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THE NOTIONAL DEFINED CONTRIBUTION MODEL: AN ASSESSMENT OF THE STRENGTHS AND LIMITATIONS OF A NEW APPROACH TO THE PROVISION OF OLD AGE SECURITY

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The structure of pension systems varies by two key dimensions: the way in which benefits are determined and the way in which they are financed. The determination of benefits follows one of two main approaches: 1) defined benefit (DB), in which benefits are based on a specific formula that often relates to a worker's wages; or 2) defined contribution (DC), in which benefits depend on the contributions made to a worker's account and the associated earnings on the account. The financing structure also follows one of two approaches: 1) pay-as-you-go (PAYGO), in which the taxes paid by current workers are used to pay the benefits of current retirees; and 2) funded, in which taxes paid by current workers are invested and used to pay their own benefits when they retire.

Most public old-age pension schemes around the world are based at least in part on the DB model and are generally financed by a PAYGO approach. As these schemes have matured and problems such as large financial imbalances and work disincentives have emerged, some countries have shifted to a funded DC model of individual accounts and others have begun to consider it. Another emerging option that involves less dramatic change is the notional defined contribution (NDC) model, which includes individual accounts but is financed on a PAYGO basis. In the years ahead, the NDC model may be combined with or possibly displace the funded DC model as the major alternative to the DB model. Drawing primarily on evidence from NDC schemes in 6 countries, this paper describes the NDC model and reviews its strengths and limitations.

While the NDC model could be used as a stand-alone system, in practice it is often included as one pillar in a multi-pillar scheme. NDC schemes have been introduced in Sweden, Italy, Poland, Latvia, Mongolia, and the Kyrgyz Republic. The main feature of the NDC model is that each worker has an individual notional (unfunded) account. Each worker's account receives a credit equal to a portion of the amount paid in payroll taxes (without any funds being deposited), while the tax revenues themselves are used to pay pension benefits to current retirees. Accounts are also credited with a rate of return that is typically tied to a factor like the growth rate of wages or the economy.

Moving to a NDC scheme from a traditional DB plan may be attractive for several reasons. Most importantly, it ties pension benefits closely to contributions, which is a key goal of many pension reform advocates who stress the need to improve labor force incentives. Second, since NDC plans operate on a PAYGO basis, they avoid requiring the current generation of workers to pay twice – once for current retirees and once for their own retirements. These “transition costs” may make it difficult politically to move from a PAYGO to a funded system. Third, NDC plans also tend to carry less financial risk than funded DC plans because the rates of return for NDC accounts are dependent on economic factors that generally fluctuate less than financial markets. This is particularly important for developing countries with more volatile

financial markets and a higher proportion of covered workers living near the economic margins. Given these attributes, NDC systems tend to emerge as a political compromise between advocates of the traditional DB structure and those who prefer a funded DC approach. Finally, policymakers may find it politically easier to cut promised benefits in the context of creating a new system than to make such cutbacks in an existing public pension plan. In this way, they may be able to establish a pension system that is financially sustainable and responsive to changes in demographic and economic factors.

NDC plans also have two major potential drawbacks. First, by themselves, NDC accounts provide less adequate pension benefits to low-wage workers than traditional DB plans due to the lack of progressive income redistribution. Second, while the fiscal burden of switching to an NDC scheme is less than that associated with a funded DC scheme, NDC schemes lack many of the potential economic benefits associated with funded DC schemes, such as higher levels of saving, investment, and economic growth.

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