# IT 2201 - Income tax superannuation - permissible benefit and contributions in respect of members of 23(ja), 23F and 23FB funds

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#### TAXATION RULING NO. IT 2201

INCOME TAX SUPERANNUATION - PERMISSIBLE BENEFIT AND CONTRIBUTIONS IN RESPECT OF MEMBERS OF 23(ja), 23F AND 23FB FUNDS

F.O.I. EMBARGO: May be released

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Ι	1199557	SUPERANNUATION	23(ja)
		REASONABLE BENEFITS	23F
		SUPERANNUATION	23FB
		DEDUCTIONS FOR	82AAA-AAR
		CONTRIBUTIONS TO	
		EXEMPT SECTION 23F FU	NDS
		CONTRIBUTIONS	
		PERMISSIBLE TO 23(ja)	,
		23F AND 23FB FUNDS	

OTHER RULINGS ON TOPIC IT 294, 2026 AND 2067

PREAMBLE The purpose of this Ruling is to set out permissible levels of benefits available from superannuation funds entitled to the benefits of taxation concessions and to comment on a number of other aspects of the income tax implications of superannuation funds which have been the subject of review.

Retiring Ages:-

2. The concept of a normal retiring age is a significant factor in the calculation of both reasonable retirement benefits and permissible contributions in respect of members of section 23F superannuation funds. Generally, ages of 65 for males and 60 for females have been accepted as normal for these purposes. A retirement before that age, unless the earlier age had been accepted as customary in the particular industry or mandatory for employees in a particular firm, would necessitate a reduction in the maximum benefit otherwise considered reasonable.

3. It has been suggested that the normal retiring age for males should be reduced. At this time there is insufficient evidence to establish that a normal retiring age other than 65 is generally accepted in the workforce for male employees. On the other hand there is a trend, highlighted by the implications of the Sex Discrimination Act, towards increasing the normal retiring age for females to bring it in line with that for males. Bearing in mind these factors it has been decided to adopt a common retiring age of 65 for both male and female employees for the purpose of calculating reasonable retirement benefits and permissible contributions. 4. It is appreciated that the immediate implementation of age 65 as the age at which maximum retirement benefits will be payable to female employees may affect the retirement planning of those who, under the previous guidelines, were within a few years of retirement. As a transitional measure contribution and benefit calculations for female employees who will attain the age of 50 years or more prior to 1 July 1986 may continue on the basis of age 60 retirement.

5. Paragraph 16 of this Ruling indicates that benefits and contributions available to members of section 23FB and paragraph 23(ja) funds are to be brought in line with those prevailing in the section 23F area. The normal retiring ages adopted for section 23F funds, and the reductions applicable in the event of payment before those ages, will also apply to section 23FB and paragraph 23(ja) funds. The administrative requirement that a member of a paragraph 23(ja) fund who selects a "retirement" age of 60 years (or less) must have 10 years prospective membership to that age will no longer apply.

6. In paragraph 17 of Taxation Ruling No IT 294 it is stated that the maximum benefit payable on retirement will be available to associated employees only where they have completed 20 years service with the employer. It sometimes occurs that an associated person will nominate a retirement age later than 65 years of age in order to have a prospective service of 20 years and ultimately qualify for the payment of maximum benefits. In the event that the associated employee retires before reaching the nominated later retiring age, i.e. before 20 years of service have elapsed, the benefit payable at the nominated later retiring age should be reduced by the application of the fraction (years of service/20).

#### Section 23F Pension Funds

7. Section 23F pension funds will continue to be permitted to provide and fund pension benefits of 75% of final average salary plus additional benefits by way of reversionary pensions to spouses and post-retirement increases in the level of pension payable to a maximum of 5% per annum. Under the previous guidelines only funds with no more than 10% of their assets lent back to the contributing employer(s) were permitted to provide and fund the additional benefit.

8. Whether or not a particular arrangement was a loan back was determined in the light of administrative rulings issued by the Commissioner eg. paragraph 31 of Taxation Ruling No IT 294. This administrative basis is now being replaced by the statutory definition of an "in-house asset" in section 121C, to be inserted into the Act by Taxation Laws Amendment Act (No 2) of 1985. Section 121C defines an "in-house asset" more broadly than the previous administrative approach. These may be situations, therefore, where a fund which was regarded under the previous guidelines as having not more than 10% of its assets lent back, and hence permitted funding towards reversionary pensions or post-retirement increases, would not be so regarded under the statutory rules. This matter will be the subject of further advice.

A number of funds established to provide benefits by way 9. of pension also permit a member at retirement to commute to a lump sum all or part of his pension entitlement. Paragraph 39 of Taxation Ruling No. IT 294 indicates that the aggregate of the amount received on commutation and the value of any remaining pension must not exceed the permissible lump sum benefits at the date of commutation. Where the proportion of the pension commuted does not exceed 25% of the original entitlement the aggregate of the lump sum payment and the value of the remaining pension would not be regarded as an excessive benefit. In determining the lump sum equivalent of the pension commuted regard must be had to the guideline assumptions for earning rates, mortality factors, etc. By way of example, in a fund providing an unindexed 75% pension with two-thirds reversion to a spouse, the lump sum equivalent of a 25% commutation of pension entitlement for a member on a final average salary of \$40000 would be \$72000 calculated as follows:-

Final Average Salary	\$40000
Pension available	\$30000
Pension commuted	\$ 7500
Commutation Factor	9.60
Lump Sum on Commutation	\$72000

Provided the amount paid on commutation did not exceed \$72000 the aggregate benefit would not be considered excessive.

10. Where more than 25% of a pension entitlement is commuted the calculation of the lump sum equivalent of the pension commuted should proceed on the same basis. Should the aggregate exceed the lump sum guidelines, either the lump sum payable or the amount of remaining pension must be reduced if the tax exemption of the fund is not to be endangered.

11. Commutation factors to be used in varying circumstances in determining the lump sum equivalent of pension commutation are located in paragraph 26.

12. Taxation Ruling No. IT 2026 specifies the amount of benefit permitted in both lump sum and pension funds in the event of early retirement or withdrawal from employment. Some uncertainty has arisen in regard to the way in which the withdrawal benefit specified for pension funds should be applied because the formula given produces a lump sum. The lump sum is the amount which the trustee is regarded as having available to purchase a pension for the withdrawing member - it is not the amount which may be paid to the member as a lump sum. Should a member not take a withdrawal benefit in the form of a pension the normal rules in relation to commutation will apply, i.e. the lump sum should not exceed the maximum amount permissible in the circumstances.

Section 23F Lump Sum Funds

13. The basis upon which permissible lump sum benefits are determined has been revised. The 'tapering' which applied under the previous guidelines to salaries in excess of \$27500 per annum has been abolished. Irrespective of salary a member of a lump sum fund will be permitted a pre-tax benefit of 7 times final average salary at normal retirement age. An employee who retires at normal retirement age may, in accordance with paragraph 4 of Taxation Ruling No. IT 2067, receive an additional benefit from the fund calculated at the rate of .5% for each year of service in excess of 40 years, subject to a maximum of 5%.

14. The removal of the 'tapering' should not be taken as requiring trustees or employers to make catch-up payments to employees, or dependants of deceased employees, who have become entitled to benefits between 1 July 1985 and the date of this Ruling or to grant all existing employees/members benefits to the full extent now permitted. These are matters for determination by the employer and/or trustee in the light of the employer's capacity to fund benefits, the provisions of the trust deed, etc.

15. Subject to the additional benefits permitted for service in excess of 40 years there is no distinction between the level of benefit available to an employee who retires after a short period of service and that available to an employee who retires after extensive service and on the same salary. It has been suggested that this approach causes difficulties where an employer seeks to make an additional payment to a long serving employee in recognition of that service. The guidelines do not require that all employees receive the maximum benefit permitted - they stipulate what are the maximum permissible benefits. Within the scope of the maximum permitted benefit guidelines an employer is free to vary benefits between employees according to length of service etc.

Section 23FB/paragraph 23(ja) Funds

16. With the decision to revise the basis of lump sum benefits available to members of section 23F funds the opportunity has been taken to review benefits and contributions permissible in respect of members of section 23FB and paragraph 23(ja) funds. It has been decided to dispense with the maximum benefit limit of \$192500 payable by these funds and, as far as practicable, to permit benefits to be provided on the same basis as applies in section 23F funds. It follows that the 'by-age' limits for contributions will also be abolished.

17. For employee-members of section 23FB funds benefits and contributions will be determined having regard to the actual rate of salary received. For non-employee members of such funds, and for members of paragraph 23(ja) funds, contributions may be determined on the basis of a "notional salary" which represents the average of the member's net business income from all sources over the previous five years, or the period of self employment, whichever is the lesser. By way of example, a self-employed person whose net business incomes were \$35000, \$50000, \$32000, \$20000 and \$36000 over the financial years ended 30 June 1981 to

1985 respectively would be permitted to make contributions in the year ended 30 June 1986 based on a 'salary' of \$34600.

18. For superannuation purposes, net business income will generally be taken as gross business income less allowable income tax deductions directly attributable thereto including prior year losses. In calculating net business income, rents dividends and interest should generally be excluded. Where in a particular year the member incurs a loss from his business activities the 'income' of that year should be taken as nil.

19. It is important to remember that the income tax deduction allowable for contributions to section 23FB or paragraph 23(ja) funds is limited by section 82AAT. With effect from 1 July 1985 the maximum deduction available in a year of income is \$1500.

20. The benefit ultimately payable to a non-employee member of a section 23FB or paragraph 23(ja) fund will reflect the average of the 'notional salary' in the year of becoming entitled to benefits and the two previous years. Should the member mentioned in paragraph 17 above become entitled to benefits in the year ending 30 June 1988 after achieving net business income of \$39000 and \$37000 in the years ending 30 June 1986 and 1987, respectively, his final average 'salary' for benefit purposes would be \$34267, calculated as follows:-

Notional salary 1986 = (35000 + 50000 + 32000 + 20000 + 36000) / 5 = \$ 34600 1987 = (50000 + 32000 + 20000 + 36000 + 39000) / 5 = \$ 35400 1988 = (32000 + 20000 + 36000 + 39000 + 37000) / 5 = \$ 32800 ------102800 Final average salary \$ 34267 ------

21. A section 23FB or paragraph 23(ja) fund may provide benefits in the form of pensions, subject to the same limits on permissible levels of pension or additional benefits as apply to section 23F funds.

22. As in the case of the increase in the retiring age for females, it is recognised that the implementation of this Ruling to section 23FB and paragraph 23(ja) funds may affect the retirement planning of some who, under the previous guidelines were within a few years of retirement and had made provision for a retiring benefit of \$192500. As a transitional measure, persons who have made provision for a retirement benefit of \$192500 in accordance with the previous guidelines and who are within ten years of their nominated retiring age may continue on that basis.

23. The revised level of permitted benefits will mean that membership of section 23FB or paragraph 23(ja) funds is opened to a wide range of persons who under the previous guidelines were ineligible for membership because of benefits from other sources or who were unable to obtain benefits comparable to those available to members of section 23F funds. An employee who is entitled under an employer-sponsored section 23F fund to a promised benefit less than the maximum permitted under the guidelines will be able to arrange to provide the shortfall through a section 23FB fund although there will not be any income tax deduction for contributions to the section 23FB fund. A self-employed person may no longer find it necessary to change his status to that of employee, by means of a family trust or private company, in order to obtain increased superannuation benefits.

#### Benefits from Other Funds

24 In determining the reasonableness of benefits being provided in a superannuation fund regard must be paid to benefits received or likely to be received by a member from other superannuation funds, approved deposit funds etc. If this were not the case, it would be possible for a member to receive benefits from various sources which, when aggregated, would be excessive. Paragraphs 23FB(2)(g) and (h) of the Act reflect this view and require, inter alia, that benefits from all other funds enjoying tax exemption be brought into account. Paragraph 23(ja) funds have always been administered on this basis. While sub-paragraph 23F(2)(h)(iii) is more restrictive in the types of other funds to which regard can be had for section 23F purposes, sub-paragraph 23F(2)(h)(iv) permits the Commissioner to take into account any other matters that he considers relevant. Furthermore the fact that benefits arising under section 23F funds must be taken into account for section 23FB and paragraph 23(ja) purposes means in practice that maximum permissible benefits cannot be exceeded in any case. For all practical purposes it is proposed henceforth to take benefits from all other funds which enjoy tax exemption into account for the purpose of determining reasonable benefits under section 23F. This practice will not apply to existing members of section 23F funds in respect of present membership of section 23FB, paragraph 23(ja) or paragraph 23(jaa) funds.

In any case of membership of more than one fund it is 25. necessary to place a value on benefits arising from the various funds. There is usually little difficulty when the benefits have already been paid or are to be paid in a lump sum form. The difficulty arises when benefits are likely to be received in the future in pension form. Under the previous guidelines the value of future pension entitlements was ascertained by projecting the member's current salary to normal retirement date at 8% per annum compound, applying to this salary the anticipated pension factor to arrive at the dollar amount of pension and then multiplying this by a factor of 8. Funding could then proceed for the difference, if any, between the benefit permitted under the present fund and the value of future pension. Bearing in mind the various combinations of pension benefits permitted under the guidelines it is clear that the 8 times factor is no longer appropriate as a general rule. Rather, it is necessary to determine a factor having regard to the pension to which the individual member will ultimately be entitled from the other source.

26. The factor may be calculated having reference to the expressions H and U as used in the calculation of contributions (see page 26 of this Ruling). By way of example, this method would produce the following factors for pensions payable at the ages stated:-

	Male Factor	Female Factor	Female Factor
Pension	Age 65	Age 65	Age 60
Pension without indexation or reversion	8.23	9.26	9.94
Pension indexed at 5% per annum, without reversion	10.95	13.16	14.96
Pension without indexation but with 2/3rds reversion to spouse	9.60	9.75	10.31
Pension with 5% indexation and reversion to spouse	14.32	14.46	16.13

The revised factors will not affect payments made on the basis of the 8 times factor before the date of this Ruling.

27. Difficulties may arise where a member of a section 23F fund ceases employment with a particular employer and takes up new employment at a reduced salary and/or in circumstances where he or she becomes an associated employee within the meaning of the relevant provisions of the income tax law. The combination of the benefit in the fund of the previous employer and the reduced salary and/or status as an associated employee may produce anomalies in the level of benefit which can be provided in the new employment. This matter is currently being examined and will be the subject of further advice.

28. It is the responsibility of the fund trustee to ensure that benefits being provided from a fund under his control are not excessive in amount. In the normal course of events, the responsibility would be discharged by the trustee requiring members, throughout their membership, to advise him of benefits received or likely to be received from any other superannuation fund, from an Approved Deposit Fund or by way of roll-over annuity. Subject to the exception in paragraph 24 this applies to new and existing members alike. Should excessive benefits be provided without regard to information supplied by members, or as a result of the trustee's failure to make enquiries of members, it should not be assumed that exemption of the fund in terms of either section 23F, section 23FB, or paragraph 23(ja) will continue.

29. In ascertaining permissible contributions the Reduction Factors specified in the Ready Reckoners should be applied in respect of amounts accruing on the member's behalf in other superannuation funds or Approved Deposit Funds as if they were balances in the present fund.

30. The question has been raised as to which trustee should be responsible for restricting benefit payments where an

individual is a member of more than one fund. The Income Tax Assessment Act does not specify any order of priority and it is not possible, therefore, to lay down any hard and fast rules. As a matter of practice, where a member of a section 23F, section 23FB, or paragraph 23(ja) fund is also a member of a paragraph 23(jaa) fund or Approved Deposit Fund, the trustee of a fund in the former group should take appropriate action to limit benefits. Where an individual is concurrently a member of two or more funds to which sections 23F or 23FB or paragraph 23(ja) apply the limitation would usually be applied in the fund which the individual has more recently joined.

#### Contributions

31. In Taxation Ruling No. IT 2026 life expectancies were based on the 1975-77 Australian Life Tables. For the 1985/86 and subsequent years the 1980/82 Life Tables will be used. The later Tables indicate that at age 65 the life expectancy of a male would be 13.80 years while that of a female would be 18 years. For the purpose of reversionary pensions it may be assumed that the pension will be payable to a male for 4.40 years and to a female for 10.89 years. Where a normal retirement age other than 65 has been accepted, the method of calculation illustrated by the following example for a male aged 62 may be applied to determine the period of payment of reversionary pension:-

Age at anticipated retirement -	62
Life expectancy at that age	15.81
	77.81
Age of spouse at expiration of	
life expectancy of member	74
Life expectancy of spouse at that age	11.53 years.

The assumption that males are three years older than their spouses will remain. Deductions for funding of reversionary pensions will be allowed on the basis of the assumed age difference and not on the basis of actual age differences between members and their spouses.

32. Under the previous guidelines deductible contributions relating to pension funds reflected the cost of providing the permitted level of pension payable yearly in arrears. For the 1985/86 and subsequent years deductible contributions may be calculated on the basis of a pension payable monthly in advance. The Ready Reckoners have been revised to reflect this change in basis and revised formulae for calculation of pension fund contributions are included with this Ruling.

33. It has been the practice where an associated employee will have total service with the employer of less than twenty years to apply a pro-rata reduction to the level of benefit, and hence contribution, permissible in respect of members of section 23F or employer-sponsored section 23FB superannuation funds. This practice will continue. In calculating the 20 year period past employment as a self-employed person must not be taken into account.

34. The approach set out in paragraphs 44 and 45 of Taxation Ruling No. IT 2067 where an employee joins a fund with less than 3 years to retirement will continue to have application. Bearing in mind the limited tax deductibility available for contributions made by members of non-employer sponsored section 23FB or paragraph 23(ja) funds neither the 3 year membership requirement nor the 20 year service requirement will apply in such funds.

35. Where a section 23F fund has less than 10% of its assets lent back to the contributing employer paragraph 35 of Taxation Ruling No. IT 2067 indicates that contributions may be reviewed at intervals up to 5 years, rather than yearly, provided that nothing occurrs in the intervening period to warrant a change in the contribution rates. During the five year period the percentage of salary contribution determined in the first year could be applied to the salary in subsequent years. Subject to the same constraints this practice may be applied to members of section 23FB or paragraph 23(ja) funds.

36. Paragraph 43 of Taxation Ruling No IT 2067 stressed the necessity for contributions to be calculated with greater precision within ten years of retirement. Clarification has been sought as to acceptable practice in this regard. There would be no objection to contributions being reviewed annually, having regard to the deemed earning rate of the fund, until 5 years from retirement. Within 5 years the annual review must have regard to the actual earning rate of the fund.

37. In calculating deductible contributions it is necessary to have regard to a member's future service until retirement. It is the practice in a number of funds for the employer's contribution to be made once annually. This means that in these cases, contributions will be made in either the first or last year of membership, but not both. It will not be necessary, therefore, to take into account in these cases every financial year in which a period of membership will fall. By way of example in a fund in which contributions were made on 30 June each year a member whose date of birth was 16 October 1954 would in the 1984/85 year be regarded as having 35 years future service until age 65 including the 1984/85 year. This represents contributions on 30 June each year from and including the year 1984/85 to and including the 2018/19 year. There would be no contribution in the 2019/20 year because the employee would have retired on 15 October 2019. In some cases the trustees of particular funds calculate contributions with greater precision eg., by counting future service on the basis of years and months. The abovementioned practice would not apply to them.

#### Transfer Between Funds

38. Where a trustee of a superannuation fund pays a member an amount in excess of that permitted under the guidelines the exempt status of the fund may be endangered. This would be so notwithstanding that the amount paid did not exceed the member's entitlement under the deed. In some cases, however, a member of a superannuation fund who has changed employment may wish to transfer a benefit from the fund of the former employer to the fund of the new employer. There would be no objection to a transfer between funds of an amount, even though it may be excessive, provided that the trust deed of the fund to which the transfer is made precludes the payment of a benefit in excess of the guidelines. This does not mean that a member would be entitled to take a part of an otherwise excessive entitlement in cash and transfer the balance to another fund - it means that no objection would be taken provided the whole entitlement is transferred. Similarly, a member would not be permitted to transfer an excessive amount which is attributable to assets of an exempt superannuation fund to an Approved Deposit Fund or towards a roll-over annuity.

39. Where a life policy is transferred from the trustee of one fund to the trustee of another fund operating under either section 23FB or paragraph 23(ja) it has been the practice not to regard the amount transferred as a contribution such as would preclude the member from further contributions in that year. On the other hand a transfer of other assets or the payment into a fund of cash received by the member from another fund has been regarded as a contribution by the member and accordingly reduced the scope for further contributions in that year. In the light of the 90 day period provided under the Eligible Termination Payment legislation a transfer between trustees of assets of whatever nature or a cash payment into a fund within 90 days of receipt of the amount from another fund will not be regarded as contributions by the member. The amount will, of course, be taken into account under the Ready Reckoners as an asset presently held in the fund on the member's behalf.

40. Under the previous guidelines a person who ceased membership of a section 23F fund and was unemployed was permitted to transfer his benefit to a section 23FB fund on the assumption that he would become eligible for membership within a short time. If the membership criteria was not met within 6 months, the trustees were required to refund moneys held on the person's behalf. This practice will be extended to include transfers to paragraph 23(ja) funds.

#### Commercial Rate of Interest

41. Taxation Ruling No. IT 294 specified that a commercial rate of interest of at least 17.5% was required on arrangements deemed to be loans back. This rate has been reviewed and for 1985/86 a rate of at least 16.5% is deemed appropriate in respect of arrangements involving 'in-house assets' as that term is defined in section 121C. The weighted earning rates applicable to section 23F or employer-sponsored section 23FB funds will thus be as follows :-

			Loan Back %	Deemed Earning Rate
Not	more	than	70	14
"		"	60	13.5
"		"	50	13

"	" 40	12
"	" 30	11
"	" 20	10
"	" 10	9.

#### Death/Disability Benefits

42. The maximum amount of lump sum death or disability benefit which may be paid will now be seven times the member's salary at the date of death or disability. A disability pension of up to 75% of salary may be provided to a disabled member while the maximum pension payable to a deceased member's spouse will be two-thirds of the pension to which the member would have been entitled. The benefits should be proportionately reduced in the case of an associated employee who would have less than 20 years service at normal retirement age.

43. In terms of paragraph 45 of Taxation Ruling No. IT 294 income tax deductions will be granted for the amount of premium necessary to provide the difference between the maximum amount of death or disability benefit permitted and the amount held in the fund on the member's behalf. Where the benefit is to be provided by way of pension this difference should be determined having regard to the guideline assumptions and the basis set out in paragraph 26 of this Ruling. In the case of an unallocated fund the balance presently held in the fund on the member's behalf should be taken as the member's equitable share of the fund, calculated in accordance with standard actuarial practice.

COMMISSIONER OF TAXATION 21 October 1985

## APPENDIX

TABLE

### TABLE OF CONTRIBUTIONS TO LUMP SUM FUND

SALARY GROWTH	RATE = 8% NET	OF CHARGES INTERES	ST RATE	
		9%	109	0
YRS. TO RETIREMENT	 % CONT	\$ REDUCTION	% CONT	\$ REDUCTION
		PER \$100 ASSETS	PEI	R \$100 ASSETS
50	10.15780	2.30058	7.84109	2.80365
49	10.41661	2.33756	8.08592	2.83863
48	10.68640	2.37610	8.34166	2.87516
47	10.96785	2.41631	8.60898	2.91335
46	11.26174	2.45829	8.88866	2.95331
45	11.56889	2.50217	9.18151	2.99514
44	11.89021	2.54807	9.48844	3.03899
43	12.22667	2.59614	9.81043	3.08499
42	12.57938	2.64652	10.14855	3.13329
41	12.94951	2.69940	10.50401	3.18407
40	13.33837	2.75495	10.87808	3.23751
39	13.74740	2.81338	11.27222	3.29381
38	14.17820	2.87493	11.68800	3.35321
37	14.63253	2.93983	12.12718	3.41595
36	15.11235	3.00838	12.59172	3.48231

35	15.61985	3.08088	13.08379	3.55261
34	16.15747	3.15768	13.60582	3.62719
33	16.72794	3.23917	14.16054	3.70643
32	17.33435	3.32580	14.75101	3.79079
31	17.98018	3.41807	15.38071	3.88074
30	18.66936	3.51652	16.05355	3.97686
29	19.40638	3.62181	16.77399	4.07978
27	20.19638	3.73467	17.54715	4.19023
27	21.04522	3.85593	18.37888	4.30905
26	21.95972	3.98657	19.27594	4.43720
25	22.94773	4.12772	20.24617	4.57581
24	24.01846	4.28068	21.29873	4.72617
23	25.18269	4.44700	22.44435	4.88983
22	26.45317	4.62849	23.69573	5.06860
21	27.84509	4.82734	25.06797	5.26464
20	29.37665	5.04613	26.57922	5.48053
19	31.06991	5.28803	28.25141	5.71941
18	32.95181	5.55687	30.11139	5.98512
17	35.05565	5.85742	32.19228	6.28239
16	37.42304	6.19562	34.53551	6.61714
15	40.10668	6.57900	37.19355	6.99686
14	43.17436	7.01723	40.23387	7.43119
13	46.71469	7.52300	43.74469	7.93274
12	50.84583	8.11316	47.84362	8.51830
11	55.72892	8.81074	52.69108	9.21079
10	61.58955	9.64798	58.51162	10.04230
9	68.75354	10.67140	65.62961	11.05916
8	77.70967	11.95085	74.53158	12.33087
7	89.22601	13.59604	85.98211	13.96666
6	104.58264	15.78985	101.25548	16.14857
5	126.08376	18.86143	122.64540	19.20427

## TABLE OF CONTRIBUTIONS TO LUMP SUM FUND

SALARY GROWTH RATE = 8%

## NET OF CHARGES INTEREST RATE

	-	118	1	28	13%	
YRS.	TO	\$ \$		\$		\$
RETI	REMENT					
	% CONT	REDUCTION	% CONT	REDUCTION	% CONT	REDUCTION
	PER	\$100 ASSET	S PE	R \$100 ASSE	TS PER	\$100 ASSETS
50	5.96818	3.35510	4.48443	3.94751	3.33081	4.57284
49	6.19257	3.38715	4.68413	3.97604	3.50385	4.59756
48	6.42770	3.42074	4.89430	4.00606	3.68692	4.62372
47	6.67428	3.45597	5.11563	4.03768	3.88071	4.65140
46	6.93305	3.49293	5.34888	4.07100	4.08597	4.68072
45	7.20485	3.53176	5.59487	4.10614	4.30352	4.71180
44	7.49056	3.57258	5.85450	4.14323	4.53426	4.74476
43	7.79117	3.61552	6.12874	4.18241	4.77916	4.77975
42	8.10776	3.66075	6.41867	4.22383	5.03930	4.81691
41	8.44151	3.70843	6.72547	4.26766	5.31584	4.85642
40	8.79371	3.75874	7.05043	4.31408	5.61009	4.89845
39	9.16579	3.81190	7.39498	4.36330	5.92346	4.94322
38	9.55933	3.86812	7.76069	4.41554	6.25753	4.99095
37	9.97609	3.92765	8.14931	4.47106	6.61404	5.04188

36	10.41801	3.99079	8.56279	4.53013	6.99493	5.09629
35	10.88725	4.05782	9.00328	4.59306	7.40236	5.15449
34	11.38625	4.12911	9.47320	4.66019	7.83873	5.21683
33	11.91771	4.20503	9.97525	4.73191	8.30675	5.28369
32	12.48470	4.28603	10.51249	4.80866	8.80945	5.35551
31	13.09066	4.37259	11.08835	4.89092	9.35026	5.43276
30	13.73949	4.46528	11.70672	4.97926	9.93307	5.51602
29	14.43565	4.56473	12.37204	5.07431	10.56230	5.60591
28	15.18422	4.67167	13.08938	5.17678	11.24300	5.70316
27	15.99103	4.78693	13.86453	5.28752	11.98096	5.80858
26	16.86282	4.91147	14.70422	5.40748	12.78286	5.92314
25	17.80740	5.04641	15.61622	5.53776	13.65646	6.04794
24	18.83387	5.19305	16.60961	5.67968	14.61081	6.18427
23	19.95293	5.35292	17.69503	5.83474	15.65651	6.33366
22	21.17722	5.52782	18.88508	6.00474	16.80611	6.49789
21	22.52178	5.71990	20.19473	6.19184	18.07453	6.67909
20	24.00467	5.93174	21.64197	6.39858	19.47968	6.87982
19	25.64773	6.16646	23.24856	6.62810	21.04324	7.10319
18	27.47769	6.42788	25.04109	6.88417	22.79169	7.35297
17	29.52752	6.72072	27.05241	7.17150	24.75776	7.63384
16	31.83848	7.05085	29.32359	7.49596	26.98233	7.95163
15	34.46280	7.42576	31.90664	7.86497	29.51720	8.31376
14	37.46764	7.85502	34.86842	8.28808	32.42895	8.72972
13	40.94082	8.35119	38.29638	8.77779	35.80466	9.21196
12	44.99945	8.93099	42.30710	9.35075	39.76039	9.77707
11	49.80321	9.61724	47.05955	10.02967	44.45444	10.44765
10	55.57564	10.44188	52.77631	10.84635	50.10840	11.25536
9	62.63966	11.45102	59.77884	11.84671	57.04325	12.24592
8	71.47963	12.71387	68.54935	13.09964	65.73638	13.48792
7	82.85667	14.33917	79.84560	14.71339	76.94492	15.08915
6	98.03934	16.50812	93.93050	16.86837	91.92534	17.22920
5	119.31104	19.54693	116.07728	19.88934	112.94086	20.23142

### TABLE OF CONTRIBUTIONS TO LUMP SUM FUND

SALARY GROWTH RATE = 8%

## NET OF CHARGES INTEREST RATE

		13.5%	14%		
YRS. TO RETIREMENT	% CONT	\$ REDUCTION PER \$100 ASSETS	* CONT	\$ REDUCTION PER \$100	-
ASSETS					
50	2.85941	4.89535	2.44892	5.22314	
49	3.01902	4.91815	2.59532	5.24405	
48	3.18838	4.94234	2.75113	5.26631	
47	3.36816	4.96803	2.91704	5.29001	
46	3.55913	4.99531	3.09380	5.31526	
45	3.76209	5.02430	3.28221	5.34218	
44	3.97794	5.05514	3.48318	5.37089	
43	4.20766	5.08796	3.69766	5.40153	
42	4.45232	5.12291	3.92674	5.43425	
41	4.71308	5.16016	4.17156	5.46923	
40	4.99124	5.19990	4.43344	5.50664	
39	5.28822	5.24232	4.71378	5.54669	

38	5.0	60559	5.2876	66	5.	01414	5.589	60
37	5.9	94510	5.3363	16	5.	33628	5,635	62
36	6	30867	5 3881	10	5	68212	5 685	502
35	6	59847	5 443	79	6	05382	5 738	12
31	7	11689	5 5030	56	6	15377	5 795	26
27	7.1	56664	5.505	01	0.	43377	5 950	20
33	/.:		5.50/0	81	ю.	0040/	5.850	082
32	8.0	15075	5.636	97	/.	34956	5.923	23
31	8.5	57265	5.711	53	7.	85185	5.994	98
30	9.1	13621	5.7920	03	8.	39542	6.072	64
29	9.	74585	5.8792	13	8.	98468	6.156	82
28	10	.40662	5.9735	52	9.	62466	6.248	24
27	11	.12429	6.0760	05	10.	32114	6.347	74
26	11	.90555	6.1876	65	11.	08079	6.456	26
25	12	75814	6.3094	45	11.	91134	6.574	91
24	13	69108	6 442	73	12	82180	6 704	98
23	11	71/97	6 5890	, <u>,</u>	13	82276	6 847	90
20	15	04000	6 7500		1.5.	02270	7 005	57
	17	.04233	6.7500	0.0	14.	92072 14054	7.000	000
21	1/	.08806	6.9280	JI	16.	14854	7.180	22
20	18	.47003	7.1254	44	17.	50607	7.374	16
19	20	.00989	7.3454	42	19.	02092	7.590	56
18	21	.73406	7.591	73	20.	71946	7.833	21
17	23	.67521	7.8690	03	22.	63429	8.106	576
16	25	.87414	8.1831	17	24.	80615	8.417	03
15	28	.38254	8.5415	51	27.	28661	8.771	.38
14	31	26686	8.9535	56	30.	14199	9.179	29
13	34	61398	9 431	72	33	45899	9 653	15
12	38	53974	9 992	54	33.	35321	10 200	46
11	13	20208	10 659	259 259	<u>л</u> 1	08227	10.203	76
10	40	.20200	11 40	1 4 5	41.	50227	11 (00	
10	48	.82214	11.40	145	4/.	20002	11.000	
9	55	./1928	12.440	6/6	54.	42555	12.648	37
8	64	.37256	13.682	294	63.	03649	13.878	50
7	75	.53478	15.27	754	74.	15079	15.466	526
6	90	.46054	17.409	980	89.	02037	17.590	49
5	111	1.40816	20.402	231	109.	89861	20.573	09
SALARY GI INTEREST	TABLE OF CONTRIBUTIONS TO PENSION FUNDS : NOT PROVIDING REVERSIONARY PENSION TO SURVIVING SPOUSE SALARY GROWTH RATE = 8% INTEREST RATE = 9%							
YRS TO	NO	POST RET	TREMEN	г 5%	POST RETT	REMENT	REDUC	TTON .
RETIREME	NT	INCREAS	ES		INCREASE	S	PER ASSE	\$100 CTS
ז	MALES	FEM	ALES	MALES	FEMA	LES		
50 9	27375	10 39	178	12 23521	14 640	28	2 30058	
10 0	50102	10.55	ц / О р / Л	12.20021	15 005	10	2.30030	
49 9.	72077	10.04	244	12.05004	15.005	57	2.33730	
40 9.	00701	10.91	-00	12.00004	15.303	10	2.37610	
4/ 9.	90/91	11.19	509	13.18553	15./82	40	2.41631	
46 10.2	24/00	11.48	053	13.53031	16.196	/6	2.45829	
45 10.	51779	11.79	112	13.89064	16.629	82	2.50217	
44 10.3	80106	12.10	976	14.26759	17.082	85	2.54807	
43 11.0	09769	12.443	343	14.66232	17.557	24	2.59614	
42 11.	40864	12.793	320	15.07610	18.054	53	2.64652	
41 11.	73495	13.16	025	15.51032	18.576	39	2.69940	
40 12.	07777	13.54	587	15.96651	19.124	65	2.75495	
39 12.4	43838	13.95	150	16.44637	19.701	36	2.81338	

38	12.81818	14.37871	16.95176	20.30875	2.87493
37	13.21872	14.82926	17.48476	20.94932	2.93983
36	13.64173	15.30508	18.04766	21.62583	3.00838
35	14.08915	15.80835	18.64304	22.34137	3.08088
34	14.56311	16.34149	19.27374	23.09937	3.15768
33	15.06605	16.90722	19.94299	23.90369	3.23917
32	15.60066	17.50858	20.65441	24.75868	3.32580
31	16.17003	18.14903	21.41206	25.66925	3.41807
30	16.77762	18.83247	22.22058	26.64094	3.51652
29	17.42738	19.56336	23.08522	27.68009	3.62181
28	18.12385	20.34678	24.01200	28.79392	3.73467
27	18.87220	21.18856	25.00783	29.99073	3.85593
26	19.67842	22.09543	26.08067	31.28010	3.98657
25	20.54947	23.07522	27.23977	32.67313	4.12772
24	21.49343	24.13704	28.49589	34.18277	4.28068
23	22.51983	25.29158	29.86172	35.82425	4.44700
22	23.63990	26.55148	31.35219	37.61554	4.62849
21	24.86702	27.93181	32.98512	39.57803	4.82734
20	26.21726	29.45062	34.78187	41.73742	5.04613
19	27.71005	31.12978	36.76823	44.12478	5.28803
18	29.36915	32.99601	38.97608	46.77812	5.55687
17	31.22391	35.08233	41.44421	49.74438	5.85742
16	33.31102	37.43001	44.22152	53.08222	6.19562
15	35.67695	40.09131	47.36985	56.86596	6.57900
14	38.38144	43.13345	50.96871	61.19115	7.01723
13	41.50262	46.64430	55.12206	66.18275	7.52300
12	45.14467	50.74105	59.96852	72.00735	8.11316
11	49.44965	55.58348	65.69714	78.89214	8.81074
10	54.61642	61.39531	72.57254	87.15517	9.64798
9	60.93226	68.49966	80.97701	97.25587	10.67140
8	68.82806	77.38123	91.48393	109.88334	11.95085
7	78.98096	88.80168	104.99436	126.12051	13.59604
6	92.51950	104.03045	123.01005	147.77220	15.78985
5	111.47507	125.35255	148.23416	178.08716	18.86143

TABLE OF CONTRIBUTIONS TO PENSION FUNDS : PROVIDING 2/3 RDS REVERSIONARY PENSION TO SURVIVING SPOUSE SALARY GROWTH RATE = 8% INTEREST RATE = 9%

					\$
YRS.	TO NO	POST RETIREM	ENT 5% POST	RETIREMENT	REDUCTION
RETI	REMENT	INCREASES	INCR	EASES	PER \$100
	MALE	FEMALE	MALE	FEMALE	ASSETS
	S CONT	 % сомт	% СОМТ	S CONT	
50	8.95520	10.07322	11.91666	14.32173	2.30058
49	9.18337	10.32988	12.22029	14.68664	2.33756
48	9.42122	10.59742	12.53679	15.06702	2.37610
47	9.66935	10.87654	12.86698	15.46385	2.41631
46	9.92845	11.16798	13.21175	15.87821	2.45829
45	10.19923	11.47257	13.57209	16.31127	2.50217
44	10.48251	11.79121	13.94904	16.76430	2.54807
43	10.77914	12.12488	14.34377	17.23869	2.59614
42	11.09009	12.47465	14.75754	17.73598	2.64652
41	11.41640	12.84169	15.19176	18.25783	2.69940
40	11.75922	13.22732	15.64796	18.80610	2.75495
39	12.11983	13.63294	16.12782	19.38281	2.81338

38	12.49962	14.06016	16.63321	19.99020	2.87493
37	12.90016	14.51070	17.16621	20.63077	2.93983
36	13.32318	14.98653	17.72911	21.30728	3.00838
35	13.77059	15.48980	18.32448	22.02282	3.08088
34	14.24456	16.02294	18.95519	22.78081	3.15768
33	14.74749	16.58866	19.62444	23.58514	3.23917
32	15.28211	17.19003	20.33585	24.44013	3.32580
31	15.85148	17.83047	21.09351	25.35069	3.41807
30	16.45906	18.51392	21.90202	26.32239	3.51652
29	17.10883	19.24481	22.76667	27.36154	3.62181
28	17.80530	20.02822	23.69345	28.47537	3.73467
27	18.55365	20.87000	24.68928	29.67218	3.85593
26	19.35987	21.77688	25.76212	30.96155	3.98657
25	20.23092	22.75667	26.92121	32.35458	4.12772
24	21.17488	23.81849	28.17734	33.86422	4.28068
23	22.20127	24.97302	29.54316	35.50570	4.44700
22	23.32134	26.23293	31.03363	37.29698	4.62849
21	24.54847	27.61325	32.66656	39.25948	4.82734
20	25.89870	29.13206	34.46332	41.41887	5.04613
19	27.39149	30.81122	36.44977	43.80623	5.28803
18	29.05060	32.67746	38.65753	46.45957	5.55687
17	30.90536	34.76378	41.12566	49.42583	5.85742
16	32.99247	37.11146	43.90297	52.76367	6.19562
15	35.35839	39.77276	47.05130	56.54741	6.57900
14	38.06288	42.81490	50.65015	60.87260	7.01723
13	41.18407	46.32575	54.80350	65.86420	7.52300
12	44.82612	50.42250	59.64997	71.68880	8.11316
11	49.13109	55.26493	65.37858	78.57359	8.81074
10	54.29787	61.07676	72.25399	86.83662	9.64798
9	60.61371	68.18111	80.65846	96.93731	10.67140
8	68.50951	77.06267	91.16538	109.56479	11.95085
7	78.66241	88.48312	104.67581	125.80195	13.59604
6	92.20095	103.71190	122.69150	147.45365	15.78985
5	111.15651	125.03400	147.91560	177.76860	18.86143

TABLE OF CONTRIBUTIONS TO PENSION FUNDS :

SALARY GROWTH RATE = 8%

INTERE	LST RATE = 10	010		<u> -</u>
YRS. I PER	0	NO POST RE:	FIREMENT	REDUCTION
RETIRE ASSETS	CMENT S	INCREA	ASES	\$100
	MALE	FEMA	ALE	
	% CONT	% CONT		
50	6.566	36	7.31020	2.80365
49	6.771	39	7.53846	2.83863
48	6.985	55	7.77688	2.87516
47	7.209	42	8.02610	2.91335
46	7.443	62	8.28684	2.95331
45	7.688	87	8.55987	2.99514
44	7.945	90	8.84601	3.03899
43	8.215	54	9.14620	3.08499
42	8.498	70	9.46144	3.13329

41	8.79636	9.79282	3.18407
40	9.10963	10.14157	3.23751
39	9.43969	10.50902	3.29381
38	9.78787	10.89665	3.35321
37	10.15566	11.30610	3.41595
36	10.54468	11.73918	3.48231
35	10.95675	12.19794	3.55261
34	11.39391	12.68462	3.62719
33	11 85845	13 20179	3 70643
32	12 35294	13 75228	3 79079
31	12.88026	14 33934	3 88074
30	13 1/371	14 96663	3 97686
29	14 04704	15 63829	1 07978
29	14.04/04	16 25010	4.07978
20	15 20102	17 12452	4.19023
27	15.39102	17.13452	4.30905
26	16.14224	10.07520	4.43/20
25	16.954/4	18.8/539	4.5/581
24	17.83619	19.85668	4./261/
23	18.79556	20.92474	4.88983
22	19.84350	22.09139	5.06860
21	20.99266	23.37073	5.26464
20	22.25822	24.77965	5.48053
19	23.65857	26.33863	5.71941
18	25.21617	28.07267	5.98512
17	26.95876	30.01267	6.28239
16	28.92106	32.19725	6.61714
15	31.14698	34.67533	6.99686
14	33.69303	37.50980	7.43119
13	36.63309	40.78291	7.93274
12	40.06567	44.60433	8.51830
11	44.12507	49.12359	9.21079
10	48.99936	54.55004	10.04230
9	54.96017	61.18610	11.05916
8	62.41495	69.48535	12.33087
7	72.00396	80.16062	13.96666
6	84.79434	94.39989	16.14857
5	102 70689	114 34159	19 20427
0	102.70000	111.01103	19.2012/
	TABLE OF	CONTRIBUTIONS TO PENSION FUNDS	:
SALARY	GROWTH RATE =	88	-
INTERES	ST RATE = 11%		
			\$

YRS. TO RETIREMENT	NO POST RETIREMENT INCREASES		REDUCTION PEF \$100 ASSETS	
	MALE	FEMALE		
	% CONT	% CONT		
50	4.75582	5.24451	3.35510	
49	4.93463	5.44169	3.38715	
48	5.12200	5.64831	3.42074	
47	5.31848	5.86499	3.45597	
46	5.52469	6.09238	3.49293	
45	5.74127	6.33122	3.53176	
44	5.96894	6.58229	3.57258	
43	6.20849	6.84645	3.61552	
42	6.46077	7.12465	3.66075	

41	6.72672	7.41793	3.70843
40	7.00737	7.72742	3.75874
39	7.30387	8.05439	3.81190
38	7.61747	8.40021	3.86812
37	7.94957	8.76643	3.92765
36	8.30172	9.15477	3.99079
35	8.67564	9.56712	4.05782
34	9.07327	10.00561	4.12911
33	9.49678	10.47263	4.20503
32	9.94859	10.97086	4.28603
31	10.43145	11.50334	4.37259
30	10.94848	12.07350	4.46528
29	11.50323	12.68525	4.56473
28	12.09973	13.34305	4.67167
27	12.74265	14.05204	4.78693
26	13.43735	14.81812	4.91147
25	14.19005	15.64816	5.04641
24	15.00800	16.55016	5.19305
23	15.89974	17.53353	5.35292
22	16.87533	18.60937	5.52782
21	17.94676	19.79089	5.71990
20	19.12842	21.09397	5.93174
19	20.43771	22.53781	6.16646
18	21.89594	24.14587	6.42788
17	23.52937	25.94715	6.72072
16	25.37089	27.97789	7.05085
15	27.46211	30.28400	7.42576
14	29.85655	32.92448	7.85502
13	32.62420	35.97653	8.35119
12	35.85837	39.54303	8.93099
11	39.68630	43.76430	9.61724
10	44.28614	48.83680	10.44188
9	49.91519	55.04427	11.45102
8	56.95943	62.81234	12.71387
7	66.02537	72.80985	14.33917
6	78.12387	86.15154	16.50812
5	95.07448	104.84393	19.54693
	TABLE OF CONTRIBUTIO	ONS TO PENSION FUNDS	:
SALARY GROWT	'H RATE = 8%		
INTEREST RAT	'E = 12%		
			\$
YRS. TO PER	NO POST RETIREMEN	ľ	REDUCTION

RETIREMENT	INCREASES MALE	FEMALE	\$100 ASSETS
	% CONT	% CONT	
50	3.40612	3.72352	3.94751
49	3.55781	3.88934	3.97604
48	3.71744	4.06384	4.00606
47	3.88555	4.24762	4.03768
46	4.06271	4.44129	4.07100
45	4.24955	4.64554	4.10614
44	4.44675	4.86112	4.14323
43	4.65505	5.08882	4.18241

42	4.87526	5.32956	4.22383
41	5.10829	5.58430	4.26766
40	5.35511	5.85412	4.31508
39	5.61681	6.14021	4.36330
38	5.89458	6.44387	4.41554
37	6.18976	6.76655	4.47106
36	6.50382	7.10987	4.53013
35	6.83839	7.47562	4.59306
34	7.19531	7.86580	4.66019
33	7.57664	8.28267	4.73191
32	7.98470	8.72875	4.80866
31	8.42209	9.20690	4.89092
30	8.89177	9.72035	4.97926
29	9.39711	10.27278	5.07431
28	9.94196	10.86839	5.17678
27	10.53072	11.51202	5.28752
26	11.16850	12.20923	5.40748
25	11.86121	12.96649	5.53776
24	12.61573	13.79132	5.67968
23	13.44015	14.69257	5.83474
22	14.34405	15.68069	6.00474
21	15.33879	16.76813	6.19184
20	16.43803	17.96980	6.39858
19	17.65830	19.30378	6.62810
18	19.01981	20.79216	6.88417
17	20.54750	22.46221	7.17150
16	22.27256	24.34802	7.49596
15	24.23450	26.49278	7.86497
14	26.48410	28.95201	8.28808
13	29.08779	31.79832	8.77779
12	32.13410	35.12850	9.35075
11	35.74380	39.07457	10.02967
10	40.08593	43.82132	10.84635
9	45.40466	49.63567	11.84671
8	52.06625	56.91802	13.09964
7	60.64625	66.29754	14.71339
6	72.10390	78.82286	16.86837
5	88.16581	96.38149	19.88934

#### TABLE OF CONTRIBUTIONS TO PENSION FUNDS

SALARY GROWTH RATE = 8% INTEREST RATE = 13%

YRS. TO PER	NO POST RETIREMEN	Т	\$ REDUCTION
RETIREMENT	INCREASES MALES	FEMALES	\$100 ASSETS
	*CONT	*CONT	
50 49	2.41535 2.54083	2.61941 2.75549	4.57284 4.59756
48	2.67358	2.89946	4.62372
47	2.81411	3.05186	4.65140
46	2.96295	3.21328	4.68072
45	3.12071	3.38437	4.71180

44	3.28803	3.56582	4.74476
43	3.46562	3.75842	4.77975
42	3.65426	3.96299	4.81691
41	3.85480	4.18047	4.85642
40	4.06817	4.41187	4.89845
39	4.29541	4.65832	4.94322
38	4.53767	4.92103	4.99095
37	4.79619	5.20140	5.04188
36	5.07240	5.50094	5.09629
35	5.36784	5.82135	5.15449
34	5.68428	6.16452	5.21683
33	6.02366	6.53258	5.28369
32	6.38820	6.92791	5.35551
31	6.78037	7.35322	5.43276
30	7.20300	7.81155	5.51602
29	7.65929	8.30639	5.60591
28	8.15290	8.84170	5.70316
27	8.68803	9.42204	5.80858
26	9.26953	10.05268	5.92314
25	9.90303	10.73969	6.04794
24	10.59508	11.49021	6.18427
23	11.35337	12.31257	6.33366
22	12.18700	13.21663	6.49789
21	13.10680	14.21414	6.67909
20	14.12575	15.31918	6.87982
19	15.25957	16.54879	7.10319
18	16.52747	17.92381	7.35297
17	17.95317	19.46996	7.63384
16	19.56633	21.21940	7.95163
15	21.40450	23.21287	8.31376
14	23.51596	25.50273	8.72972
13	25.96386	28.15744	9.21196
12	28.83237	31.26830	9.77707
11	32.23628	34.95979	10.44765
10	36.33627	39.40617	11.25536
9	41.36445	44.85916	12.24592
8	47.66895	51.69630	13.48792
7	55.79686	60.51090	15.08915
6	66.65996	72.29178	17.22920
5	81.89943	88.81877	20.23142

## TABLE OF CONTRIBUTIONS TO PENSION FUNDS

SALARY	GI	ROWTH	RÆ	ΑTΕ	=	8%
INTERES	ЗT	RATE	=	13.	. 5 %	5

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YRS. TO RETIREMENT	NO POST RETIREMENT INCREASES		REDUCTION PER \$100 ASSETS
	MALES	FEMALES	
	%CONT	%CONT	
50	2.02722	2.19029	4.89535
49	2.14038	2.31255	4.91815
48	2.26045	2.44228	4.94234
47	2.38791	2.57999	4.96803
46	2.52330	2.72627	4.99531
45	2.66719	2.88174	5.02430

44	2.82022	3.04708	5.05514
43	2.98308	3.22304	5.08796
42	3.15654	3.41045	5.12291
41	3.34141	3.61019	5.16016
40	3.53861	3.82326	5.19990
39	3.74916	4.05075	5.24232
38	3.97417	4.29385	5.28766
37	4.21487	4.55391	5.33616
36	4.47263	4.83241	5.38810
35	4.74898	5.13099	5.44379
34	5.04563	5.45150	5.50356
33	5.36448	5.79600	5.56781
32	5.70770	6.16683	5.63697
31	6.07771	6.56660	5.71153
30	6.47726	6.99829	5.79203
29	6.90947	7.46527	5.87913
28	7.37793	7.97141	5.97352
27	7.88674	8.52115	6.07605
26	8.44062	9.11959	6.18765
25	9.04508	9.77266	6.30945
24	9.70650	10.48729	6.44273
23 1	L0.43240	11.27158	6.58900
22 1	L1.23166	12.13513	6.75005
21 1	L2.11484	13.08936	6.92801
20 1	L3.09461	14.14794	7.12544
19 1	L4.18632	15.32746	7.34542
18 1	L5.40870	16.64817	7.59173
17 1	L6.78490	18.13508	7.86903
16 1	L8.34387	19.81945	8.18317
15 2	20.12224	21.74087	8.54151
14 2	22.16712	23.95024	8.95356
13 2	24.54011	26.51412	9.43172
12 2	27.32334	29.52123	9.99254
11 3	30.62878	33.09256	10.65859
10 3	34.61320	37.39749	11.46145
9	39.50304	42.68066	12.44676
8 4	15.63792	49.30903	13.68294
7	53.55154	57.85923	15.27754
6 6	54.13339	69.29228	17.40980
5	78.98453	85.33804	20.40231
	TABLE	OF CONTRIBUTIONS	TO PENSION FUNDS

INTEREST RATE	= 14%		
			\$
YRS. TO RETIREMENT	NO POST RETIR INCREASES	REMENT S	REDUCTION PER \$100 ASSETS
	MALES	FEMALES	
	%CONT	%CONT	
50	1.69809	1.82814	5.22314
49	1.79961	1.93743	5.24405
48	1.90765	2.05374	5.26631
47	2.02269	2.17760	5.29001
46	2.14525	2.30955	5.31526

SALARY GROWTH RATE = 8%

45	2.27590	2.45020	5.34218
44	2.41525	2.60022	5.37089
43	2.56398	2.76034	5.40153
42	2.72282	2.93134	5.43425
41	2.89258	3.11411	5.46923
40	3.07417	3.30960	5.50664
39	3.26855	3.51888	5.54669
38	3.47683	3.74310	5.58960
37	3.70020	3.98358	5.63562
36	3.94001	4.24176	5.68502
35	4.19775	4.51923	5.73812
34	4.47508	4.81780	5.79526
33	4.77387	5.13947	5.85682
32	5.09622	5.48652	5.92323
31	5.44451	5.86148	5.99498
30	5.82143	6.26726	6.07264
29	6.23002	6.70714	6.15682
28	6.67378	7.18489	6.24824
27	7.15673	7.70482	6.34774
26	7.68347	8.27191	6.45626
25	8.25938	8.89192	6.57491
24	8.89070	9.57160	6.70498
23	9.58477	10.31882	6.84797
22	10.35026	11.14293	7.00568
21	11.19748	12.05503	7.18022
20	12.13880	13.06844	7.37416
19	13.18920	14.19929	7.59056
18	14.36698	15.46727	7.83321
17	15.69473	16.89671	8.10676
16	17.20071	18.51802	8.41703
15	18.92067	20.36971	8.77138
14	20.90061	22.50127	9.17929
13	23.20063	24.97745	9.65315
12	25.90091	27.88452	10.20946
11	29.11072	31.34016	10.87076
10	32.98308	35.50907	11.66855
9	37.73895	40.62918	12.64837
8	43.70982	47.05733	13.87850
7	51.41654	55.35426	15.46626
6	61.72718	66.45454	17.59049
5	76.20426	82.04034	20.57309

TABLE OF REDUCTION FACTORS FOR AMOUNTS PREVIOUSLY RECEIVED FROM OTHER FUNDS

APPLICABLE TO BOTH LUMP SUM AND PENSION FUNDS

#### SALARY GROWTH RATE = 8% \$ REDUCTION PER \$100 RECEIVED FUND EARNING RATE

YRS. TO	9%	10%	11%	12%
KETTKEMENT				
50	0.03341	0.02579	0.01963	0.01475
49	0.03700	0.02872	0.02200	0.01664
48	0.04100	0.03200	0.02466	0.01877
47	0.04544	0.03567	0.02765	0.02119

46	0.05040	0.03978	0.03102	0.02393
45	0.05591	0.04437	0.03482	0.02704
44	0.06206	0.04953	0.03910	0.03056
43	0.06893	0.05530	0.04392	0.03455
42	0.07659	0.06179	0.04936	0.03908
41	0.08515	0.06907	0.05551	0.04422
40	0.09472	0.07725	0.06245	0.05007
39	0.10544	0.08645	0.07030	0.05672
38	0.11744	0.09681	0.07918	0.06428
37	0.13090	0.10849	0.08924	0.07290
36	0.14601	0.12166	0.10065	0.08273
35	0.16299	0.13652	0.11360	0.09394
34	0.18209	0.15333	0.12832	0.10676
33	0.20360	0.17235	0.14505	0.12141
32	0.22786	0.19390	0.16411	0.13818
31	0.25526	0.21835	0.18584	0.15741
30	0.28624	0.24614	0.21066	0.17949
29	0.32135	0.27776	0.23904	0.20487
28	0.36118	0.31381	0.27155	0.23408
27	0.40647	0.35497	0.30885	0.26778
26	0.45807	0.40209	0.35175	0.30672
25	0.51697	0.45611	0.40117	0.35180
24	0.58438	0.51821	0.45824	0.40412
23	0.66173	0.58977	0.52430	0.46497
22	0.75072	0.67247	0.60099	0.53594
21	0.85344	0.76832	0.69028	0.61896
20	0.97241	0.87981	0.79459	0.71638
19	1.11074	1.00998	0.91690	0.83113
18	1.27226	1.16259	1.06090	0.96683
17	1.46177	1.34237	1.23125	1.12804
16	1.68532	1.55529	1.43383	1.32057
15	1.95068	1.80899	1.67617	1.55185
14	2.26787	2.11341	1.96811	1.83157
13	2.65014	2.48165	2.32259	2.17257
12	3.11527	2.93133	2.75707	2.59211
11	3.68761	3.48659	3.29550	3.11395
10	4.40144	4.18148	3.97166	3.77161
9	5.30648	5.06537	4.83460	4.61380
8	6.47755	6.21263	5.95823	5.71398
7	8.03250	7.74047	7.45910	7.18803
6	10.16817	9.84468	9.53199	9.22972
5	13.23933	12.87829	12.52816	12.18860

TABLE OF REDUCTION FACTORS FOR AMOUNTS PREVIOUSLY RECEIVED FROM OTHER FUNDS

APPLICABLE TO BOTH LUMP SUM AND PENSION FUNDS

SZ	ALARY	GROWI	CH RA	ATE =	8%		
\$	REDUC	CTION	PER	\$100	RECEIVEI	2	
					FUND	EARNING	RATE

YRS. TO	13%	13.5%	14%
RETIREMENT			
50	0.01095	0.00940	0.00805
49	0.01244	0.01072	0.00922
48	0.01414	0.01223	0.01055

47	0.01608	0.01395	0.01208
46	0.01828	0.01592	0.01384
45	0.02080	0.01818	0.01586
44	0.02366	0.02076	0.01818
43	0.02694	0.02372	0.02084
42	0.03068	0.02710	0.02390
41	0.03495	0.03099	0.02743
40	0.03984	0.03544	0.03148
39	0.04543	0.04056	0.03615
38	0.05183	0.04643	0.04153
37	0.05917	0.05318	0.04774
36	0.06758	0.06095	0.05490
35	0.07724	0.06989	0.06317
34	0.08834	0.08020	0.07273
33	0.10110	0.09209	0.08379
32	0.11580	0.10582	0.09661
31	0.13274	0.12170	0.11147
30	0.15229	0.14008	0.12872
29	0.17490	0.16138	0.14877
28	0.20206	0.18611	0.17212
27	0.23140	0.21486	0.19934
26	0.26664	0.24834	0.23114
25	0.30765	0.28742	0.26834
24	0.35549	0.33311	0.31196
23	0.41140	0.38666	0.36322
22	0.47694	0.44959	0.42361
21	0.55397	0.52374	0.49494
20	0.64481	0.61139	0.57948
19	0.75229	0.71535	0.67999
18	0.87998	0.83914	0.79997
17	1.03236	0.98722	0.94381
16	1.21513	1.16523	1.11713
15	1.43563	1.38045	1.32714
14	1.70343	1.64239	1.58330
13	2.03121	1.96366	1.89814
12	2.43607	2.36129	2.28859
11	2.94157	2.85870	2.77798
10	3.58095	3.48903	3.39932
9	4.40260	4.30048	4.20063
8	5.47950	5.36582	5.25445
7	6.92690	6.79996	6.67536
6	8.93754	8.79513	8.65511
5	11.85927	11.69833	11.53982

FORMULAE FOR CONTRIBUTIONS TO FUNDS

#### A. Contributions

1.LUMP SUM

a) 
$$E = (1+I) - 1$$
  
 $-----$   
 $(1+G)$   
b)  $A = SM$   
 $---- N$   
 $(1+E)$ 

-Nc) K = A - B - [[W(1+I)](1+G)]d) V = K E \_\_\_\_\_ [(1+E) [1-( 1 )]] ----N (1+E) e) C = V \_\_\_\_\_ 1+G f)  $P = C/S \times 100$ 2. NON - REVERSIONARY PENSION - as above except that b) A = SF H ---N (1+E) -T (1-(1+R)) (R) 3. REVERSIONARY PENSION U b) A = SF -----N (1 + E) where U = H + X-D [1-(1+R) ) -T L ----- (1 + R) Х = -T R and H has the same meaning as set out in (2) above. B. WITHDRAWAL BENEFITS J [(1+E) -1] 1) LUMP SUM FUND SM -----0 [(1+E) -1] [1+I] J 2) NON-REVERSIONARY PENSION H [(1+E) -1] SF -----Q [(1+E) -1] [1+I] 3) REVERSIONARY PENSION

