

## Expectation of life under State Life 2001-2005 Mortality Table

The Pakistan Society of Actuaries have developed a Mortality Table, based on a study of about 20,000 deaths in years 2001 to 2005, under individual life policies issued by the State Life Insurance Corporation of Pakistan.

Expected ages at death under the new Table are shown below, compared with two older Tables

Present age (yrs)	Expected age at death (yrs)		
	State Life 2001-2005	EFU 1961-1966	Indian LIC 1994-96
25	74.32	69.83	73.91
35	74.88	70.36	74.44
45	75.67	71.20	75.14
55	77.23	72.93	76.46
60	78.52	74.46	77.49
65	80.17	76.45	78.78
70	82.01	78.85	80.44
75	84.19	81.63	82.63
80	86.84	84.79	85.43
85	89.93	88.31	88.85

The data included (1) male and females. The majority are males (2) policies where extra premiums were charged for health or occupational reasons.

The Table excluded deaths in the first 2 policy years.

Most Pakistani employees retire at age 60. For a person who is 60 years old, the average expected age at death under the new Table is 78.52 years.

This is 4.06 years more than EFU 1961-66, and 1.03 years more than Indian LIC 1994-96.

### Probability of living to different ages

The life span of some will be less than the average shown in the Table. For others, it will be more than average. If a person retires at age 60

years, there is an 80% probability that he will live to at least age 70, under the new Table.

The probability that he will live to at least age 80 is 48%.

The probability that he will live to at least age 90 is 14%.

The probability that he will live to at least age 95 is 4%.

And there is a 0.6% probability that he will live to age 100.

### Implications for retirement planning

Future death rates are likely to fall. The probabilities of survival to the ages shown above are likely to increase. Prudent retirement planning should be based on survival to at least age 90, preferably to age 95.

The Pakistani state provides little or no health care to old people. Apart from health costs, at some point every aged person will need help with daily living. These expenses call for much additional savings during working life time.

### Akhtar & Hasan's Total Retirement Benefits Study (TRBS)

Our TRBS systematically studies how an employer's provident fund, pension schemes and gratuity schemes (if any), respond to various phases of retirement. Post retirement living costs, inflation, increasing health care costs, and other relevant factors are taken into account.

TRBS aims to identify shortfalls, to be met by additional savings during working life-time.

If you are interested in a TRBS study for your organisation, please contact Muhammad Hussain, FSA, Senior Manager and Actuary, at:

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### Inflation will hit retirement planning

Suppose a person retires at age 60, and needs Rs 25,000 pm for his expenses. He has Rs 30 lakhs. He invests in Bahbood, currently yielding Rs 1,060 pm per Rs 1 lakh invested. On Rs 30 lakhs, he gets an income of Rs 31,800 pm. With-holding tax or zakat is not deducted, but he has to offer it for tax in his annual return. The tax rate is capped at 10%. At this tax rate, his net income after tax will be Rs 28,620 pm, equal to Rs 343,440 pa. He is happy, because he thinks he will get more than he needs. Also, he thinks that his capital of Rs 30 lakhs will remain in tact. But this is an illusion. If inflation is 8% pa, the Table shows what will happen.

Amounts in Rs 000's

Year	Age	Capital	Income for year less tax	Expense for year increasing @ 8% pa	Excess/shortfall in year
1	60	3,000	343	300	43
2	61	3,043	348	324	24
3	62	3,068	351	350	1
4	63	3,069	351	378	(-) 27
5	64	3,043	348	408	(-) 60
6	65	2,983	341	441	(-) 99
7	66	2,883	330	476	(-) 146
8	67	2,737	313	514	(-) 201
9	68	2,537	290	555	(-) 265
10	69	2,272	260	600	(-) 340
11	70	1,932	221	648	(-) 426
12	71	1,506	172	699	(-) 527
13	72	979	112	755	(-) 643
14	73	335	38	816	(-) 778
15	74	Nil	Nil	881	(-) 881

The capital will run out in Year 14, when he will be only 73 years old!

One of the advantages of our Total Retirement Benefits Study is to help employees to plan in advance how to overcome this inflation squeeze.

### Government securities should be traded on the Stock Exchange

When Pakistan Investment Bonds (PIB's) were introduced in 2000, the authorities indicated that they would be traded on the Stock Exchange. This has not happened yet.

The secondary market in PIB's and other Government securities is conducted through banks. There is no transparency, because the public has no access to current prices.

The advantage of putting PIB's, TB's and other Government securities on the Stock Exchange is that the public will have instant access to current prices and amounts being offered for sale. It will encourage retail investors to buy and sell Government securities.

Our stock trading system is of international standard. There seems no valid reason to keep Government securities out of it

### Cyprus bank hair-cut - or "scalping"?

Under a recent agreement between Greek Cyprus and the Euro authorities, bank accounts in two troubled Cypriot banks will take a "hair-cut" if the balance is over € 100,000. This "hair-cut" could go up to 60% of the excess over € 100,000. Sounds more like "scalping"!

Part of the "scalped" amount will be converted into shares in the bank. The rest may never be paid back.

Withdrawals from accounts and ATM's were frozen as soon as discussions started.

We believe this is the first time depositors have been asked to bail out their banks. The Euro authorities get full marks for originality!

*Readers should take expert advice on legal, tax, investment and medical matters*

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