

The Marketing Actuary's Response to PRS

ASM's 2012 Life Insurance and
Takaful Conference
29 November 2012

Teh Loo Hai
FIAA, FASM, FSAS

Agenda

1. Background of PRS
2. Case for Deferred Annuity
3. Market Research
4. Some Product Designs
5. Other Considerations
6. Conclusions

BACKGROUND OF PRS

Economic Transformation Programme

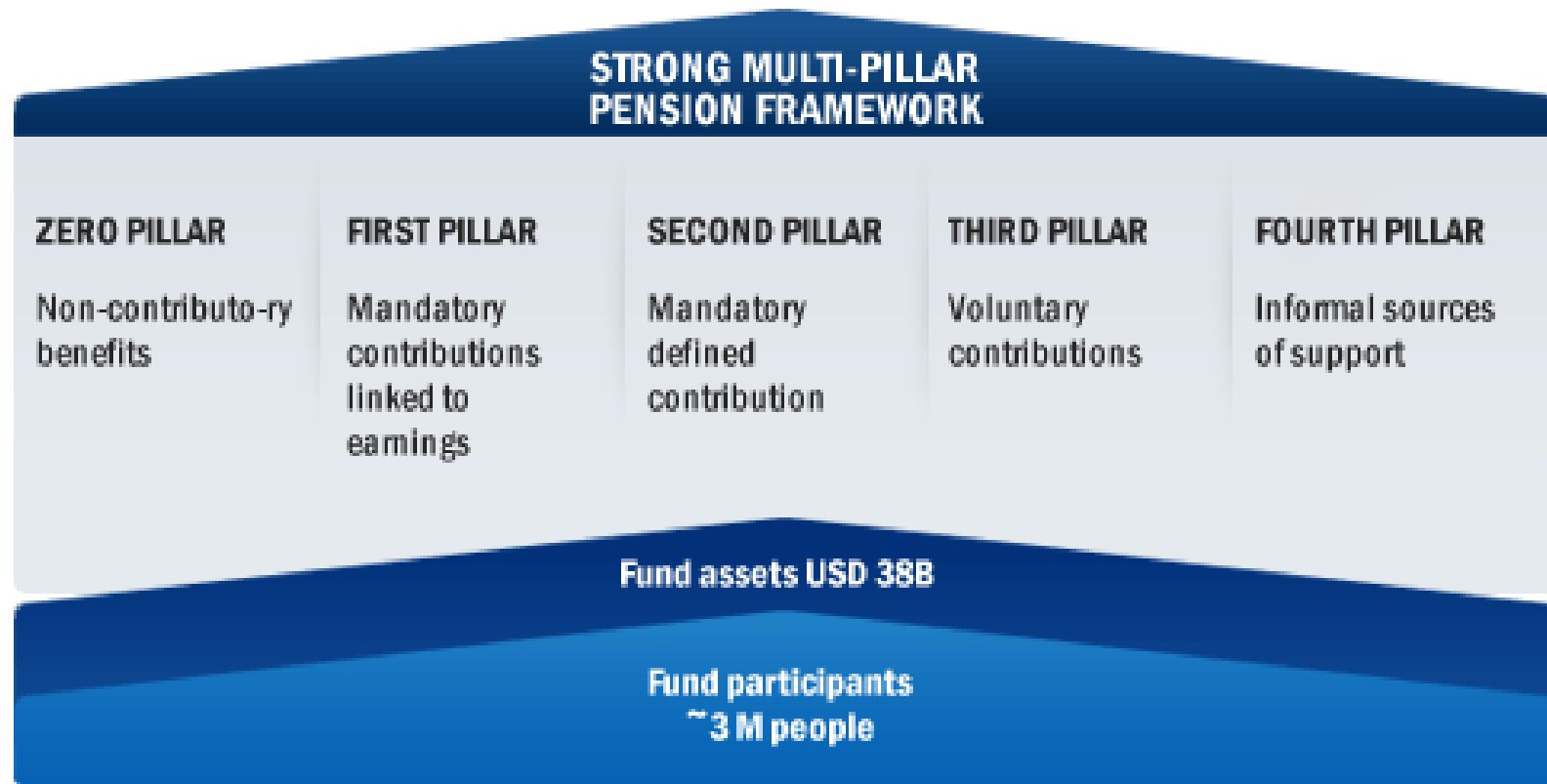
- In 2010, government set up PEMANDU to embark on ETP with the objective of transforming the country into a high-income nation by 2020
- 21 September 2010 – ETP open day
- 12 National Key Economic Areas (NKEAs) were identified
- 131 Entry Point Projects were unveiled
- Financial Services - EPP 6: Accelerating growth of the private pension industry

Case for Change - PEMANDU

- 2 million self-employed not covered by EPF
- Most EPF members exhaust their lump sums within 3 to 5 years
- Aging population increases strain on the system

Aspiration - PEMANDU

- Model pension system with vibrant private pension industry



Recommendations - PEMANDU

1. Develop private pension funds to supplement existing public pensions
2. Provide incentives to rapidly build up critical mass in PPF industry
 - Employers' contributions >12% into PPFs with tax parity
 - Withdrawal from a/c I & II, tiered return >RM1 mil
 - EPF relief for self-employed
 - Tax exemption for PPF pension income
 - Additional RM6,000 tax relief for PPF
3. Improve education on importance of financial and retirement planning

PRS Progress

- 18 July 2012 – PRS was launched by PM
- 31 October 2012 – Hwang Investment Management rolled out first PRS
- 10 November 2012 – CIMB Principal received approval to launch PRS
- 22 November 2012 – Manulife NESTEGG series
- 26 November 2012 – Public Mutual launched 6 PRS funds.

Source: actuaries.com.my/insurance-news

CASE FOR DEFERRED ANNUITY

Factors to Consider

- Market potential
- What consumers want
- What are the constraints
- What others are doing
- What are our choices
- Other considerations:
 - How to reach customers
 - Internal operations – underwriting, claims, finance, actuarial
 - Customer service
 - IT

Market Potential

- 1.7 million tax payers in Malaysia
- Highest tax rate = 26%
- $\text{RM}3,000 * 26\% = \text{RM}780$
- $1.7 \text{ million} * 3,000 = \text{RM}5.1 \text{ billion per year?}$
- Areca Capital: RM600 mil
- CIMB Principal's target: RM2 bil in 5 years
- Hwang's target: RM100 mil in 3 years
- Manulife: RM18 bil, 1st yr: RM90 mil, 2nd & 3rd: RM200 mil
- Steve Ong: RM39 bil per year!

What Consumers Want?

- Guaranteed income
- Lifetime income
- Indexed to inflation
- Lump sum on death
- Drawdown flexibility
- Portability

What Concerns Insurers

- Investment
 - Duration mismatch
 - Guarantees are costly
 - No suitable assets – e.g. indexed bonds
- Mortality
 - Longevity risk
 - Anti-selection
- Anti-selection with too many options

Market Research

- Unit Trust – “H” PRS
- Unit Trust – “C” PRS
- Insurer – “P” – SP & RP
- Insurer – “G” – Deferred Annuity

“H” PRS

| Category | Features |
|-------------------------|--|
| Funds | Growth, Moderate, Conservative, Shariah Growth |
| Commission | Nil |
| Fund Management Charge | 1.8%, 1.5%, 1.3%, 1.8% |
| Trustee Fee | 0.04% p.a. |
| Switching | Free |
| PPA Admin Fee | 0.04% p.a. |
| PPA Account Opening Fee | RM10 (one-off) |
| PPA Annual Fee | RM8 p.a. |
| PPA Withdrawal Fee | RM25 per withdrawal |
| Transfer Fee | RM50 per transfer (PPA: RM25, Fund: RM25) |

“H” PRS – Asset Allocation

| Fund | Equities | Fixed Income |
|----------------|-------------------------|--------------|
| Growth | 0 – 70% | 30 – 100% |
| Moderate | 0 – 60% | 40 – 100% |
| Conservative | 0 – 20% | 80 – 100% |
| Shariah Growth | 95 – 100% (feeder fund) | 0 – 5% |

“C” PRS

| Category | Features |
|-------------------------|--|
| Funds | Growth, Moderate, Conservative, Equity, Asia Pac ex-Japan Equity. Both conventional and Islamic. |
| Commission | Class A – 3%, Class C – 0.5%, Class X – 0% |
| Fund Management Charge | Class A – 1.4%, Class C – 1.5%, Class X – 1.4% |
| Trustee Fee | 0.04% p.a. |
| Switching | Free, once per month. No switching between classes. |
| PPA Admin Fee | 0.04% p.a. |
| PPA Account Opening Fee | Classes A & C: RM10 (one-off), Class X: Waived |
| PPA Annual Fee | RM8 p.a. |
| PPA Withdrawal Fee | RM25 per withdrawal |
| Transfer Fee | Max RM100 per transfer (PPA: RM25, Fund: RM75) |

“C” PRS – Asset Allocation

| Fund | Equities | Fixed Income |
|--------------------------|-------------------------|--------------|
| Growth | 0 – 70% | 30 – 100% |
| Moderate | 0 – 60% | 40 – 100% |
| Conservative | 0 – 20% | 80 – 100% |
| Equity | 70 – 99.8% | 0 – 0.2% |
| Asia Pac ex-Japan Equity | 95 – 100% (feeder fund) | 0 – 5% |

“H” & “C” PRS - Summary

- No insurance cover
- No protection against longevity risk
- Upside potential
- No downside protection
- Choice of funds, with default selections
- Portable

“P” Annuity

| Category | Single Premium | Regular Premium |
|-------------------------------------|---|---|
| Guarantee charge | 0.1% of unit value p.a. | 1% of premium (savings) |
| Fund Management Charge | Equity: 1.5% Bond: 1.0% Managed: 1.1% | Equity: 1.5% Bond: 1.0% Managed: 1.1% |
| Service charge | RM100 one-off | RM5-6 per month |
| Administration charge during payout | RM2 per month | RM2 per month |
| Processing Charge | RM25 per transaction | RM25 per transaction |
| Insurance Cover | 125% SP - annuity | Max (o/s annuity, value of units) |

“P” Annuity – Asset Allocation

| Years before Payout | Equities | Fixed Income |
|---------------------|----------|--------------|
| <= 0 | 20% | 80% |
| 1 - 5 | 25% | 75% |
| 6 - 10 | 30% | 70% |
| 11 - 15 | 35% | 65% |
| 16 - 20 | 40% | 60% |
| 21 – 25 | 45% | 55% |
| 26 – 30 | 50% | 50% |
| 31 – 35 | 55% | 45% |
| 36 – 40 | 60% | 40% |
| 41 – 45 | 65% | 35% |
| > 45 | 70% | 30% |

“P” Annuity – Guaranteed Income (RP)

| Payout Period | 10 | 15 | 20 | 25 | 30 | 35 |
|-------------------|--------|-------|-------|-------|-------|-------|
| Guaranteed Income | 10.80% | 7.45% | 5.80% | 4.80% | 4.15% | 3.65% |

“P” Annuity – Guaranteed Income (SP)

| | Payout Period | | | |
|---------------------|---------------|--------|-------|-------|
| Accumulation Period | 15 | 20 | 25 | 30 |
| 5 | 7.00% | 5.65% | 4.70% | 4.10% |
| 10 | 8.00% | 6.25% | 5.20% | 4.50% |
| 15 | 9.00% | 7.00% | 5.80% | 5.00% |
| 20 | 10.00% | 7.75% | 6.40% | 5.50% |
| 25 | 10.70% | 8.25% | 6.80% | 5.85% |
| 30 | 11.35% | 8.75% | 7.20% | 6.20% |
| 35 | 12.35% | 9.50% | 7.80% | |
| 40 | 13.35% | 10.25% | | |

“P” Annuity – Guaranteed Yield

| | Payout Period | | | |
|---------------------|---------------|-------|-------|-------|
| Accumulation Period | 15 | 20 | 25 | 30 |
| 5 | 0.40% | 0.83% | 0.95% | 1.07% |
| 10 | 1.06% | 1.14% | 1.20% | 1.24% |
| 15 | 1.36% | 1.37% | 1.38% | 1.39% |
| 20 | 1.50% | 1.49% | 1.48% | 1.47% |
| 25 | 1.48% | 1.46% | 1.44% | 1.44% |
| 30 | 1.44% | 1.42% | 1.41% | 1.41% |
| 35 | 1.47% | 1.45% | 1.43% | |
| 40 | 1.48% | 1.46% | | |

“P” Annuity - Summary

- No protection on longevity risk
- Small investment guarantee (<1.5%)
- Potential upside gain
- Not losing out if dying too early
- Small insurance cover throughout the life of the policy
- Pre-determined choice of funds
- Not portable

“G” Deferred Annuity

- Non-par
- Retirement age: 55 or 60
- Premium payment term: 10 years
- Annuity payment period: 15 or 10 years
- Death, TPD, CI – cash value
- No medical underwriting

“G” Deferred Annuity - Yield

- Age 35, pays RM3,000 for 10 years
- Receives RM65,475 in 15 equal instalments from age 55

$$3000\ddot{a}_{\overline{10}|} = \frac{65,475}{15} v^{20} \ddot{a}_{\overline{15}|}$$

- Guaranteed yield: 3.56%
- At highest marginal tax rate of 26%, yield: 4.98%
- EPF: 2.5% minimum guarantee, 4.25% - 6% in last 10 years
- Maybank: 3.8%, 60-month FD

“G” Deferred Annuity - Summary

- No protection on longevity risk
- Moderate investment guarantee (3.56% - 4.98%)
- No potential upside gain
- Not losing out if dying too early
- No insurance cover throughout the life of the policy
- No choice of funds
- Not portable

Requirements under Deferred Annuity Guidelines

- Annuity (yearly or more frequent) from age 55 or retirement age
- Paid until age 70 or at least for 10 years, whichever is later
- Definition of Insurance under FRS 4
- AP/SP, traditional/ILP, basic/rider, immediate/deferred
- Annuity ($\geq 50\%$) and Non-Annuity Premiums
- Commission: 3%, ARE: 0.5%
- Minimum Retention Amount ($MRA = AAP \times MRF$)
- Full surrender at any time subject to tax clawback

PRS vs Deferred Annuity

| | PRS | Deferred Annuity |
|----------------------|---------------------------------------|-------------------------------|
| Early Withdrawal | Only sub-account B (30%) | Partial and full withdrawal |
| Tax Penalty | 8% on withdrawal amount | 8% of accumulated tax reliefs |
| Retirement Age | Prevailing retirement age | Locked in at inception |
| Withdrawal Frequency | Once a year | Unlimited |
| Portability | Portable | Not portable |
| Costs | Other ancillary charges (e.g. PPA) | No such charges |

SOME PRODUCT DESIGNS

dAnnuity 1

- A product to mimic PRS – if you can't beat them, join them!
- Recurring single premium ILP:
 - Maturity age at 55 (2012) or 60 (2013 and beyond)
 - At maturity age, equal drawdown of units over 15 or 10 years
 - On death, cash out units plus x% (e.g. 10%) of total premiums paid
 - Monthly mortality charge based on attained age and sum at risk
- Advantages:
 - No investment risk
 - Manageable mortality risk
 - No longevity risk
 - Easy to implement / fast to launch



dAnnuity 1

- Why would consumers buy?
 - Tax relief
 - Some death benefit (with no underwriting?)
 - Provide some sort of discipline in drawing down retirement fund
 - Smooth out investment volatility over longer term
 - Some sort of hedge against inflation risk
- Needs not met:
 - Longevity protection
 - Investment guarantee
 - Not much of inflation hedge
 - Can't take lump sum

dAnnuity 2

- Reward those survive by enhancing the retirement income
- “Penalise” those who die too early
- Example:
 - Retirement age: 60
 - Annuity payable until age 70
 - Units accumulated at age 60 is 1,000
 - Receive 1,050 units each year if survive, forfeit all units if die
- Advantages:
 - Enhanced annuity payment
 - Compensate for no lump sum at retirement



dAnnuity 2

- Disadvantages:
 - Painful for those who die too early
 - Company takes on some longevity risk
 - Only slight improvement in annuity amount

dAnnuity 2L & 2LS

- Extend annuity payment period to age 100
- Advantage:
 - Fairly good longevity protection
 - Longevity risk manageable
 - Even longer investment horizon
- Disadvantage: too painful to die early
- dAnnuity 2LS
- On death before age 100, forfeit x% of future units

dAnnuity 2LS

- Needs not met:
 - No lifetime guarantee
 - Not inflation hedged
 - Not portable

dAnnuity 3G & 3GS



- Provides investment guarantee as well!
- Method 1:
 - Use some sort of structured note to lock in investment guarantee
 - May need to roll over the structured note periodically
- Disadvantages:
 - Lower upside gain
 - Guarantee may be only for a short period, new lock-in guarantee depends on prevailing rate
- Method 2:
 - Variable annuity – GMIB, GMAB

dAnnuity 3G & 3GS

- Disadvantages
 - Complex
 - Lack of matching assets
 - Some got burned
- Method 3
 - Dynamic hedging using ALM
- Advantage:
 - Wider choice of assets
- Disadvantages:
 - Complex
 - Company takes on more investment risk



Other Considerations

- Distribution channel:
 - Low commissions: 3% +0.5% ARE
 - Bancassurance
 - Agency
 - Seminar selling
 - Worksite marketing
 - Internet
- Traditional annuity?

Conclusion

- PRS is practically just another type of unit trust.
- Does not address longevity risk.
- Not likely to have investment guarantee.
- Can tap into the additional 7% employer contributions
- Many ways to structure annuity product.
- Advantage of longer investment horizon.
- Investment guarantee may not be that costly.
- Longevity risk can be manageable, good hedge to mortality risk.
- Preference for lump sum may disadvantage insurer.
- Portability



Teh Loo Hai
tehloohai@actuaries.com.my