

To encourage savings and economic growth, new Pakistan government must control the deficit and reduce inflation

Savers have a vital interest in low inflation. The Akhtar & Hasan Letter No 82 of October 2007 showed that real yields, net of inflation, on Bahbood, SSC's, DSC's and other National Savings Schemes, are very sensitive to inflation. This is true of all fixed return investments.

In some cases, the real yield is less than 1% pa. If inflation reduces by 1%, it would double the real yield. If inflation goes up by 1%, the real yield would become zero.

And every Pakistani gains by high growth.

Step 1 towards low inflation is to control the budget deficit. But, as a former Prime Minister remarked, "Pakistanis don't want to pay taxes". In addition to this problem, external events, like oil prices, strongly affect our economy. The country's economic managers have a hard task.

Instead of pruning non-development expenses, the easy way out is to cut back development. This has been done more than once in Pakistan.

To control the budget deficit and reduce inflation, and yet to accelerate development and growth, is the classical objective for any government. It can be done. But it needs integrity of purpose, statesman-like vision, and political skills. It requires good leadership.

We trust the new government which will take office after the 2008 elections will demonstrate these qualities.

Proposed Merger of UK Institute and Faculty of Actuaries

The Institute of Actuaries was founded in London in 1848. It is the oldest existing

professional actuarial body. In 1856, Scottish actuaries broke away to set up their own Faculty of Actuaries in Scotland. But in recent decades, the two bodies have worked very closely together.

On 13 Feb 2008, the Councils of the Faculty and Institute recommended a merger of the two bodies from 1 Jul 2009. Members would vote on this in June 2008. If, as expected, the merger is approved, a new Royal Charter would be applied for. This would replace the Royal Charters granted to the Faculty in 1868, and to the Institute in 1884.

UK Pensioner death rates went down much faster than projected

In 1992, a Committee of the UK Institute and Faculty issued the PML(80) Base Mortality Tables. They were derived from UK pensioner death rates in 1979-82. The expectation of life for a UK male pensioner aged 60 would have been 17.215 years under the Base Tables.

The Committee also made projections of reductions in death rates. Under their projected death rates in the year 2000, his expectation of life would have increased by 12 %, to 19.252 years.

But death rates reduced much faster than projected. Based on actual UK pensioner death rates in 2000, his expectation of life would have increased to 21.580 years. This increase by 25% over base, or 12 % over projected, significantly increased pension costs.

Mortality projection problem for pension schemes and annuities

Death rates have reduced in almost all countries, including Pakistan. Prudence requires future reductions in death rates to be built into pension

valuations. Actuarial valuations on current death rates would under-estimate pension costs.

Similarly, life insurance companies have to build reductions in death rates into their annuity rates.

But death rates are impossible to predict for decades into the future. They depend on unknowns, like future medical advances, changes in life-styles and habits, and efficiency in delivering health care.

So projections of improving future mortality have to be periodically re-calibrated.

Breast cancer epidemic

The Nov 2007 issue of *The Actuary*, the magazine of the Staple Inn Actuarial Society, London, contains an article by Patrick Carroll, director of research at the UK Pension and Population Research Institute. Significant points:

Taking men and women together, "breast cancer has overtaken lung cancer to be [the UK's] most common cancer".

Things which increase the risk:

- Induced abortion, especially where the woman had no previous full term pregnancy.
- Hormonal contraceptives and female Hormone Replacement Therapy.
- Childlessness. "Nuns have long been known to have a higher risk".

Things which reduce the risk:

- Low age at first birth
- More children
- Breast-feeding.

The complete article is on the magazine's website, www.the-actuary.co.uk.

It takes less time to become a brain surgeon than to become a Fellow of the US Society of Actuaries

In the US magazine *The Actuary* of December 2007/January 2008, the President of the US Society of Actuaries said that the average age of attaining Fellowship has been 33 for the last decade. "It actually takes less time to become a brain surgeon". We think a capable student should be able to complete the Fellowship exams before age 30. The problem is that it is hard to study after a long day at work.

Hijri calendar devised in Iran in 11th century was accurate to 1/100th second per year

In 1073, the Seljuk Sultan Jalal-ud-din asked a team of astronomers, including Omar Khayyam, to devise a solar calendar, starting from the Hijra. It was introduced on 15 March 1079, and named the Jalali calendar, to honour the Sultan.

Working at the Isfahan observatory, the team calculated the solar year at that time to be 365.24219858156 days. Modern instruments attest its accuracy to within 1/100th second p.a. But it is now known that over a lifetime, the year's length changes in the 6th decimal place. So the Jalali calculation would by now have caused an error of about $\frac{3}{4}$ second p.a.

The Jalali months varied from 29 to 32 days, depending on the precise times of the sun's transit between zodiacal regions. So the Jalali calendar did not need leap years.

But from 31 March 1925, Iran simplified it, and introduced a leap year. The first 6 months now have 31 days, the next 5 have 30 days, and the 12th has 29 days, or 30 days in a leap year. This Iranian calendar is also used in Afghanistan. (Iranian year = Christian Year *minus* 622).

(Source: Wikipedia)