LIC of India IPO - Cracking the Conundrum

The announcement came in the Budget speech of 2020, there were some rumblings for the past few years, but few had anticipated that it would come in this manner.

"Listing of companies on the stock exchanges discipline a company and provides access to financial markets and unlocks its value. It also gives an opportunity for retail investors to participate in the wealth so created. The Govt. now proposes to sell a part of its holding in LIC by way of an Initial Public Offer." Finance Minister in the budget speech.

The media hype that followed the announcement was on the expected lines, highlighting the size, scale and complexity of the exercise; some pitching it to rival the Aramco mega IPO when it came. Hence the speculations around the size of the valuation and the timing.

The Ministry insisted that 2nd half of FY 21 was a likely time line, even though it required an amendment to the LIC Act, converting LIC to a company under the Companies Act, seeking regulatory approval etc. Analysts suggested this was ambitious; SBI Life Initial Public Offering (IPO) took nearly 9-12 months to prepare the Embedded Value Report and get necessary approvals and SBI Life was nowhere near LIC in terms of scale and complexity.

There were speculations regarding the likely valuation of LIC. The government indicated that LIC IPO would be a key component of the target ₹2 lakh crore disinvestment plan for FY 21. The indications that came were that a 10% dilution would yield the government an amount of around ₹0.8 to ₹1.2 lakh crore. There was also a suggestion from another quarter of ₹20 lakh crore as a likely valuation for LIC.

This line of thinking seemed to have come from a comparison with the other listed life insurance entities. If LIC's AUM was around 20 times that of SBI Life's, given the latter's market cap, the former would be valued at ₹10-12 lakh crore.

Not everybody agreed to this given as the argument went, LIC's structure entailed a 5% surplus attribution to the shareholders. Theoretically, EV could be the present value of this future profit cash flow plus the net worth. If that be around ₹25,000 to ₹50,000 Cr and the market supported 3-5 times the EV as the valuation, it would fall way short of the earlier estimates.

What we set out to do and what follows from here on is an overview of the current structure of LIC as it has been historically set up and the constituent value (shareholder interest) components. The pooling of funds and the 95/5 sharing of surplus have implications on the extent of ownership of these components. We will then look at a possible restructuring or a reworking of the current structure, thereby exploring a crystallization of the ownership by way of an acceptable governance process. Having done that we will aim at a rough estimation of its valuation. The restructuring is of much more consequence as we will see later, thereby the focus of the thought processes would be on the latter.

Pooling, Life Fund & Ownership

Many aspects of LIC's business is governed by the LIC Act 1956. LIC's capital requirement of ₹5 Cr was amended in 2011 to ₹100 Cr. Sec 28 of LIC Act stipulated that 95% of (all) surplus emerging will be allocated to the with profits or participating policyholders. Even though this was amended to 90%, LIC is magnanimous and continues to allocate 95% of the surplus to the policyholders.

Historically, LIC has been and remains a big pooled fund called the Life Fund or the Long Term Fund. De jure, the Life Fund and thereby all surplus emerging out of it belong to the with profits policyholders to the extent of 95%. This includes all the non-profits (ULIPs included) funds or businesses that sit within the pooled fund, where the with profits policyholders claim 95% ownership to their profits. A glance at the revenue statement of LIC indicates that the profits/losses of business segments other than the participating, are entirely moved to the participating business.

This is in sharp contrast to the other private companies which mostly operate lines of business which are entirely owned by the shareholders. In LIC hence, apart from the shareholder fund, pretty much everything else is majorly

owned by the participating policyholders, leaving the shareholders with a claim to the residual 5%.

Asset & Liability

Dig deeper and we will unearth further complications within the big pooled fund.

In a fair value, market consistent world, the assets are required to be valued at the market prices if traded, or a reasoned estimate of what it would have been if it had been traded at that time.

A market consistent liability would consist of a best estimate liability and a risk margin. The former typically is the present value of the expected future cash flows, discounted using the risk free rate. The Risk Margin represents the theoretical compensation for the risk of the future experience being worse than the best estimate; the cost of holding capital for risks that cannot be hedged. It is calculated by projecting forward the future risk capital that is required to be held during the run off of the existing business.

Best Estimate liability and the Risk Margin together constitute a fair value price of the liability if there was an arm's length transaction.

While Non-Par policy benefits are mostly fixed in nature, thereby the future cash flows are also fixed, there are very specific considerations around the participating policies.

The obligation to the in-force participating policyholders would take into account both the policy benefits by way of contractual obligations already vested as well as a fiduciary duty to meet future policy benefit obligations that fulfil their (policyholders') expectations in a well-defined or reasonable manner. While there are legal uncertainties around the definition of 'reasonable', a broad agreement exists within the actuarial profession that it should be based on 'asset-share'. A degree of actuarial discretion is inherent in the calculation of the asset-share and its application to decide future benefits to participating policyholders; there may be a documented internal policy around this, past practices, statements made, indications given in the past to these policyholders or an adoption of global best practices may help navigate this issue.

The reasonable expectation would typically include a share of the surrender profits, a share of profits from non-profit business written within the fund etc. It would also include an entitlement to the full asset-share or something very close to the full amount; albeit a degree of smoothing ensuring some protection from the volatility from market returns.

The asset-share would then be a fair representation of the best estimate liability of the participating policies.

Residual (Excess) Surplus

The excess of the fair value of assets over liability defined in the above manner is often called estate or 'inherited estate'. It is not unusual for large legacy with profits companies across the globe to have carried sizable estates. Why should there be an excess?

A participating policy typically pays out at maturity, all premiums net of actual expenses and claims accumulated at the pooled rate of investment return earned over its term. This amount is referred to as 'asset-share' and is fundamental in deciding an equitable pay-out at maturity or for that matter at earlier surrender. Such equity is achieved by allocating regular bonuses during the term of the policy and a final bonus at maturity.

- One source of estate is capital injected by the shareholders into the life fund, which is not the case here.
- Often, the estate may well be, largely or wholly, a result of past, now terminated participating policyholders receiving less than the asset-shares, e.g.

  - Prudence may have led to pay-outs being smoothed well below asset-share levels
  - Lack of the necessary wherewithal at earlier times to track asset-share; company may have wished to err on the side of underpayment if the systems for asset-share or bonus rates were inadequate.
  - Surrender profits and profits from non-profit products not credited to asset-share
  - Inability or simply unwillingness to pass on unrealized gains on equity and property
  - Besides, merger of the erstwhile private companies into LIC in 1956 may have created surplus at that time.

There have also been several occasions in the past where instances of insouciance on the part of the Corporation may have led to drawdown of the estate. Some of the instances could be:

- Guaranteed addition life and guaranteed deferred pension products sold during early part of 2000 decade, where the pay outs were too far out of line with the then available market yields.
- Gratuity / superannuation rates to corporate clients in the past have often been much higher than the underlying earnings on funds.
- Annuities often continued to be sold in large volumes subsequent to sharp decline in interest rates before re-pricing them.

Estate Reattribution

Who does the estate belong to?

The question of what rights the policyholders have in the inherited estate has often been the subject of heated discussion within the actuarial profession and in other interest groups. In the end there is no single answer! There are only divergent points of view:

- The estate is of course surplus, and to distribute part of it to shareholders in any other manner is inconsistent with the basic with profits principles, which requires 90% (95% for LIC) of the distribution to be to the policyholders.
- Equity is nor served by transferring undistributed profits from past terminated policies to those now in force and other yet to be written; except in a limited way to achieve an acceptable degree of smoothing of benefits between generations of policies.
- Current participating policyholders as a class, cannot have a right to the estate as there is no requirement to distribute it; if not done (distributed through the reattribution) they would never get it and would eventually exit the fund having received their rightful (normal) benefits.
- Policies have a finite life and on being terminated cease to have any claim whatsoever on the fund. Shares on the other hand have indefinite existence and may carry full rights to residual surplus/estate.

Reattribution is a process under which a firm which carries on with profits business seeks to redefine the rights and interests that the with profits policyholder have over the inherited estate - FCA.

Many of the estates originated many years ago. For LIC, given the lack of historical data and the complexity of its origin and legacy, it can be very difficult to determine the sources of inherited estate with any degree of certainty but a major part of it could have emerged out of past under-distribution.

There are no regulations in India that define or govern the distribution of estate, nor is there precedence to follow. There is however, a few international precedence, particularly in the UK.

UK Regulations:

COBS 20.2.21 (Financial Conduct Authority FCA, UK): At least once a year and whenever a firm is seeking to make a reattribution of its estate, the firm's governing body must determine whether firm's with profits fund has an excess surplus. If the fund has an excess surplus, to retain that surplus would be a breach of Principle 6 (A firm must pay due regard to the interests of its customers and treat them fairly).

COBS 20.2.42 (FCA): A firm that is seeking to make a reattribution of its inherited estate must: (1) first discuss with FCA as part of the determination under COBS 20.2.21 ...... (2) following the discussions referred to in (1), identify at the earliest appropriate point a "policyholder advocate" who is free from conflict of interest....... to negotiate with the firm on behalf of the relevant with profits policyholders..

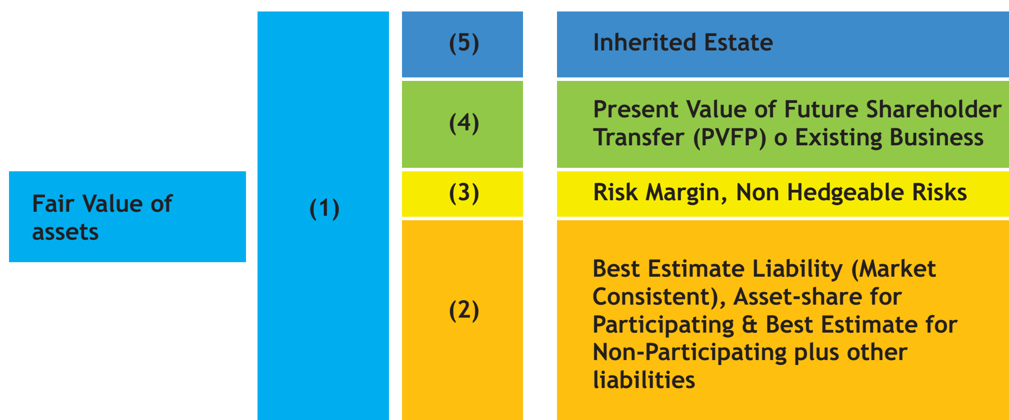

Diagram-1: Composition of the Life Fund (other than the shareholder fund): (1) Fair Value of Assets (2) Backing policyholder obligation (3) Backing policyholder obligation (4) Shareholder value (5) Policyholder (95%) & Shareholder (5%) under normal circumstance.

To conclude, any reattribution exercise (the process of a negotiated buying out the policyholders' interest in the Estate through some legal means) would be in order and that it is fair to the policy holders to be offered a choice. In exchange for a pay out of a fixed amount (PIP, Policyholders' Incentive Payment) now, the policyholders may choose to give up the uncertain prospect of any future more favourable distribution of the estate.

Eventually, the balance of the arguments and a measure of quid pro quo will decide the respective shares between the

two parties. This would follow a complex actuarial/accounting exercise, which 'would' normally require legal / quasi legal oversight and eventually regulatory approval.

A crude estimation

Hereinafter, we look at ways and means of putting numbers to the above boxes and make a rough inference on LIC's overall valuation. Our effort at the valuation would be at best for academic interest, given that it will be based on sample data, subsequent scaling up of the results and on information available in the public domain only.

The other part of the valuation piece is of course the goodwill represented typically in a life company as the value of New Business. We will try and propose some numbers for this as well.

The estimation is based on the publicly available information on assets and liability, assumptions, past bonuses etc.

From Statutory to Realistic Balance Sheet / 31.03.2019

Policy Liability	Statutory	Realistic
	Cr.	
Individual Par Life & Pension#	21,80,000	20,27,400
Individual Non-par	9,000	8,100
Annuity	60,000	57,000
Group Fund (Gratuity, Superannuation etc.)	4,30,000	4,39,890
Group Term etc.	12,000	9,600
ULIPs	78,000	78,000
Total	**27,69,000**	**26,19,990**
Other Liability		
Current Liabilty	38,336	38,336
Provisions##	17,600	2,657
Total Liability	**28,24,936**	**26,60,983**
Assets exluding the Shareholder fund		
Application of Fund (BS)		31,07,434
MTM Bonds		38,284
Market Value of Assets		**31,45,718**
Future Shareholder Transfer		29,800
Risk Margin###		45,000
Estate		**4,09,935**

Table 2: # Realistic Policy obligation based on asset-share, excluding future shareholder transfer.
14943 Cr, provision towards solvency margin excluded
Risk Margin includes Cost of Guarantee and Cost of Risk Capital with respect to risks that are not hedged. Based on equivalent estimation of other life companies.

- Segment wise segregation of statutory liability is approximate as the financial statements and public disclosures afford limited visibility.
- For participating policies, an excel sheet based simulation was done based on a small representative pool of policies with assumed mix in terms of products, terms and outstanding terms. Asset-share is based on historical market yields for bonds, equity index, policy loans, cash and a long term return on property, on an assumed historical mix of assets. Past regular bonuses are used.
- Bonds are assumed invested for the outstanding term and held to maturity.
- PVFP (Present Value of Future Profits) is estimated based on future shareholder transfer from the current levels of regular bonus continuing into the future and residual transfer as terminal bonus, the latter, whether positive or negative. The future accumulation and discount rate is the risk free forward rates.
- The ratio of asset-share to reserve varies by outstanding term from 40% to 140%, being lower for the recently issued policies. At an aggregate level it works out to 93%
- The model outputs (asset-share, Reserve, PVFP) are scaled up; the model and sample portfolio is calibrated by scaling up the cost of bonus estimated from the model to the actual cost of bonus for FY 2018/19.
- Reserves are based on the currently available reserving assumptions.
- For non-participating business high level adjustment is made to the reserves to turn them into best estimate realistic reserve, based on the nature of the business
- For spread & fee business (Group Funds & ULIPs), the reserves are left at their reported statutory basis levels except for any undistributed unrealized capital on the assets backing the liability in respect of the former, assuming 5% equity backing; which may be argued to be required to back policyholder liability.

Shareholder Interest

We now populate diagram (1) with the estimates to hazard an assessment of the shareholder interest in the business as at 31.03.2019.

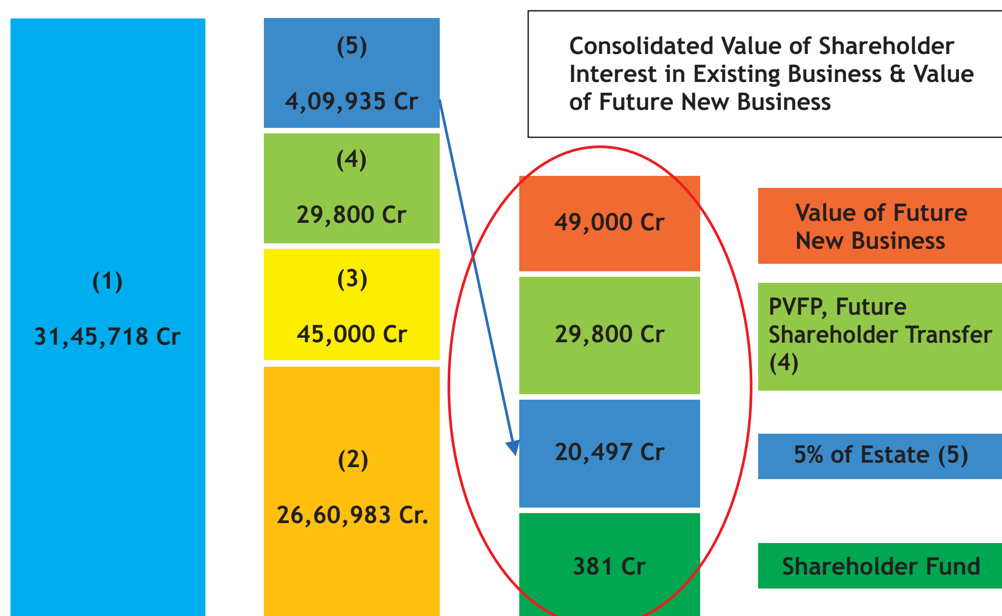

Diagram-3: Composition of the Life Fund (other than the Shareholder fund): (1) Fair Value of assets (2) Realistic Liability (3) Risk Margin for risks that cannot be hedged, includes cost of guarantee specifically for the group fund business (4) Future Shareholder Transfer (PVFP) (5) Estate: Policyholder (95%) & Shareholder (5%) under normal circumstance.

Value of Future New Business FY 2018/19

Segment	New Business APE 2019	Estimated Margin	VONB Cr		VONB Cr	Value of Future New Business
Individual Participating Life & Pension	29050	8%	2324			
Individual Protection	1500	75%	1125			
Annuity Individual & Group	1700	30%	510		2,593	49,000
Group Accumulation Fund	7650	25%	1912.5	@5%		
Group Term/Protection	4600	40%	1840			
Total APE	44,500					
Total NBP	1,44,400					

Diagram-4: (1) NB Margins are typical of the business segment as seen in similar companies
(2) VONB from Non-Participating business will contribute only 5% to the Participating VONB

Assuming 15 years of future New Business, an annual growth of 15% and a risk discount rate of 12%, the multiple works out to 19, giving the value as 49,000 Cr.

To conclude

A reiteration of the earlier caveat that the estimation is approximate, for academic interest only; thereby no claim is made for nor any pretence to any level of accuracy. Judgement is often used in the various workings, this is no substitute for facts and figures.

The market value of the real estate is taken as the book value plus the revaluation; an appropriate valuation if carried out, could see some divergence.

As things stand, the major part of LIC's value would emerge from the estate and significantly as a consequence of reattribution which would be the sine qua non of the larger process.

It should be possible to embark on a fundamental restructuring exercise leading to a segregation of the Life Fund into participating and non-participating business lines, the latter wholly owned by the shareholders; the shareholders would then need to provide the risk capital and compensate the former for the future profits on the latter business lines.

Views expressed are of my own and they do not in any way reflect those of my employer or profession.

Lastly, I acknowledge a discussion paper of 2011 by C D O'Brien titled “Equity between with-profits policyholders and shareholder” - UK actuarial Profession, for some of the thoughts expressed here.

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Sanjeev Pujari is currently President in SBI Life Insurance Co, overseeing Actuarial, Risk and Product Management functions.

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