





How to do (and how not to do) Collective Defined Contribution Pension Schemes

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Some terminology

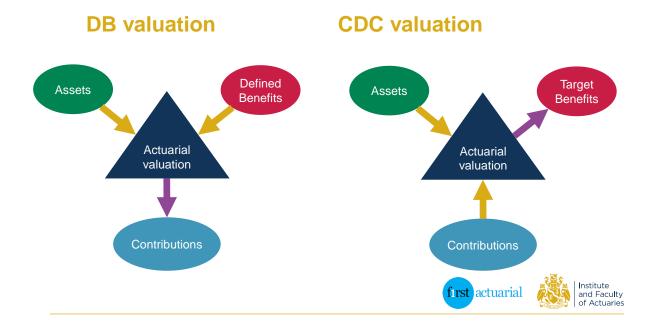
- Defined Contribution
 - The contribution going in to the pension scheme is defined
 - The benefit coming out of the pension scheme is not defined
- Money Purchase
 - Every member has their own investment account to receive the defined contribution
 - The investment account is spent on retirement benefits
 - Cash sum
 - Draw down
 - Annuity

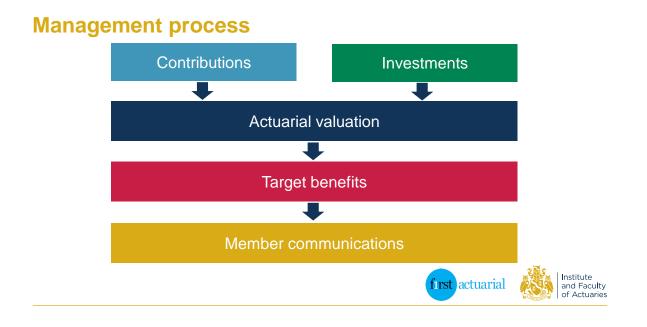


Collective Defined Contribution

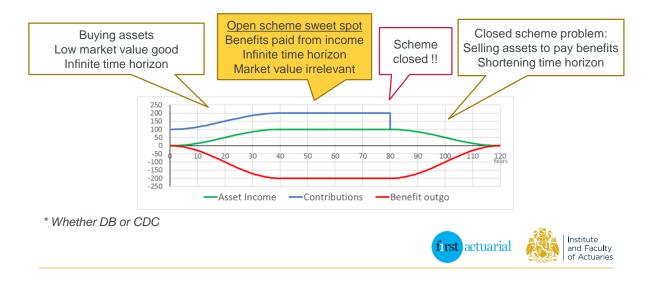
- Defined Contribution
 - The contribution going in to the pension scheme is defined
 - The benefit coming out of the pension scheme is not defined
- · But there aren't any Money Purchase accounts
 - The contributions are pooled together in the scheme







The life cycle of a collective* scheme

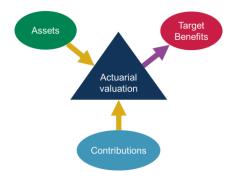


Investments

- Unconstrained invest for a good return wherever it may be found
- Not compelled to invest in growth
- Not necessarily anticipating average growth returns



Actuarial valuation



- Best estimate basis for inter-generational fairness
- Discount rate for valuing target benefits
 = Internal rate of return on investments
- Matches the outgo on target benefits to income from assets and contributions



Member communications

- · Best estimate target benefits
- · Common concern that members should not be disappointed
- · Could also communicate:
 - Smaller benefit with 75% probability of delivery
 - Even smaller benefit with 90% probability of delivery



Definitions of fairness

The same benefit for everyone

The same contribution for everyone

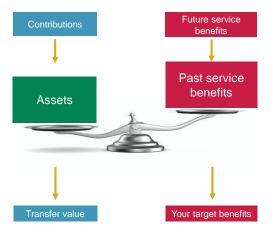


With or without employer sponsorship?

- "Open access" to general public
- Member's contribution buys target benefit of equal value
- Single employer sponsorship
- Exact value for members' contributions
 not necessary
 - Same target benefit for all members regardless of age or gender



Open access CDC

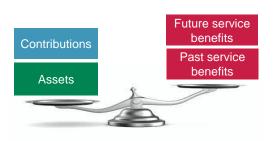


- Open access to general public, not necessarily any employer contribution
- Each valuation decides an annual rate of increase which balances assets with the value of benefits
- Contribution converted to target benefit
 - according to age of member and daily market conditions
 - on fair terms relative to existing target benefits

Sum of transfer values = assets



Employer sponsored CDC



- Defined contributions from employee and employer
- · Career average target benefit
- Each valuation decides an annual rate of increase which balances assets and contributions with the value of benefits
 - Aggregate method
- Sometimes the accrual rate might need to change
- Rarely pensions might need to be cut



Multi-employer CDC

- 1. Employers can pay contributions to an "open access" CDC scheme
- 2. Multiple employers in a master trust can have ring fenced sections
 - each run as a single employer CDC scheme
- 3. Multiple employers can share in a common target benefit pool with a common contribution rate



Institute

and Faculty of Actuaries

Employer sponsored CDC

- Who might be interested? An employer with:
 - a closed to new entrants DB scheme, containing long serving employees it doesn't want to upset
 - An open DC scheme, receiving lower contributions than the DB scheme
- Unify the work force in an open CDC scheme:
 - The target benefit might be similar to the DB scheme
 - The employer has defined contributions for everyone
 - DC employees can expect a better benefit in CDC
- Royal Mail, for example

The life cycle of money purchase

- · While contributing:
 - Investment time horizon limited by retirement date
 - Want assets to be cheap
- Big risk at retirement:
 - From sale and reinvestment of assets into an annuity
 - Want non-bonds to be expensive and bonds to be cheap
- Big risks of draw down in retirement
- Money purchase is always either accumulating or decumulating, there is no open collective scheme sweet spot



Why?

first actuarial



How not to do CDC



Smoothing ?

- Smoothing: under-spending on benefits in "good times" over-spending on benefits in "bad times"
- · I don't advocate smoothing
- I do advocate balanced best estimate budget



Corridors ?

- For a small change in funding of target benefits, don't bother changing target benefits
- But still have to react to bigger changes
- · Anchoring in a historic target is a bad idea
- · Better behaviourally to keep making small changes



Protect the pensioners ?

- Some suggest protecting the pensioners from the worst of the volatility of outcomes
- All in it together
- The older naturally have better protection by virtue of their age: less time for a change in the annual increase rate to have cumulative effect
- No need to further protect pensioners



Investing to raise the probability of delivery of target benefit ?

- The actuarial valuation has already matched the target benefits to the expected income
- No need to go back to the investment strategy to match the investment strategy to the target benefits
- The target benefit is not a defined benefit



Prudent target benefit plan?

- E.g. Calibrate the actuarial assumptions to have:
 - 75% probability of delivery of target benefits with annual increases
 - 90% probability of delivery of target benefits without annual increases
- Do: Under-report the target in the communications
- Don't: Under-pay the members



CDC myths



CDC doesn't fit with "freedom and choice"

- It's another choice !
- Option to transfer out
- · Do offer the traditional choices for pension or cash



CDC needs scale

• If 1,000 different investments form a diversified asset portfolio

then 1,000 members form a diversified target benefit portfolio

• A 1,000 active scheme could grow to £150m - £200m assets and be administered for 0.1% pa of the assets



CDC is inter-generationally unfair

- Not introducing CDC leaves very large unfairnesses in place:
 - The public sector DB / private sector money purchase pension divide
 - Previous generations of private sector employees in closed collective DB / Current and future generations in open money purchase DC
 - Different generations of money purchase retirements can have hugely different retirement income outcomes
- Widespread adoption of CDC can reduce all these unfairnesses



It's essential to have entrants

• It's preferable to have new entrants



Will CDC happen?

- Work and Pensions Committee CDC inquiry
- Royal Mail, Communication Workers Union, First Actuarial, WTW are in talks with DWP
- Royal Mail willing to sponsor the development of regulations



CDC Summary

- Employer sponsored CDC could look like DB (but explain it's not !)
 - The benefits are targets, not guarantees
 - Strong investment advantages to an open, collective scheme
 - Unify work force in one scheme, DC for the employer
 - Bigger benefits on average for the members, less volatile than money purchase
- Or in DB world, offer a lower defined benefit plus material discretionary benefit, for not-quite-CDC
- · Open access CDC looks a bit more like money purchase
 - Each contribution buys a target benefit as we go along, rather than at retirement





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