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The autopilot solution

How notional savings accounts could put state pensions on a sustainable trajectory

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THE economic and financial storms of recent years have already battered public finances in the developed world. Now an even bigger threat looms. As populations grow older more pensioners will rely upon fewer workers for their income: in the European Union (EU) the old-age dependency ratio (those aged 65 and more as a share of 20- to 64-year-olds) is projected to go from 28% to 58% in the next 50 years. It is a similar story in many developing countries. China's working-age population is starting to shrink, for example. Without reform, these dire demographic trends will test many state-pension schemes to destruction.

In most developed countries public pensions have two main features. They are financed through "pay-as-you-go" (PAYG): today's workers pay for today's pensioners. And they offer defined benefits, in some cases flat-rate but more generally linked to earnings. Having a dwindling pool of contributors finance such benefits for a longer-living pensioner population is a recipe for disaster. One solution is to adopt notional defined-contribution (NDC) schemes, a direction first taken by Sweden in the 1990s.

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The NDC model keeps the PAYG financing, but rather than defining the benefits that people get out, it defines the contributions that people pay in. The effect is to build financial sustainability into the design. In EU projections out to 2060 published last year by the European Commission, the countries that were the first to switch to NDCs—Latvia,

Italy and Poland along with Sweden—stand out for keeping public spending on pensions stable or falling even as their populations age. A recent assessment of NDC schemes published by the World Bank was broadly positive*.

How does it work? The contribution rate is fixed at an affordable rate; in Sweden, for example, it is 16% of earnings. Although these contributions are in fact used to pay for the pensions due today, they are also counted towards notional accounts, which mimic the actual ones found in privately funded defined-contribution (DC) schemes. The notional capital in these accounts earns a return equal to the growth in the national wage-bill on which the contributions are levied. At retirement the nest eggs are annuitised (ie, converted into annual payments) just as they are in a privately funded pension plan—except that the money comes from contributions made by people who are then working. The attraction of this system is that it avoids costly procrastination and piecemeal interventions by politicians. By fixing the contribution rate, the rest of the pension system has to adjust when its financial viability is threatened. The NDC model's greatest strength is the way that it automatically responds to rising longevity—a crucial reason why traditional public pensions have run into trouble. As life expectancy at retirement increases the NDC annuity formula becomes less generous, which cuts the value of pensions. And if the workforce shrinks, that reduces growth in the earnings base, which lowers the returns on the “capital” in the notional accounts.

Imposing financial sustainability through ever-lower benefits may well be politically untenable as a large generation of baby-boomers moves into retirement. Not all of the adjustment has to come through lower benefits, however. Individuals can also choose to work longer. Unlike traditional schemes where the link between what workers pay in and what they get out as pensioners is tenuous, the NDC's tight link between earnings (and thus contributions) and pensions encourages people of all ages to work. This is particularly important for older employees who are confronted far more explicitly with the trade-off between stingier pensions and working longer.

The NDC model is not for everyone. In the rich world places like New Zealand, whose flat-rate pension systems are based on providing the same (lowish) benefits to everyone who is eligible, would find an earnings-related scheme more expensive. But the NDC approach suits the bigger group of nations that already have earnings-related schemes. Indeed, it may not be necessary to replace them wholesale, since some NDC principles can be built into existing models. Germany, for example, has introduced a demographic-sustainability factor that curbs costs automatically.

Chile out

Emerging markets have a freer hand than developed economies to make big changes, because their pension schemes are less mature. But the administrative demands of NDC schemes, which include the tracking of millions of accounts over time, are too exacting for the least developed economies. Where they could work is in a middle tier of countries, like rapidly ageing China, that have got the institutions to make the schemes function.

For emerging economies with that sort of institutional capacity, the NDC design also overcomes the snags in an earlier reform strategy pioneered by Chile when it changed its pension system in the early 1980s. The Chilean approach was to switch from PAYG schemes to mandatory funded-DC savings accounts, which meant that the contributions that had formerly financed pensioners of the time were diverted into the workers' saving accounts, with general taxes having to pay for current pensions. The NDC model dodges this “double burden” on the working generation. It also avoids the risks of relying too heavily on the markets to deliver pensions.

The NDC solution is only one part of the answer to the pensions conundrum. Retirement income should also rest on a privately funded pillar, which can provide higher, if more volatile, returns. But for many countries, the NDC design provides a plausible way of taming the costs of public pensions.

* “Nonfinancial Defined Contribution Pension Schemes in a Changing Pension World”, World Bank, 2012

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