Traditional DB versus Notional DC Systems: Economic and Political Trade-offs

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Core question: What should (and what can) notional DC systems do better than traditional DB systems?

Four main challenges:

**Demography:**
1. Longevity up
2. Fertility down

**Design Flaws:**
3. Strong negative labor supply incentives

**Macroeconomic Feedback Effects:**
4. Growth, savings, and capital market performance

*Important yard stick: Social risk management*
What is a NDC system? (Mechanical description)

Credits:

All contributions are credited on a life-time basis to an individual account on a currency basis

Rate of return:

Balance accumulates with a *notional* rate of interest

Benefits:

Conversion at retirement into an annuity, some flexibility in choice of retirement age and type of annuity
What is a NDC system? (Economic essence)

„Point system“ for credits:

Contribution rate can be anything. Accounting rules equivalent to financial accounts: units are currency;

Rate of return (*the crucial [N]DC parameter!*):

Indexation to pay-as-you-go fundamentals (internal ror): productivity (wage growth), demography (wage bill)

Actuarial computation at retirement:

Stock-flow conversion according to actuarial rules: Function of „SS wealth“, internal ror, longevity
What is a NDC system NOT?

**Not automatically balancing (short-run stability):**

If annuities are frozen at retirement and contribution rate is fixed: missing feedback mechanism if longevity increases unexpectedly.

**Not automatically sustainable (long-run stability):**

Unless contribution rate is fixed and rate of return equals the contribution bill (or equivalent trajectory).

**No substitute for pre-funding:**

NDC does not change intergenerational burden (unless it generates a benefit cut which in turn precipitates real savings).
What does it bring to pension reform?

**Creates sense for actuarial fairness:**

- Annual benefits in line with life-time contributions
- Automatic adjustment to retirement age

**Exposes redistribution:**

- Any non-contributory credits can be clearly shown (credits for education, child raising, unemployment...)

**Automatic response to macro environment:**

- Demography: longevity (annuity), fertility (notional ror)
- Employment: notional rate of return (if indexed to bill)
What does it bring to pension reform (2)

Takes certain issues out of the political agenda:

- Retirement age (but: external effects to economy as a whole and other social security branches)
- Actuarial adjustments (but: which interest rate? When to fix? Which life table?)

Creates a new set of „parameters“, a new „rhetoric“:

- Permits redefinitions and readjustments; changes focus of debate; has the appeal of a new system (while it is not), thus enables parameter change.

[FN: A certain irony: on the one hand NDC strengthens credibility through transparency, on the other hand device to deflect emotional opposition...?]
Hence: Mainly a rhetorical and psychological device...

-- Exposes the economics of a pay-as-you-go system
-- Visualizes the budget constraint of a pension system
-- Shows trade offs (retirement age vs. replacement rate)

...which helps the reform process get going

-- Framework to introduce actuarial adjustments (since they come „automatically“)
-- Framework to diffuse explosiveness of changes in the retirement age (since choice minimizes opposition)
-- Framework to change intergenerational redistribution (but only indirectly by substituting real savings)
The four major challenges revisited:

Demography:
1. Longevity up → Well manageable in NDC system
2. Fertility down → Sudden changes *NOT* manageable in NDC system; need pre-funding

Design Flaws:
3. Labor supply incentives → Well manageable in NDC

Macroeconomic Feedback Effects:
4. Growth, savings, and capital market performance → Not addressed in NDC; need funding
Which challenges can a NDC system master:
-- Economics: longevity, actuarial fairness
-- Politics: change in rhetoric and transparency *may* make reform easier
-- Psychology: transparency and vocabulary may make people acquainted with second and third pillar pensions

Which challenges will a NDC system *NOT* master:
-- Prefunding necessary to smoothen babyboom/bust shock
-- Prefunding needed for macroeconomic side effects
-- Can only be part of social risk management

Summary: