

Addressing the long-term costs of GCC state pension schemes

Messrs Simon Herborn of Milliman, Khurram Mirza of Osool and Fahad S Alajlan of GOSI discuss the sustainability of state-managed pension schemes in the GCC and consider possible ways of reducing longevity exposure and other risks.

GCC nationals are eligible to participate in state-managed pension schemes. In exchange for contributions made during their career, individuals receive a certain percentage of salary as a lifetime retirement income. There are multiple schemes across the region, but there is considerable similarity among them.

These schemes give considerable protection to the individual participant: they receive a guaranteed retirement income—typically extending to dependents as well. However, the risk of the accumulated contributions being insufficient to meet the cost of the benefits is borne by the state. In the long term, significant shortfalls are expected to emerge. This potentially onerous co-financing requirement for the state prompts us to discuss the sustainability of the schemes in their current formats.

There are many different risk exposure factors contributing to this financing problem. One of the most fundamental is participant longevity: quite simply, higher life expectancy means greater scheme costs (see Figure 1). Accordingly, in this article we give careful consideration to how we can build a better understanding of longevity trends. We then consider other changes to scheme benefits that could be used to reduce longevity exposure and other risks. Finally, we briefly consider the implications for contribution investment strategy.

Understanding the issue

As a starting point, we need to have a clear picture of underlying life expectancies. There are published studies we can refer to—for example, biannual UN mortality statistics or data published by government ministries. However,

such data is only helpful when based on lives of similar composition to the scheme covered populations. The deviation sometimes observed between scheme experience and these studies suggests this may not be the case—and if so, they may not be fit for the purpose.

It is important to develop alternative benchmarks that we consider to be a more meaningful indicator of participant life expectancy. These should be based on past mortality data within the schemes. A significant volume of data is needed to ensure the statistical credibility of this analysis. If we accept that the underlying mortality risk is similar between the populations (or, at least, that we can isolate rating factors to distinguish the schemes), the study could be based on the combined experience of the schemes in each country, or even across the region.

Another aspect of the risk is movements in life expectancies. At this time, they are progressively rising, which is due to improvements in healthcare and changes in lifestyle. Figure 2 compares life expectancies of GCC countries with those in the US. Although the adjustments from year to year are marginal, the impact on the long-term sustainability of the schemes could be significant. Further local research is needed to understand the trends in this region.

Refinements to the benefit structures

With a framework that delivers a meaningful view of life expectancy, we can prepare better forecasts of future financing requirements. As previously mentioned, this analysis is likely to reveal the schemes are not self-sustaining—that is, co-contributions will be required from the state. If these are deemed too onerous, the next recourse is higher contribution rates from the participants or employers. Failing this, the natural progression is refinements to the benefit structure to reduce costs.

One route could be raising the retirement age. All else being equal, this would shorten the time span for which benefits will be paid and thereby lead to a reduction in costs (though it should be noted that the full cost implications are deceptively complex and careful consideration is required to achieve the desired effects). This type of intervention has been very common in other parts of the world, among both state- and employer-sponsored schemes.

There are many other ways

Figure 1: Cost relative to period of receipt

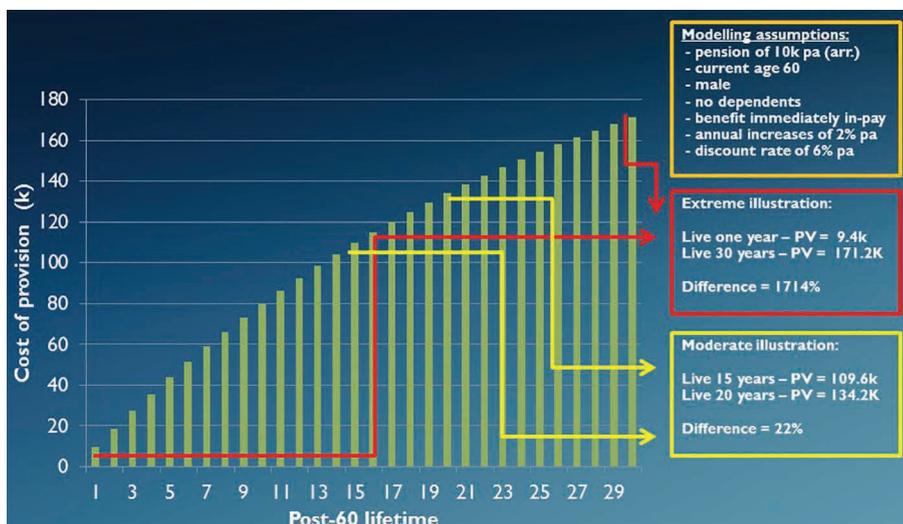


Figure 2: GCC vs. ROTW



Source: United Nations – World Population Prospects: The 2012 Revision

in which the benefits can be refined to help manage costs – for instance, changing the definition of salary for determining benefits (for example, an average of salaries over the individual's career rather than just at retirement age), limiting cost-of-living increases, making dependent benefits less generous (though this coverage often has significant importance, particularly in this region), and penalising early retirements. These changes do not directly target longevity exposure but can still be very effective in reducing the overall quantum of exposure.

Structural reform – migration to defined contribution plans

A more fundamental way of reducing exposure is migration to a defined contribution framework: the employee and employer would contribute a certain percentage of annual earnings, which would accumulate over time—either with investment returns, or at a notional crediting rate determined by the state pension agency.

If the state actively wishes to contribute to the financing of individuals' retirement benefits, it could also make some form of contribution (much as it is effectively doing in those schemes where the current level of contributions is actuarially insufficient to support the benefits being promised). At retirement age, the accumulated contributions could simply be passed to the individual to manage their own retirement income.

There are many examples of large-scale migrations to defined contribution vehicles in other parts of the world. Under such an arrangement, the post-retirement longevity and investment risk is passed from the state to the participant. For the state, this means the obligation is extinguished at the point of retirement, with no further co-financing requirements.

However, without appropriate financial advice (which may be in short supply), it can be very difficult for an individual to judge how to use the fund to provide a sustainable lifetime retirement income. If the funds are drawn down too fast, the individual will fall reliant on other resources of income/ wealth or their broader personal support framework – or, failing this, state or community welfare. This is very much at odds with the paternalistic outlook of the GCC states in looking after their citizens and dependents in old age.

A compromise may be annuitisation of the accumulated funds, i.e., conversion into a guaranteed lifetime income. If there is no mature local annuity market, the state pension agency would need to facilitate this. It could be offered as

an option or made mandatory. The rates could be calibrated to reflect the agency's best estimate of future life expectancy (and investment returns). The residual risk would be borne by the state, but with an expectation these would be modest by virtue of the appropriately selected annuity rates. A mechanism could even be established to adjust benefits for emerging losses.

Variants of this type of arrangement exist in other parts of the world. One example is the Lifelong Income For The Elderly system of Singapore's Central Provident Fund.

Investment solutions

Investment performance on accumulated contributions is another key factor in determining the cost of the schemes. This is a broad-ranging topic and not considered in detail here. However, barring a means of earning markedly higher risk-adjusted investment returns, investment strategy will not be a remedy to the significant financing shortfalls we expect to emerge over the long term. Therefore, it is not a substitute for the structural reforms that may be required.

However, we can consider how it can be used to stabilise a scheme's funding position. The central premise is to invest in assets that broadly replicate the scheme's liability profile. The most basic example is to invest in long-term financial instruments with terms similar to the expected streams of benefit payments.

In the US and Europe, there is considerable sophistication in setting investment strategy, often including the use of complex instruments – for example, longevity swaps/ bonds under which the income stream from the counterparty (often holding inverse risk exposure, such as a life insurance company) will rise if there is unfavourable longevity experience for the scheme. In this region, investment guidelines tend to be more restrictive and preclude the use of derivatives. But we can still apply similar risk management principles.

Conclusion

Longevity is evidently a key cost lever across the pension schemes in the GCC. There is a need for further research to help us understand it better, to help us forecast future financing shortfalls. Exposure could be reduced through refinements to the existing benefit structures, or a more fundamental switch to defined contribution accounts—under which annuitisation by the state pension agency would offer additional protections to the participant. Or perhaps, the solution could be a combination of a slimmed-down defined benefit pension designed to meet primary living costs with a supplementary defined contribution pot beyond it. A sensible investment strategy is an important requirement in any of these configurations.

This is clearly an important topic with no easy solutions. There are many other dimensions of risk exposure (and possible solutions) we can consider beyond those outlined in this article. The required research and innovation of new structures will require input from all facets of the region's insurance industry. An exciting future awaits. 

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