh Conference on Annuities was held at 156 Fifth Avenue, New York City, on Tuesday, April 29, 1941. The Conference was attended by 78 delegates representing 18 denominations and 18 religious, charitable, educational, and other institutions. Delegates attended from the following states: Illinois, Indiana, Maryland, Massachusetts, New York, Ohio, Pennsylvania, Tennessee, and the District of Columbia.

The program of the Conference consisted of the papers printed in this booklet in the order in which they were presented at the morning session. Mr. Charles C. Dubuar, Principal Actuary of the Insurance Department of New York State, who was present before the Conference began, was unable to stay because of a hearing before the Insurance Department, and his paper was read by the Secretary of the Committee on Annuities, Dr. George F. Sutherland.

Dr. Samuel McCrea Cavert, General Secretary of the Federal Council of the Churches of Christ in America, spoke a word of appreciation of the work of the Committee on Annuities, and intimated that the Federal Council hoped to reorganize somewhat its Committee on Financial and Fiduciary Matters, but thought it would not adversely affect in any way the Committee on Annuities.

At the afternoon session, Mr. George A. Huggins called on the Conference members present to express their viewpoints with regard to the proposed new annuity rates based upon the Combined Annuity Mortality Table with interest at 3½ percent, 70 percent residuum, female lives, age setback of two years, and with the rates modified at the younger and older ages.

After general discussion

It was voted, That this Conference express approval of the new uniform maximum rates proposed by the Committee on Annuities, and record its conviction that such uniform rates should be adopted by all religious, charitable, and educational organizations and institutions using the annuity plan for securing gifts. (There were no votes in the negative, but some eight or ten people refrained from voting).

It was voted, That the proceedings of this Conference, with the papers presented, be printed as a report of the Seventh Conference on Annuities; and that one copy be given to each person registered for this Conference, and the balance sold, as per the custom in connection with previous Conferences.

It was voted, That the Secretary be requested to write to Mr. Dubuar and Dr. Nadler, expressing appreciation for their courtesy in coming to the Conference, and for their contributions to the discussion.

It was voted, That the Secretary write to the Presbyterian Board, expressing appreciation for providing such a satisfactory and pleasant room for the Conference.

It was voted, That the Secretary send a word of appreciation to Mr. Huggins for his contribution to the Conference, and for his services over many years past in the cause of annuity gifts to benevolent and missionary organizations.

GILBERT DARLINGTON
Chairman

WHY THE CONFERENCE WAS CALLED

GILBERT DARLINGTON
Chairman, Committee on Annuities

The Conference on Financial and Fiduciary Matters held on March 22-24, 1927, authorized the appointment of a continuing Subcommittee on Annuities with the following instructions —

> To study and recommend: (1) the proper range of rates; (2) the form of contracts; (3) the amount and type of reserve funds, and the nomenclature to be used; (4) to ascertain and devise as to the legislation in the United States and the various states regarding annuities, their taxability, etc. This committee is requested to make an immediate study of the matter of rates, and to call a conference of interested parties on this matter at the earliest possible date. This committee should be guided in its study by an early determination as to what is the primary motive in the writing of annuity contracts.

This Subcommittee on Annuities has been is existence ever since, has held meetings each year subject to the call of its chairman, and under its supervision six Conferences on Annuities have been held as follows:

Date	Place	Publication
1st—Apr. 29, 1927	Atlantic City	Wise Public Giving Series No. 18
2d—Nov. 9, 1928	New York City	Wise Public Giving Series No. 31
3d—Nov. 17, 1930	Atlantic City	Wise Public Giving Series No. 34
4th—Mar. 17, 1931	Atlantic City	Wise Public Giving Series No. 38
5th—Nov. 20, 1934	New York City	Wise Public Giving Series No. 43
6th—Oct. 4, 5, 1939	New York City	Wise Public Giving Series No. 44

The Committee announces with regret the resignation of one of its original members and its former chairman, Dr. Ernest F. Hall. Dr. Hall has retired from the Board of Foreign Missions of the Presbyterian Church in the U.S.A., and is planning to live in Delaware hereafter. We shall miss his wise counsel and wide experience at this Seventh Conference on Annuities.

If there is no objection, the Secretary is directed to send to Dr. Hall the best wishes of this Conference and its regret that he is not with us today.

The Committee on Annuities, because of requests received from members who are present today, decided to call this Seventh Conference on Annuities primarily to hear a report on recent amendments to the Insurance Law of New York State, and to consider the question of adopting a lower standard of uniform annuity rates than those adopted at the Fifth Conference, November 20, 1934, in New York.

This Fifth Conference approved uniform maximum annuity rates for a single life based on the Combined Annuity Mortality Table with interest at 4 percent — residuum 70 percent — female life — rates modified at younger ages below 57, and at older ages above 79; and uniform maximum annuity rates for two lives based on two females with the same standards as are given above. The resolution voted was:

> That this conference express approval of the uniform maximum rates proposed by the Committee on Annuities and amended by vote of the conference, and record its conviction that such uniform rates should be adopted by all religious, charitable, and educational organizations and institutions using the annuity plan for securing gifts.

These rates have received wide acceptance since 1934, and are still slightly lower than the maximum rates payable in New York State at the present time under the new Insurance Law of 1939 that went into effect January 1, 1940; but since November 20, 1934, interest rates on all classes of securities have declined very substantially. At that time the yield on investments was higher than at present, as shown by the following comparison —

	Nov. 15, 1934	Jan. 2, 1935	Mar. 15, 1934	Apr. 25, 1941
U. S. Treasury 4% 1954-44	3.14	2.96		
U. S. Treasury 2⅞% 1960-55			2⅞	1.970
Highest-grade Utility Bonds	3.54	3.49		2.703
Highest-grade Railroad Bonds	3.55	3.44		2.884

During the six years and more that have intervened since this Fifth Conference, all of the insurance companies have reduced their annuity rates substantially from time to time. The reduction made by the Metropolitan Life Insurance Company from January 1, 1935, to November 1, 1940, was 23 percent as follows:

Female Age	1934	1940	Reduction
60	$77.94	$59.80	23%
65	89.24	68.68	23%
70	104.42	80.47	23%
75	125.04	96.39	23%
80	153.42	118.32	23%

The Sixth Conference on Annuities, held October 4-5, 1939, called attention to the lower interest being earned at that time, and to the adverse mortality being experienced by certain religious and charitable groups. It also supplied information as to the maximum annuities that could be paid under Section 45 of the New York Insurance Law effective January 1, 1940. These maximum rates were very close to the uniform maximum rates adopted by the Fifth Conference on Annuities, November 20, 1934. In fact, for ages 50-55 on two female lives of equal ages they are practically identical.

At the Sixth Conference in October 1939 was presented a new series of lower rates based upon the Combined Annuity Mortality Table with interest at 3½ percent — the single-life rates being based upon female lives, 70 percent residuum, 3½, setback of two years, and with the rates modified for younger and older ages; the two-life rates based on two females, 70 percent residuum, 3½, setback of two years, with rates also modified for younger and older ages. Because the second World War had started, there were some present who felt that interest rates might rise substantially as the war progressed. A decision on the proposed rates was therefore deferred to a later conference.

Comparing interest rates as of October 4, 1939, when the Sixth Conference was held, with what they are today, we find that the following reductions in interest rates have taken place; although there were some at the Sixth Conference who thought that interest rates would rise because of the war.

	Yield Oct. 4 1939	April. 25 1941	Reduction from Oct. 4/39	Reduction from Nov. 15/34
U. S. Treasury 2⅞ 1960-55	2.738	1.970	.768	1.17
Highest-grade Utility Bonds	3.065	2.703	.362	.837
Highest-grade Railroad Bonds	3.333	2.884	.449	.666

If we take the average bond yields on Dominion of Canada bonds in Canada, we find that there has been a steady reduction in yield from 1932. For Dominion of Canada 3¼ percent due June 1, 1956-66, the yield in August 1939 was 3.17 percent. In September, when the war began, it rose to 3.58 percent. From there it worked its way down to 3.30 percent in May 1940, rose to 3.34 percent in July 1940, and since then the monthly average rates have been:

	Percent		Percent		Percent
July 1940	3.34	Oct. 1940	3.28	Jan. 1941	3.21
Aug.	3.32	Nov.	3.27	Feb.	3.20
Sept.	3.29	Dec.	3.22	Mar.	3.19

Experience has shown that modern governments have much stronger control over interest rates than was possible during and after the first World War. In England, interest rates are lower on April 25, 1941, at 3.241 percent for British 2½ consols than they were in October

1939, when the yield was about 4.05 percent. In Canada also, interest rates are lower in March 1941 by .39 of one percent than they were in September 1939 when the war began. It appears, therefore, that this whole subject should be studied again by this Conference, as, even if interest rates were to rise substantially, they would not be back again to the levels of November 20, 1934, when the present annuity rates approved by the Fifth Conference on Annuities were adopted.

All who are present at this Conference today desire, I am sure, that the final result of the many generous annuity gifts that have been made shall be completely favorable. By "favorable" I mean that the desire of the donors to make a substantial gift to a cause or to a work that they believe in shall be accomplished successfully without question and without any possibility of failure or undue risk. Surely, the primary purpose in the heart of the donor is to make a gift to some cause or work that he believes in very deeply. It is our duty to see that this generous purpose shall not be defeated or brought to naught by injudicious investment or by paying higher rates than are necessary or desirable.

We talk of favorable and unfavorable rates, and of favorable and unfavorable mortality experience. Oftentimes it seems that we are considering only the point of view of the societies or of the organizations that issue the annuities, and not the interest or the point of view of the donors of annuity gifts. Knowing thousands of annuitants as I do, I have no hesitation in saying that their primary purpose is to make a gift of a substantial part of their principal to a worthy cause. Therefore, if interest rates and/or mortality experience are favorable to the preservation and fruitfulness of that gift, they themselves will rejoice; whereas, if interest rates, expenses, future taxation, and/or mortality experience are unfavorable to the establishment, preservation, and fruitfulness of that gift, then the donors themselves will regret this very deeply.

At this Conference are undoubtedly many who are interested in the cultivation and the promotion of annuity gifts. Some of these may suggest that high rates will attract more gifts; and that, even if the percentage of the residuum on the whole program is less than it would be with lower rates, that more money will be obtained for the cause they are interested in by doing a greater volume of business on a smaller margin of profit or residuum. At the last conference one of the speakers took as his subject "Securing Annuity Gifts." For those who obtain the gifts, this means one thing; but for those who invest the money, pay the annuities, and figure the ultimate residuum after expenses, advertising costs, and adverse mortality experience, loss on securities, if any, etc., this means an entirely different thing. If the thousands of donors who make gifts on the annuity basis were present and we could discuss this with them, I am confident that the great majority would say that the securing of a substantial ultimate gift to the work they believe in means much more to them than a slightly higher rate of return on all new annuities. While it is true we might, with higher rates, attract more money from others, and possibly a little more from our present donors, still, if the percentage of the original gift that is devoted to the work is less, and if the danger and risk that we have to undertake is greater, then I do not believe that our donors and annuitants would approve of high annuity rates. Would they not be apt to say to us: "Make doubly sure of the annuity that you must pay to us by also making sure of a sizable gift to your work, and do not try to sail too close to the wind. If we, the donors," they might continue, "were interested only in the amount of annuity that we receive, we would go to the commercial life insurance companies for all or for a part of our annuities. Do not let the gift that we wish to make to God's kingdom because of our keen sense of Christian stewardship slip through your fingers by paying too high a rate. To secure more gifts from us, make us feel sure that our gifts to you on the annuity basis are secure."

Gilbert Darlington

DEVELOPMENTS IN THE REGULATION AND SUPERVISION OF THE ISSUANCE OF ANNUITY AGREEMENTS BY CHARITABLE SOCIETIES, AND THE APPLICATION OF THE 1941 AMENDMENTS TO THE NEW YORK INSURANCE CODE

CHARLES C. DUBUAR
Principal Actuary, Insurance Department of the State of New York

---

To date the Insurance Department has issued special permits under §45 of the Insurance Law to twenty-four annuity societies. In each instance the licensed corporation holds assets of at least $100,000, and its reserves on outstanding annuity agreements amount to at least $80,000. No license has been issued to societies unable to meet these minimum requirements as to size of assets and reserves. It has been somewhat of a problem to know whether we should continue to refuse licenses to the smaller societies. The Department finally decided at the last session of the legislature to ask for an amendment to §45 exempting such smaller annuity societies entirely from the department supervision, and from the necessity of securing a special permit, except that such corporations must maintain at all times at least the statutory reserves, and, in addition, a surplus of 25 percent. This amendment was passed and signed by Governor Lehman.

The argument has been advanced that the smaller annuity societies probably are in greater need of supervision than the larger societies—and this is probably true. Nevertheless, the issuance of a license presupposes an ability on the part of the society to carry out its annuity agreements. A small corporation which has available only its reserves and surplus may or may not be able to operate successfully, depending upon its actual experience. Insurance averages can only work out satisfactorily where there is a sufficient volume of lives. The requirement of a minimum amount of surplus and reserves before a formal license is granted, is logical and consistent with the attitude taken generally with all other types of insurers.

Aside from the matter previous mentioned, the present insurance law and amendments thereto relating to annuity societies appear to be working out satisfactorily. Annual reports for the year 1940 have been filed with the Department by twenty-two of the twenty-four licensed organizations. I believe that the report forms can be considered as generally stabilized for the 1941 forms. However, in reviewing the current reports, it does seem desirable to comment on several points:

(1) In the special exhibit showing the number and annual amount of annuities in force and reserves thereon, it was intended that the amount of the annual income under annuity con-

tracts should be reported. With a few exceptions, all corporations interpreted the exhibit correctly. However, four corporations apparently considered that the exhibit referred to the amount of the original consideration for the gift annuities—which was an error. The amount of the annual income is of some importance, as it bears a close relationship to the reserve, and the Department, therefore, asks that the exhibit be prepared properly.

(2) Section 45 permits an annuity corporation domiciled in New York to hold ineligible investments, such as common stocks, until January 1, 1950, before being required to dispose of them. However, the law does not permit a domestic corporation to make *new* purchases of ineligible investments; and if this is being done, it should be discontinued by any domestic corporation. In the case of corporations located in other states, investments may be made in accordance with the laws of such other states regulating life insurance companies.

(3) It was also noted that the amount of common stock holdings in the case of a few corporations represented as much as two or three times the surplus or unassigned funds. In other words, a *substantial portion* of the reserves held for the protection of annuitants is being supported only by speculative securities. The Department desires to inject a word of caution against following such a practice. From the viewpoint of annuitants, the only fair and conscientious policy for a contracting annuity corporation is to place its funds so that there will be a minimum of risk to its annuitants.

(4) The same situation holds where the amount invested in real estate is excessive. In the case of two societies, the value of real estate represented two or three times the surplus or unassigned funds. It is not clear whether the large amount of real estate is accounted for by reason of the foreclosure of mortgages or by the practice of the society of accepting real estate as an original consideration for gift annuities. If the latter, then certainly this is a questionable policy not followed by the great majority of societies. It is urged that, where a real estate problem exists, the society follow the practice of liquidating such properties as soon as reasonably possible, rather than speculating on a possible enhancement of values.

Aside from the matters previously discussed, the Department is glad to state that the reports of the licensed annuity societies appear to indicate that the societies are being capably and conservatively managed in the interests of annuitants.

LIST OF ANNUITY SOCIETIES WHICH HAVE RECEIVED SPECIAL PERMITS UNDER SECTION 45, TOGETHER WITH FIGURES FROM THE 1940 REPORTS OF SEGREGATED ANNUITY FUNDS OF SUCH SOCIETIES

April 28, 1941

	No. of Annuities End of Yr.	Tot. Assets in Segregated Ann. Fund	Amount of Reserve	Other Liabilities	Unassigned Funds or Surplus	Special Permit Issued on
	(1)	(2)	(3)	(4)	(5)	(6)
American Baptist Foreign Mission Society	947	$ 1,231,196	$ 1,012,738	$ 68	$ 218,390	3/25/40
American Baptist	705	1,272,526	1,144,340	4,500	123,686	3/25/40
American Bible Society	6,629	3,889,511	3,535,919	..	353,592	5/ 9/40
The American Missionary Association	196	151,951	138,137	..	13,814	5/20/40
American Tract Society	304	261,765	201,673	..	60,091	1/31/41
Bd. of Christian Education of the Presbyterian Ch.	271	450,870	398,372	..	52,498	5/ 9/40
The Bd. of Educ. of the Northern Baptist Convention		(1940—Report not as yet filed)				7/10/40
Board of Foreign Missions of the Methodist Epis. Ch.	1,416	2,229,323	1,869,389	19,462	340,471	5/ 9/40
The Bd. of Foreign Missions of the Presbyterian Ch.	1,129	2,610,603	1,480,289	..	1,130,314	3/25/40
Board of Natl. Missions of the Presbyterian Ch.	1,307	1,785,696	1,155,022	1,448	629,226	5/ 9/40
Board of Pensions of the Presbyterian Church	416	582,936	399,552	..	183,384	5/ 9/40
Catholic Foreign Mission Society of America, Inc.	212	372,788	271,427	..	101,360	5/ 9/40
The Christian and Missionary Alliance	328	270,541	226,944	7,277	36,320	5/ 9/40
The Congregational Bd. of Ministerial Relief	150	120,364	109,422	..	10,942	1/31/41
The Congregational Home Missionary Society	176	107,766	97,969	..	9,797	5/20/40
The Genl. Mis. Soc. of the German Baptist Churches of NA		(1940—Report not as yet filed)				1/ 6/41
The Ministers & Mis. Benf. Bd. of the No. Bap. Conv.	1,312	1,890,617	1,119,385	..	771,232	3/25/40
New York Bible Society	516	2,930,572	288,176	7,620	2,634,776	1/31/41
The Salvation Army	50	122,592	104,939	..	17,653	1/31/41
The Society for the Propagation of the Faith	494	1,492,218	905,979	31,863	554,376	3/25/40
Vassar College	268	810,500	690,376	..	120,124	5/ 9/40
Women's Amer. Baptist Foreign Mission Society	558	539,801	460,656	3	79,143	3/25/40
Women's Amer. Baptist Home Mission Society	477	479,223	294,225	..	184,998	7/25/40
Woman's Foreign Miss. Soc. of the Meth. Episc. Ch.	691	210,277	180,944	..	29,333	5/ 9/40
TOTALS	18,552	$23,813,636	$16,085,873	$72,241	$7,655,520	

UNIFORM ANNUITY AGREEMENT RATES

SINGLE LIFE

Calculated on basis recommended to Conference October 4, 1939

Age set back two years—Residuum 70%—Rates modified at younger ages
Basis: Combined Annuity Mortality Table—Interest at 3½%—Female

Age	*Rate*	*Age*	*Rate*
30	2.5%	56	4.5%
31	2.5	57	4.5
32	2.5	58	4.6
33	2.5	59	4.7
34	2.5	60	4.7
35	2.5	61	4.8
36	2.6	62	4.8
37	2.7	63	4.9
38	2.8	64	5.0
39	2.9	65	5.1
40	3.0	66	5.1
41	3.1	67	5.2
42	3.2	68	5.3
43	3.3	69	5.4
44	3.4	70	5.5
45	3.5	71	5.6
46	3.6	72	5.8
47	3.7	73	5.9
48	3.8	74	6.0
49	3.9	75	6.2
50	4.0	76	6.3
51	4.1	77	6.5
52	4.2	78	6.7
53	4.3	79	6.9
54	4.4	80	7.0
55	4.5		

GAH:1940

UNIFORM ANNUITY AGREEMENT RATES

TWO LIVES — JOINT LIFE AND SURVIVOR

Calculated on Basis Recommended to Conference October 4, 1939

Basis: Combined Annuity Mortality Table — Interest at 3½% — Two Females
Ages Set Back Two Years — Residuum 70% — Rates Modified at Younger Ages

AGE OF OLDER LIFE

AGE OF YOUNGER LIFE

Younger \ Older	80	79	78	77	76	75	74	73	72	71
80	5.8									
79	5.8	5.7								
78	5.7	5.6	5.6							
77	5.6	5.6	5.5	5.5						
76	5.6	5.5	5.5	5.4	5.4					
75	5.5	5.4	5.4	5.4	5.3	5.3				
74	5.4	5.4	5.3	5.3	5.2	5.2	5.2			
73	5.4	5.3	5.3	5.2	5.2	5.2	5.1	5.1		
72	5.3	5.3	5.2	5.2	5.1	5.1	5.1	5.0	5.0	
71	5.2	5.2	5.2	5.1	5.1	5.1	5.0	5.0	4.9	4.9
70	5.2	5.1	5.1	5.1	5.0	5.0	5.0	4.9	4.9	4.9
69	5.1	5.1	5.0	5.0	5.0	5.0	4.9	4.9	4.9	4.8
68	5.0	5.0	5.0	5.0	4.9	4.9	4.9	4.8	4.8	4.8
67	5.0	5.0	4.9	4.9	4.9	4.9	4.8	4.8	4.8	4.7
66	4.9	4.9	4.9	4.9	4.8	4.8	4.8	4.8	4.7	4.7
65	4.9	4.8	4.8	4.8	4.8	4.8	4.7	4.7	4.7	4.7
64	4.8	4.8	4.8	4.8	4.7	4.7	4.7	4.7	4.7	4.6
63	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.6	4.6	4.6
62	4.7	4.7	4.7	4.7	4.6	4.6	4.6	4.6	4.6	4.6
61	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.5
60	4.6	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5
59	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
58	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.4
57	4.5	4.5	4.5	4.4	4.4	4.4	4.4	4.4	4.4	4.4
56	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
55	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3
54	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
53	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
52	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
51	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
50	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
49	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
48	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
47	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
46	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
45	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
44	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
43	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
42	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
41	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
40	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
39	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
38	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
37	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
36	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
35	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
34	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
33	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
32	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
31	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
30	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

Younger \ Older	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56
70	4.8														
69	4.8	4.8													
68	4.8	4.7	4.7												
67	4.7	4.7	4.7	4.6											
66	4.7	4.7	4.6	4.6	4.6										
65	4.6	4.6	4.6	4.6	4.5	4.5									
64	4.6	4.6	4.6	4.5	4.5	4.5	4.5								
63	4.6	4.6	4.5	4.5	4.5	4.5	4.4	4.4							
62	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.4	4.4						
61	4.5	4.5	4.5	4.5	4.4	4.4	4.4	4.4	4.4	4.3					
60	4.5	4.5	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.3				
59	4.4	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.3	4.3			
58	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2		
57	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.2	4.2	
56	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.2	4.2	4.2	4.2
55	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1	4.1
54	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1	4.1	4.1
53	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1	4.1	4.1	4.1
52	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
51	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
50	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
49	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
48	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
47	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
46	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
45	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
44	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
43	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
42	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
41	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
40	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
39	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
38	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
37	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
36	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
35	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
34	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
33	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
32	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
31	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
30	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

Younger \ Older	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
55	4.1														
54	4.1	4.1													
53	4.1	4.1	4.1												
52	4.1	4.1	4.1	4.0											
51	4.0	4.0	4.0	4.0	4.0										
50	3.9	3.9	3.9	3.9	3.9	3.9									
49	3.8	3.8	3.8	3.8	3.8	3.8	3.8								
48	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7							
47	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6						
46	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5					
45	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4				
44	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3			
43	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2		
42	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	
41	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
40	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
39	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
38	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
37	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
36	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
35	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
34	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
33	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
32	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
31	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
30	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

Younger \ Older	40	39	38	37	36	35	34	33	32	31	30
40	2.9										
39	2.8	2.8									
38	2.7	2.7	2.7								
37	2.6	2.6	2.6	2.6							
36	2.5	2.5	2.5	2.5	2.5						
35	2.5	2.5	2.5	2.5	2.5	2.5					
34	2.5	2.5	2.5	2.5	2.5	2.5	2.5				
33	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5			
32	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5		
31	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
30	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

GAH :1940

DEVELOPMENTS IN REGULATION AND SUPERVISION

Section 45, Article 4 of the Insurance Law of New York State, June 1939, as Amended April 1941

(Matter in italics is new)

Charitable annuity societies exempt.

1. The superintendent may, in his discretion, issue a special permit to make annuity agreements with donors to any duly organized domestic or foreign nonstock corporation or association conducted without profit, engaged solely in bona fide charitable, religious, missionary, educational or philanthropic activities, and which shall have been in active operation for at least ten years prior thereto. Such permit shall authorize such corporation or association to receive gifts of money conditioned upon, or in return for, its agreement to pay an annuity to the donor, or his nominee, and to make and carry out such annuity agreement. Every such corporation or association shall, before making any such agreement, file with the superintendent copies of its forms of agreements with annuitants, and a schedule of its maximum annuity rates, which shall be computed, on the basis of the annuity standard adopted by it for the calculation of its reserves, as to return to such corporation or association upon the death of the annuitant a residue at least equal to one half the original gift or other consideration for such annuity.

2. Every such domestic corporation or association shall have and maintain admitted assets at least equal to *the sum of* the reserves on its outstanding agreements, calculated in accordance with section two hundred five of this chapter, and a surplus of ten per centum of such reserves *or the amount of one hundred thousand dollars, whichever is the higher.* In determining the reserves of any such corporation or association, a deduction shall be made for all or any portion of an annuity risk which is reinsured by a life insurance company authorized to do business in this state. The assets of such corporation or association in an amount at least equal to *the sum of* such reserves and surplus *or the amount of one hundred thousand dollars, whichever is the higher,* shall be invested only in securities permitted by the provisions of this chapter for the investment of the reserves of authorized life insurance companies; and such assets shall be segregated as separate and distinct funds, independent of all other funds of such corporation or association, and shall not be applied for the payment of the debts and obligations of the corporation or association or for any purpose other than the annuity benefits hereinbefore specified. Any such corporation which, on the effective date of this chapter, has not invested its assets in accordance with this subsection, shall do so not later than ten years

from such effective date; but this shall not be construed to permit any investment by any such corporation after the effective date of this chapter other than is permitted by this subsection.

3. No such corporation or association incorporated or organized under the laws of another state shall be permitted to make such annuity agreements in this state, unless it complies with all the requirements of this section imposed upon like domestic corporations or associations, except that any such foreign corporation or association may invest its reserve and surplus funds in the kind of securities permitted by the laws of the state in which it was incorporated or organized.

4. No such corporation or association shall make or issue in this state any annuity contract, unless or until it has obtained from the superintendent a permit issued in accordance with the provisions of this section, *except that a corporation, whose requisite reserve on its outstanding gift annuity agreements computed in accordance with section two hundred five of this chapter does not exceed the amount of eighty thousand dollars, may make gift annuity agreements in this state, and shall be exempted from the requirement of the securing of a permit, provided it shall have and maintain the reserve required by section two hundred five of this chapter and a surplus of twenty-five per centum of such reserves.* If the superintendent finds, after notice and hearing, that any such corporation or association, having such a special permit, has failed to comply with the requirements of this section, he may revoke or suspend such permit; or he may order such corporation or association to cease making any new annuity contracts until such requirements have been satisfied. The action of the superintendent in revoking or suspending any such permit or in making any such order shall be subject to judicial review. The superintendent may, in his discretion, dispense with the requirement of annual statements by such corporations or associations, and may accept in lieu thereof a sworn statement, by two or more of the principal officers thereof, in such form as will satisfy the superintendent that the requirements of this section are being complied with.

5. Except as provided in this section, every corporation or association shall be exempt from the provisions of this chapter, other than articles one, two, three, and sixteen.

6. Every college, as defined in the education law, which, within the meaning of subsection one agrees to pay an annuity otherwise than by the payment of sums certain, shall, with respect to such agreements, be exempt from this section and from all other provisions of the insurance law.

RATES OF YIELD ON INVESTED FUNDS UNDER EXISTING CONDITIONS, AND THE PROBABILITIES AS TO THE FUTURE

DR. MARCUS NADLER

Graduate School of business Administration, New York

At the outbreak of the war in September 1939, there were many people in this country who believed that the period of low-money rates had come to an end, and that money rates would go up. You will remember that at the outbreak of the war prices of high-grade bonds went down, stock prices went up, and all the people who believed that the era of low-money rates was over had proved that they were correct. Later events, however, proved that they were wrong.

It is, therefore, of importance to analyze what the chances are that money rates will go up. The cost of money and the present supply of and demand for money should be analyzed without any wishful thinking. The supply of money in the United States is tremendous, and may be divided into two categories: (1) the supply that comes from banks,—which is highly flexible, and which can be increased by action of the monetary authorities; and (2) the supply that comes from the ultimate savers—including insurance companies, pension funds, savings funds, trust funds, corporations, and individuals.

Let us analyze these. The banks have six billion dollars of excess reserves, which under present conditions would enable them to buy thirty billion dollars of obligations in the open market. By action of the monetary authorities, this can be increased to a point where the banks could buy between 200 to 400 billion dollars of bonds. Hence, the supply of money in the hands of the banks is tremendous, and can be increased almost overnight by action of the monetary authorities.

The insurance companies throughout the country need each year about one and a half to two billion dollars in new securities in which to invest their new funds. In addition, there is a great deal of money in the hands of trust companies; and great efforts are being made by the government to sell national defense obligations to the ultimate investors. The purchasing power in the hands of the people is bound to increase. During 1940 the national income of the country amounted to 74 billion dollars. In 1941 the national income is estimated at 80 billion, and in 1942 it may aggregate 90 billion dollars.

Notwithstanding what you read in the papers about inflation, I do not believe this is imminent. A moderate increase in commodity prices can be expected, but not more. The amount of money in the hands of ultimate investors is bound to be great, but what is more important is the demand for money.

Under present conditions this demand can come from the government and from business. For the fiscal year 1941-1942 we were told by the Secretary of the Treasury that the United States Government will need nineteen billion dollars. The treasury is endeavoring to increase the revenues of the government by an additional three and a half billion dollars, so that the deficit for the fiscal year 1941-42 may be six to seven billion dollars—obviously quite a substantial amount. From what sources will the government obtain the money?

Of the seven billion dollars, about one and a half billion will come from the net proceeds of the revenues derived from the social security funds, old age pensions, unemployment insurance, and railroad pension fund, which automatically go to the government and are handled as if they were an ordinary tax. An additional one and a half billion will come from the life insurance companies. At least two billion dollars will come from individuals and trust companies which will find the government bonds very attractive. This makes five billion dollars which the government will obtain without any recourse to the banks. If the banks of the country have to subscribe only two or three billion dollars a year of new government obligations, each issue that will be offered in the bond market will be over- and oversubscribed, just as the last issues were oversubscribed.

Hence, although the deficit of the United States for 1941-42 will be very large, the demand for money on the part of the government will not be so great as to make a dent in the money market.

The demand for money from business will not be very great for the following reasons: First, the volume of deposits in the country is exceedingly large. These deposits belong to individuals, firms or corporations, and not to the banks. There are business people in the country who have a great deal of money, and before they borrow from the banks, they will utilize their own funds.

A high level of business activity is generated through the national defense program, and people who need money to enlarge plants and equipment for national defense do not borrow money in the open market. They obtain it from the government directly or indirectly through the R.F.C. The supply of money, large as it is, can be increased at a moment's notice by the monetary authorities, but the demand is not so great as you would expect.

The chances are that money rates in the United States are going to remain low. The only thing one can foresee is a very moderate decline in prices of long-term tax-exempt government securities. There will also be a moderate decrease in prices of AAA corporate bonds, which will come for the first time into competition with fully taxable governments.

Assuming that the United States should be at war, will the demand for money on the part of the government increase to a point where money rates are bound to go up? Let us see what happened in other countries. If Great Britain, with a public debt larger than the national income, can maintain low-money rates, then it is quite obvious that the United States Government can do it too. The higher the public debt of the country, the greater the demand for money on the part of the government, the lower interest rates are in Great Britain—which proves that money is one commodity which the government can control and does control under present conditions. Canada was confronted with the task not merely of financing large deficits to meet armament expenditures, but of repatriating large amounts of Canadian Government obligations previously held in Great Britain.

If Great Britain can finance this war at 3 percent; if Canada can finance this war at $3\frac{1}{8}$-$\frac{1}{4}$ percent, is it not reasonable to assume that the United States Government will be able to finance the war at $2\frac{3}{4}$ percent, particularly if you take into consideration the fact that we have $22\frac{1}{2}$ billion dollars of gold, 6 billion dollars of excess reserves, and the volume of deposits is greater than ever before? If you bear all these factors in mind, you can reach only one conclusion: that money rates are bound to remain low.

A number of people will say: "All right, we grant you that during the emergency the government has control over the money market, and will exercise this control. But some day the war will come to an end. Is it not likely that the same thing may happen again (as after the last war), particularly if a wave of inflation should come?" At the end of the last war, the Federal Reserve Bank of New York raised the discount rate to 7 percent, and the $4\frac{1}{4}$ percent Liberty bonds dropped to 80. Many people believe that at the end of the present emergency, a similar situation may develop. I do not believe that this will happen. In the first place, as I stated before, I do not think a sharp rise in commodity prices will take place. Furthermore, after the emergency is over, the government also will not be in a position to permit a sharp rise in interest rates. The government will not have a balanced budget as soon as the emergency is over. The deficit will continue at least during the difficult period of readjustment; and the government will be confronted with the task of refunding billions and billions of dollars. If the government is the greatest debtor in the country, and it has the power to regulate money market conditions, will the government keep money rates high or low? The answer is obvious.

Low-money rates are an invisible tax. The government takes part of your money out of your pockets, but you are not aware that the tax is being collected. I believe we ought to make up our minds that, as far as can be foreseen, money rates are bound to remain low. The most I can see in the money market is for long-term taxable government obligations to yield 2¾ percent. As soon as the government offers the 2¾ percent taxable bonds, in all probability you will witness a moderate decline in the price of AAA bonds. Where insurance companies or pension funds can buy government bonds to yield 2¾ percent, it would be unwise for them to buy corporate bonds that yield less than 3 percent, because there is nothing better than government obligations.

There is a distinct possibility that the long-term tax-exempt bonds will show a moderate decline, for the reason that, first, the government may impose a 6 percent surtax, and, second, a large number of trust companies and pension funds will find it advisable to sell these bonds, in order to acquire national defense obligations.

In conclusion, I see no material change in the money market. To be sure, bonds will fluctuate, depending upon news from abroad and political developments here; but if you analyze the demand and supply factors, the power of the government over the money market, and the rate of interest on savings deposits, you must inevitably reach the conclusion that money rates will remain low.

GREAT BRITAIN

British Government Securities

	2½ Percent Consols		5 Percent Conversion		4 Percent Funding		3½ Percent War	
1939	**Price**	**Yield**	**Price**	**Yield**	**Price**	**Yield**	**Price**	**Yield**
August	65.0	3.85	106.9	3.40	103.1	3.78	90.0	3.89
September	62.3	4.01	104.5	3.92	101.1	3.92	87.6	4.00
October	65.1	3.84	105.6	3.64	101.9	3.86	89.3	3.92
November	67.8	3.69	107.7	3.14	105.2	3.64	92.2	3.80
December	68.0	3.68	107.7	3.11	105.4	3.62	92.4	3.79
1940								
January	71.7	3.49	109.3	2.70	109.0	3.39	96.3	3.63
February	73.5	3.40	109.2	2.66	110.4	3.29	98.0	3.57
March	73.3	3.41	108.7	2.77	110.8	3.27	98.1	3.57
April	72.5	3.45	108.5	2.76	109.7	3.33	98.4	3.56
May	73.2	3.42	107.9	2.89	110.2	3.30	99.2	3.53
June	71.9	3.48	107.2	3.01	109.1	3.37	97.8	3.58
July	72.1	3.47	107.4	2.93	109.5	3.34	98.7	3.55
August	73.2	3.42	107.7	2.79	110.3	3.28	99.6	3.51
September	73.8	3.39	107.7	2.74	111.6	3.20	100.2	3.48
October	74.6	3.35	107.8	2.67	112.1	3.16	101.0	3.40
November	75.5	3.31	107.4	2.75	112.5	3.14	101.8	3.31
December	76.3	3.27	107.1	2.78	113.1	3.10	102.7	3.23
1941								
January	77.4	3.23					103.0	3.20
February	77.2	3.24					102.8	3.22

AUSTRALIA

Commonwealth Government Securities

(In Australia) *

Security Yields

		Under 5 Years	5 Years and Under 10	10 Years and Over
1939				
July	26	3.90	3.91	3.94
August	30	4.07	4.02	4.01
September	27	3.99	3.98	4.05
October	25	3.93	3.89	3.96
November	29	3.60	3.78	3.88
December	20	3.68	3.74	3.83
1940				
January	31	3.51	3.63	3.60
February	28	3.29	3.53	3.54
March	27	3.07	3.51	3.52
April	24	2.72	3.18	3.20
May	29	3.39	3.23	3.30
June	26	3.57	3.23	3.28
July	31	3.38	3.22	3.25
August	28	3.20	3.24	3.24
September	25	3.02	3.15	3.23
October	30	2.80	3.06	3.21
November	27	2.89	3.04	3.11
December	18	2.86	3.06	3.09
1941				
January	29	2.76	2.93	2.99
February	19	2.73	3.02	3.01

* Weighted averages

DOMINION OF CANADA BONDS

Payable in Canada Only

Monthly Average of Business Days	3¼ Percent Due June 1, 1956–66		3 Percent Due June 1, 1950–55	
1939	Price	Yield	Price	Yield
August	101.09	3.17	99.21	3.06
September	94.33	3.58	92.68	3.62
October	95.99	3.48	94.47	3.46
November	97.27	3.41	95.78	3.35
December	96.86	3.43	95.12	3.41
1940				
January	97.36	3.40	95.60	3.37
February	98.07	3.36	96.05	3.33
March	98.38	3.34	95.98	3.34
April	98.90	3.31	96.97	3.26
May	99.19	3.30	97.20	3.24
June	98.54	3.33	96.19	3.33
July	98.51	3.34	96.48	3.30
August	98.82	3.32	97.41	3.20
September	99.40	3.29	97.73	3.19
October	99.56	3.28	97.91	3.18
November	99.74	3.27	98.36	3.14
December	100.34	3.22	98.71	3.11
1941				
January	100.45	3.21	98.83	3.10
February	100.60	3.20	98.79	3.11
*March	100.68	3.19	98.99	3.09

*Average March 1–26

A. RATE OF MORTALITY AMONG THE GIFT-ANNUITANT LIVES

B. RATES FOR GIFT-ANNUITY AGREEMENTS

GEORGE A. HUGGINS
Actuary, Philadelphia, Pa.

A. Rate of Mortality among Gift-annuitant Lives

The rate of mortality among gift-annuitant lives has received consideration at each of the six previous Conferences on Annuities. It is a very live subject, and one of vital interest in a conference such as this one. No person living can predict the future duration of the life of an individual, not even the individual himself, unless there is a definite suicidal intent in the mind of the exceptional person. However, as a result of the continuing study of the actual deaths which occur among groups of lives, we can form some conclusions as to the way in which the deaths among the group will occur; i.e., the so-called rate of mortality. This is true particularly as the groups under study grow in number, and the studies extend over lengthening periods of time.

As a result of these studies of actual experience, various tables of mortality have been developed which have been recognized as standard tables. These tables become the basis of calculations of premiums and reserves, and become yardsticks against which to measure the actual experience as currently observed. These standard tables are, of course, based upon large groups of lives; and, therefore, when one studies small groups, the variations from year to year in the actual experience as contrasted with the experience expected may be quite appreciable. The cumulative experience, however, helps greatly in smoothing off the so-called hills and valleys as they show in the curve of actual experience year to year, and generally reveal quite closely the trends of the mortality of the particular group.

Mortality studies show clearly the effect of the so-called selection of the individual when entering the group. For example, a person, in anticipation of death, takes out a policy of life insurance under which the proceeds are payable at death. A person anticipating long life, and with a desire of an income during such lifetime, takes out an annuity policy. No matter how carefully the insurance companies may exercise their right of selection among the applicants, the results of years of actual experience show a lower rate of mortality among those who elect to take annuity policies, as contrasted with those who elect to take policies of life insurance. It has become necessary for the companies to use entirely different tables of mortality as a basis for premiums and reserves on annuity policies, than in the case of life insurance policies.

In our gift-annuity mortality studies, we do not have sufficient experience to develop our own tables of mortality. Therefore, we have to take as our yardsticks standard tables of mortality among annuitant lives, and to measure our actual experience from year to year, and cumulatively, against the yardstick, and then to modify the standard tables to conform as nearly as possible to our own experience as a basis for calculating rates and setting up and maintaining reserves.

In the Insurance Code which became effective in the state of New York January 1, 1940, the Combined Annuity Table of Mortality with an age setback of one year was fixed as the minimum basis for maintaining reserves on gift annuities. There is also a requirement for an additional 10 per centum as a margin for contingencies, such as mortality fluctuations, variations in the rates at which interest is earned on the invested reserve funds, and capital losses on invested funds.

Studies which have been made among some of the larger groups of gift-annuitant lives show an actual rate of mortality somewhat lower than the minimum basis above-described, and that is one of the problems to receive our consideration today.

In making mortality studies based upon actual experience, there are two different types of studies: one relates wholly and solely to lives; and the other relates to reserves released at the deaths of the annuitant lives. The latter combines the effect of the deaths among the lives, and also the effect of the varying amounts of annuities in force on the lives which constitute the group. For example, a death occurring in the case of a life carrying a small annuity may have little or no appreciable effect on the financial operations of a year; while the death of a life carrying a large anuity, or a number of annuities which aggregate a considerable amount, may have a very material effect on the financial results of the year.

Furthermore, this weighting of the lives may cause rather violent fluctuations in the year-to-year experience. There may be variations between the experience on lives alone and the experience when the amounts of annuities are taken into account as well as the lives. Studies have shown that the larger the number of lives and the amounts of annuities involved, the nearer together will be the results of the actual experience.

In deciding on a basis of rates, one should consider the mortality among the lives; for, after all, one cannot predict the variations in the incidence of the amounts of the annuities in the different organizations, even though, in studying the financial gains or losses of an organization year by year, the reserves actually released, as compared with the reserves expected to be released, give a better picture of the actual results of the year's operations.

In a recent mortality study of a considerable group of annuities in force in an organization, the ratio of actual reserves released in the fiscal year 1939-40 was 80.5 per centum of the expected reserves released by death when calculated on the basis of the Combined Annuity Mortality Table with interest at $3\frac{1}{2}$ percent and with a one-year setback in ages. There were some variations within the group itself in the various classes of annuities. For example, among the single-life males, the ratio was 107.6 per centum; among the single-life females, the ratio was 81.8 per centum; and where two lives were involved, whether male or female, the ratio was 70.9 per centum, with a general average of 80.5 per centum. During the last five-year period, the corresponding average ratio among the single-life males was 91.4 per centum; among the single-life females, the ratio was 80.0 per centum; and where two lives were involved, whether male or female, the ratio was 81.5 per centum, with a general average of 81.9 per centum.

In comparing the experience of the last year with that of the five-year average, there was a higher ratio among the single-life males, and also among the single-life females; but the gains from these sources were more than offset by the low mortality in the joint-life cases. Of course, here again, we must consider that this particular study involves the effect of the amounts of the annuities as well as the deaths among the lives themselves.

The important lesson to be learned from this particular study is that the actual experience on a large volume of business, some new and some old, shows reserves released by death over the last five-year period amounting only to 81.9 per centum of the reserves expected to be released according to the Combined Annuity Table with ages set back one year, and for the current year reaching only 80.5 per centum. While we do not have the exact figures showing the setback in ages that would be required to offset this lower mortality, nevertheless, for practical purposes, it can be said to approximate a four-year setback instead of a one-year setback. Further, we do not know whether the low has been reached in the mortality rate of this group.

In a study made in 1939 on the contributed experience of three major boards of a denominational body involving nearly 2,800 annuity gifts for a total approximating $5,750,000, with annuity payments approximating $350,000 yearly, covering quite a period of exposure, the results were somewhat more favorable; but a two-year setback in ages was required in the studies of actual reserves released as compared with the expected reserves released on the Combined Annuity Mortality Table with interest at 3½ percent.

The Committee on Annuities submitted to the Sixth Conference held on October 4 and 5, 1939, a schedule of gift-annuity rates based upon the Combined Annuity Mortality Table, with ages set back two years on the female-life basis. This was done with two purposes in mind: one to avoid the use of gift-annuity rates differing according to sex; and the other to allow some margin from the actual experience on the male lives as an offset to any unfavorable experience among the female lives.

Furthermore, modifications in the tabular rates were recommended at the younger and the higher ages, so that, for the group as a whole, there were three different margins as compared with the tabular rates; i.e., the margin on the male lives, the margin due to the scaling down of the rates at the younger ages, and the limitation to 7 percent of the rates at the older ages.

Your Committee on Annuities will welcome the results of any information which any organization may be in position to contribute in the matter of its own mortality experience. These studies as to lives are not very difficult in the case of single lives, but are complicated in the case of annuities involving two lives with survivorship annuities, and also when made on the basis of reserves released.

As previously stated, much consideration has been given in previous conferences to the matter of rates of mortality; and in the published proceedings of those conferences there is much material worthy of earnest study on the part of those who wish to go further into the theory and principles involved in this problem of mortality experience.

B. Rates for Gift-annuity Agreements

At the request of the Committee on Annuities, I am resubmitting the gift-annuity rates which were submitted to the Sixth Conference in October 1939. The basis of these rates has already been outlined; i.e., the Combined Annuity Mortality Table with interest at 3½ percent, with ages set back two years on the female-life basis, and calculated in accordance with a formula designed to produce an average residuum of 70 percent of the amount of the original gift, with the scaling down of the rates below age 55 until they reach 2½ percent at age 35, and letting that rate apply at any lower ages. At the higher-age bracket, the rate is held at 7 percent from 80 and upwards.

These rates were printed in full on the single-life basis in the report on the Sixth Conference, with rates at specimen ages on the two-life cases. Later, the entire set of two-life rates was reproduced in leaflet form as a supplement to the printed proceedings.

The uniform rates now in use are based upon the Combined Annuity Table with interest at 4 percent female lives, so that the rates now submitted are on the basis of lower mortality and lower interest rates, both of which are in accordance with the trends which have developed so acutely since the present uniform rates were adopted.