DC plans in the UK and the Netherlands: exchanging experiences

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Welkom!
Agenda

• UK pension system
• Recent reforms to private-sector pensions
• What was the outcome?
• Types of collective pension schemes
• How collective pension schemes might be introduced in the UK
• Analysis and issues to discuss
UK pension system
## UK pension system

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<tr>
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<th>Pillar 1</th>
<th>Pillar 2</th>
<th>Pillar 3</th>
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<tbody>
<tr>
<td></td>
<td>Single-tier state pension</td>
<td>Occupational pension</td>
<td>Additional voluntary pension</td>
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<td>Unfunded</td>
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<td>Funded</td>
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<td>√(Small)</td>
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<td>Defined benefit</td>
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<td>√ (Historically)</td>
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<td>Defined contribution</td>
<td>√ (Currently)</td>
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<td>√(Small)</td>
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Dramatic changes in UK pension system since late 1990s

- Single-tier state pension replaced basic state pension in 2016
  - Replacement rate raised from 17% to 29%
  - Aim to reduce means testing
  - Triple lock indexation
    - Max (price inflation, wage inflation, 2.5%)

- Public-sector occupational DB schemes moved from final salary to career average
Dramatic changes in UK pension system since late 1990s

• c8000 private-sector DB schemes gradually closed
  – replaced mainly by DC with low contributions
  – many part-time employees and self-employed uncovered

• Reasons:
  – low interest rates
  – inflation uplifting of pensions in payment
  – frequent updating by actuaries of longevity projections
  – introduction of market-consistent valuation methods
  – increased accounting transparency of pension assets and liabilities
  – increased intervention by the regulator (TPR)
Recent reforms to private-sector pensions
Recent reforms to private-sector pensions

• Auto-enrolment introduced in 2012
  – 10mn unpensioned workers auto-enrolled into DC schemes by 2018
  – 5mn self-employed excluded
• From 6 April 2015 (‘Freedom & choice’):
  – DC members no longer need to buy annuities
  – DB members can transfer to DC
• Government allowed ‘defined ambition’ schemes to be introduced
  – Pensions Schemes Act 2015
‘Freedom and choice’

• Government wished to:
  – introduce greater flexibility in how people can take income from DC schemes to reflect the changing pensions and workplace environment
  – encourage more pension saving
  – encourage product innovation

• Increasing complaints about ‘poor value’ annuities
  – 70% of retirees did not buy annuities in open market
  – bought internal/rollover annuities from existing accumulation insurer
  – could have got 30% more
‘Freedom and choice’

• Changes from April 2015:
  • No restriction on how benefits can be taken after minimum pension age:
    – can withdraw entire amount
    – purchase an annuity or
    – buy a drawdown product
  • Tax free lump sum of 25%
  • Any remainder taken taxed at individual’s marginal rate
    – whether as lump sum, annuity or drawdown
‘Freedom and choice’

• Minimum pension age initially set at 55
  – State Pension age (SPa) *minus* 10 years
  – increases with SPa

• F&C applies to all pension schemes
  – DB members can move DB assets (over £30k) to DC arrangements
    • excludes public sector
  – if suitable on the basis of ‘appropriate independent advice’ from IFA
What was the outcome?
What was the outcome?

• Since April 2015, more than 1mn DC pension pots have been accessed and £16bn withdrawn
  – in 70% of cases by people under 65

• 50% of the pots accessed have been fully withdrawn:
  – 90% < £30,000

• Over 50% of fully withdrawn pots were transferred into a current account or ISA
  – although most of the people doing this had other sources of income
    – such as a DB pension
    – in addition to the state pension
What was the outcome?

• Before pension freedoms, over 90% of pots were used to buy annuities.
• Now twice as many pots are moving into drawdown than into annuities.
• However, little evidence of shopping around
  – with 95% of non-advised drawdown sales made to the existing customers of insurers
• Average withdrawal rate is between 3-4%
  – although some are withdrawing 6% pa
• High charges in some drawdown products
• Mass market reluctant to pay for advice
What was the outcome?

• Annuity sales have fallen from £12bn pa at their peak to around £4bn

• Annuity providers are leaving the open annuity market
  – reducing choice for consumers who do shop around.
What was the outcome?

• Very little of the product innovation anticipated back in 2015 has materialised.

• One example was guaranteed drawdown
  – in effect a combination of drawdown and an annuity

• But demand for this product has been low and several providers have withdrawn from the market
  – e.g., Met Life and Aegon
What was the outcome?

• More than £43m stolen by scammers

• The greater flexibilities have done little to increase savings into DC schemes:
  – the average total (member plus employer) contribution rate is just 4.2%

• In addition, around 250,000 DB scheme members have transferred to DC
  – withdrawing £50bn
  – an average of £250,000
Key implications

• Complete individualisation of risks as a result of
  – Move from DB to DC in accumulation
  – F&C in decumulation

• Key risks:
  – Investment and reinvestment risks
  – Inflation risk
  – Longevity risks
  – Interest risk

• Can we do better than this?
Types of collective pension schemes
Motivation for collective schemes

• Investment, inflation and longevity risk
  – these risks might be more effectively managed if they are pooled and shared

• Two types of pooling/sharing

• Risk pooling within each cohort of members
  – requires scale
  – common diversified investment fund will give everyone the same return
    • but no pooling or sharing of other risks
Motivation for collective schemes

• Risk sharing between cohorts of members, in order to make the retirement incomes of each cohort more predictable
  – requires the agreement of all cohorts

• Two types of collective scheme
  – Collective DC (CDC)
  – Collective Individual DC (CIDC)
Collective DC
CDC schemes

• Main benefits claimed for CDC are:
  – greater risk sharing within & across generations
  – lower operating costs
• It is claimed that as a result CDC pensions can be 30% or more higher than in pure DC schemes
CDC schemes: features

• However:
• No risk sharing with employer who pays fixed contributions
  – in the region of 10-12% of earnings
• Important to understand that a CDC scheme offers a target pension
  – not a promised pension
  – no guarantees
CDC schemes: features

• They manage both accumulation and decumulation phases
  – in contrast with DC
    • which just manages accumulation

• Each member has a target pension
  – typically related to career average revalued earnings (CARE)
    • with accrual rate of 1% of earnings
  – also with-profit variant
CDC schemes: features

• CDC schemes
  – through management of both accumulation and decumulation phases
• can invest for longer periods in growth assets than DC schemes
  – such as equities
  – which conventionally only used in accumulation period
CDC schemes: features

• The extra investment risk that arises from an extended growth phase needs to be shared in an efficient and equitable manner
  – e.g., via smoothing/reserve fund:
    • when investment returns are very good, some of the return is held in a reserve fund.
    • when investment returns are very poor, the scheme draws on the reserve fund
  – shocks can be smoothed over many generations
CDC schemes: features

• Longevity risk is pooled in CDC schemes.

• One way of doing this is through scheme drawdown

• But cost of buying retail annuities avoided
CDC schemes: criticisms

• A number of criticisms have been made of CDC:
• Higher and/or less volatile potential pension comes at the expense of severe restrictions on choice flexibility
  – CDC schemes appear to work only if people stay in for life and draw an income from the scheme
    • rather than take lump sum at retirement
CDC schemes: criticisms

• Members of a CDC scheme have no identifiable pension pot
  – so valuation of each member’s claim in CDC scheme as challenging as in DB scheme

• Members who transfer out of a CDC scheme when they change jobs might experience a reduced transfer value via a market value adjustment (MVA)
  – if scheme has an implicit deficit
CDC schemes: criticisms

- If the risk sharing in a CDC scheme is not fair between generations, it could turn into a Ponzi scheme
  - with older members taking out more than their fair share at the expense of younger members
- Follows because effective contributions are age-related and ‘transferred’ within scheme from young to old
  - given that cost of providing a target benefit for 55-year old is twice that for a 40-year old
  - will younger generation accept this?
CDC schemes: criticisms

• CDC schemes cannot work without an ‘estate’ or initial reserve that can be used for smoothing returns
  – Supporters of CDC schemes might argue that, with good governance, it is not necessary to have an estate.

• The risk-sharing rules lack transparency
  – Especially true in CDC schemes that operate on similar basis to with-profit schemes.
CDC schemes: criticisms

- According to Ralph Frank (Cardano):
- Five of the largest Dutch CDC schemes have not given pension increases above inflation over the last 10 years
- Three have cut pensions
- Main reason: failure to hedge interest rates
  - These schemes account for more than 50% of total assets
Sources of higher returns in CDC schemes

• Possible to show that CDC scheme can generate pension that is 30% higher than in DC scheme:
  – 0.5% additional annual return from avoiding de-risking glide path
    • totalling 5% over 10 years
  – 1.5% additional annual return from maintaining investment in growth assets between 65 and 75
    • totals 15% over 10 years
  – CDC scheme could set up its own annuity business and pass its profits onto members
    • could lead to higher returns of 5-10%.
Sources of higher returns in CDC schemes

• Should not expect significant cost differences between large DC scheme and CDC scheme.

• Default fund in large DC scheme can achieve same degree of risk pooling as large CDC scheme.

• Increasing the number of members in the same cohort cannot increase the degree of diversification in either type of scheme
  – since every member of cohort has same investments.
Sources of higher returns in CDC schemes

• So any additional benefits in terms of investment diversification that CDC scheme has over DC scheme can only come from diversification across generations
  – i.e., risk sharing between different cohorts of members in the CDC scheme.

• It is possible to show that there are clear benefits from investment risk sharing using a smoothing fund across a number of cohorts of members.

• But the claimed higher returns of CDC (cf DC) are the result of much higher risk taking within each generation
Collective Individual DC
CIDC schemes

• ‘Collective individual defined contribution’ (CIDC) scheme.

• In CIDC scheme, collective features that promote economies of scale and lower costs are maintained, e.g.,
  – automatic enrolment
  – pooling of investment and longevity risks.
CIDC schemes

• However, there are key features that are specific to each individual member and which make the scheme easy to understand:

• CIDC scheme maintains individual accounts for all members in the accumulation phase
  – so it is easy to value each individual’s pension pot
CIDC schemes

• Contribution rate set to be actuarially fair to each member
  – implying direct relationship between contributions that individual pays into scheme and pension they eventually receive
  – contrasts with CDC schemes in which contributions are averaged on collective basis to meet target average salary pension

• Each individual has their own de-risking investment strategy in the lead up to retirement.
CIDC schemes

• CIDC scheme avoids intergenerational and other cross-subsidies that CDC schemes can involve
  – while maximising benefits of economies of scale.

• Also consistent with F&C flexibilities

• Personal de-risking investment strategies could be designed to enable members to take pension as lump sum from age 55
CIDC schemes

• Large CIDC scheme using scheme drawdown could also avoid costs of retail annuities
  – yet still pool longevity risk

• Could also allow individual medical underwriting of longevity risk
  – in a way that CDC schemes cannot
How collective pension schemes could be introduced in the UK
How new collective schemes might be introduced into the UK

• Evidence to DWP select committee Feb 2018:

• Sandeep Maudgil (Slaughter & May):
  – Law must treat these schemes as unambiguously DC
  – But without imposing specific design requirements
  – Also needs specific governance, transparency and communications requirements
How new collective schemes might be introduced into the UK

• David Pitt-Watson (LBS, Collective Pensions in the UK, RSA, 2012):
  – Get the governance right, get the communication right, and make sure the people doing this have the scale and trust
    • includes trustees whose only duty is to the member of the scheme
  – 50% increase in pension cf DC, due to
    • no de-risking prior to retirement
      – if contributions coming in, benefits can be paid out
    • save annuity provider costs by self-annuitising
How new collective schemes might be introduced into the UK

• Hilary Salt (First Actuarial):
  – TPR should provide a dashboard so everyone can compare CDC schemes and pull them apart
    • including academics
  – Important to have lay trustees as well as professional trustees
    • who just protect their own backs and are really affected by herd instinct
  – No reason why transfers are not possible
How new collective schemes might be introduced into the UK

• Nathan Long (Hargreaves Lansdown):
  – Pension freedoms could see cross-subsidies:
    • from the poor to the rich within one generation
    • across generations
  – If those with large pots and lower longevity exercise their freedoms, the shared pooling of risks is weakened
  – Real danger of mistrust of the system if people perceive they are locked in
  – People want to own their own retirement
How new collective schemes might be introduced into the UK

• Royal Mail - UK’s first CDC scheme
• Replaced DB scheme
• Agreed with Communication Workers Union
• Both sides prioritised member communication:
  – What is being offered is a target not a promise
  – What can change
  – What members can do
Analysis and issues to discuss
Analysis

• CDC schemes could generate smoother pensions across different cohorts of members than DC schemes

• Evidence for this comes from both:
  – theoretical models of intergenerational risk sharing in an overlapping generations framework
  – stochastic simulation models using CDC designs that are typical of those in use in the Netherlands
    • such as career average revalued pensions with conditional indexation.
Analysis

• Theoretical models also suggest that CDC schemes are only likely to be sustainable in long run if:
  – everyone joins
    • i.e., participation is mandatory
  – everyone remains in scheme for life

• These two conditions potentially break down in the UK context.
Analysis

• Pension freedoms could also mean the benefits from CIDC schemes could be quite small
  – cf CDC or even DC schemes

• It would appear that the biggest benefits from collective schemes do come from inter-generational risk sharing
  – Not de-risking prior to retirement
  – Using new contributions to pay benefits
Issues to discuss

• We can all probably agree that in order to improve on DC:
  – Costs to the employer should be fixed and predictable
  – Risks should be shared/pooled
  – Economies of scale should be exploited
Issues to discuss

• But how best to share risks within or between cohorts of members
  – that is fair to different cohorts of members
  – does not turn into a Ponzi scheme
  – or enable members to game the system
    • time inconsistency problem
  – allows pension freedoms
  – and secures member trust even if there is no guarantee or individual ownership
Issues to discuss

• Finally, there seems to be a different definition of CDC depending on who you talk to

• Ralph Frank (Cardano) says:
  – ‘If you ask 10 people how they would define CDC, you will get 11 different opinions’
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<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Topic</th>
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<tbody>
<tr>
<td>09.30AM</td>
<td>David Blake (Cass/Pensions Institute)</td>
<td>Welcome; pension reforms in the UK; the way ahead – DC or CDC or CIDC</td>
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<tr>
<td>10.15AM</td>
<td>Bastiaan Starink (Tilburg University/Netspar)</td>
<td>DC plans and pension reforms in the Netherlands</td>
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<td>11.00AM</td>
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<td>Tea / coffee</td>
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<tr>
<td>11.30AM</td>
<td>Jenny Hall (Royal Mail) and Derek Benstead (First Actuarial)</td>
<td>Royal Mail’s journey to CDC</td>
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<td>12.15PM</td>
<td>Ed Westerhout (Netherlands Bureau for Economic Policy Analysis / Netspar)</td>
<td>Intergenerational fairness in Dutch DC plans</td>
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<td>1.00PM</td>
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<td>Lunch</td>
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<td>1.45PM</td>
<td>Robin Ellison (Pinsent Mason) and Julian Barker (Department for Work and Pensions)</td>
<td>Regulatory issues (including effective communication to help prevent people making sub-optimal choices at different stages)</td>
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<td>2.30PM</td>
<td>Kevin Wesbroom (Aon)</td>
<td>The truth – and myths! – about CDC. What can CDC offer - risk sharing, risk pooling, smoothing and decumulation solutions</td>
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<tr>
<td>3.15PM</td>
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<td>Tea / coffee</td>
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<tr>
<td>3.45PM</td>
<td>Stefan Lundbergh (Cardano)</td>
<td>How to design a universal good DC plan: Evidence from Sweden, Netherlands, Chile and Australia</td>
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<td>4.30PM</td>
<td>Panel discussion (chaired by Stefan Lundbergh)</td>
<td>What can we learn from each other with Maiyuresh Rajah (State Street Global Advisors, UK), David Pitt-Watson (London Business School, UK), Alwin Oerlemans (APG, NL), Michael Visser (Tilburg University, NL), Paul Brunger (PwC, UK) and Anouk Bollen-Vandenboorn (Maastricht University, NL)</td>
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<td>5.30PM</td>
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<td>Closing remarks</td>
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<td>5.30PM</td>
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<td>Drinks</td>
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Thank you
‘Defined ambition’ schemes
‘Defined ambition’ schemes

• Pensions Schemes Act 2015
• ‘Defined ambition’ workplace pension schemes combine some of the risk pooling/sharing benefits of DB
  – but zero liabilities on sponsoring employer
• Aims:
  – to provide more predictability for members than typical DC scheme
  – to ensure less cost volatility for sponsors of DB schemes than with traditional DB
‘DB-lite’

• Replace statutory indexation of pensions in payment with conditional indexation
  – which will depend on scheme’s funding position
• Change scheme’s normal pension age in line with changes in longevity assumptions
• Automatically convert benefits to a DC pension when a member leaves the scheme
  – with choice between cash equivalent transfer value and full buy-out
‘DC-heavy’

• Money-back guarantee (MBG)
  – members receive same amount that they paid in
    • i.e., they get at least their money back

• Capital and investment return guarantees (CIRG)
  – members receive back contributions plus minimum investment return
‘DC-heavy’

- Retirement income insurance (RII)
  - uses part of member’s fund to purchase insurance that guarantees minimum level of income
  - insurance is triggered if member lives long enough to exhaust their fund
‘DC-heavy’

• Pension income builder (PIB)
  – uses part of contributions to purchase deferred annuity which provides minimum pension in respect of that year
    • can be bought from insurer or provided from within fund
  – rest of contribution goes to common pooled fund
    • invested in riskier assets
    • used to generate growth and pay conditional indexation
‘DC-heavy’

- Collective defined contribution schemes (CDC)

- None of these options involves any risk to the employer