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Defined Contribution Accounts – Still an Indispensable Idea

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The diversity of developed countries' pension system designs today reflects these systems' different historical origins and social philosophies, as well as the political difficulties involved in reforming any social institution that provides income for a large share of the electorate. Whereas a large public sector role in pension provision remains the defining feature, a noticeable and uniform cross-country development in recent years has been the growing importance of private schemes in global pension provision.[1] Private pension provision has expanded due to concerns about the long-term sustainability of government finances in an era of ageing populations and from the associated need to diversify the sources of retirement income to ensure adequacy and life time income smoothing. Principally private pension schemes are thus intended to complement, rather than fully replace, reformed and possibly scaled-back public pension systems.

The vehicle of choice for introducing complementary private pension provision has been the defined contribution (DC) account. Here workers during their working life pre-fund retirement income by paying contributions into an account which is then invested in real economic assets enabling investment returns to be added to the workers' contributions. DC retirement plans can be individual or occupational (i.e., typically organised by industry or at the firm-level). Introducing a DC pension plan option works to address at least three interrelated long-term challenges facing countries' pension systems:

1. *The fiscal challenge* facing governments from ageing populations; complementary DC plans can over time account for a substantial share of retirement income for especially higher income groups. In this way future unfunded long-term liabilities for governments are reduced.
2. *The savings challenge* of getting people to save more for their own retirement; complementary DC plans offers a simple, transparent and (usually through tax-preferences) financially lucrative vehicle for personal saving towards retirement. At the same time, accumulated DC assets in complementary plans assist in raising the national savings rate and (given the persistence of investment home bias) the domestic private capital stock and productive capacity in an economy.
3. *The labour input challenge* of ensuring that ageing populations do not lead to labour shortages through premature retirement; complementary DC accounts – via their direct link between contribution levels and retirement income – provide straightforward individual incentives to remain longer in the labour force. It is not a coincident that recent surveys of workers' retirement intension in the hardest hit countries, such as the Ireland, United States and the UK (see below), indicate that many expect to retire later as a result of the crisis.[2] An "automatic stabiliser"-type effect on labour force participation among older workers from incurred DC retirement savings losses seems to be occuring. Moreover DC pension plan contributions made towards individuals' own retirement are less likely to be perceived as an additional tax on income and thus avoid the adverse effects of high taxation on aggregate labour input.

The crucial final point is illustrated in Figure 1, which plots the total tax wedge on labour income and annual average hours worked per capita for high income OECD countries in 2008.[3]

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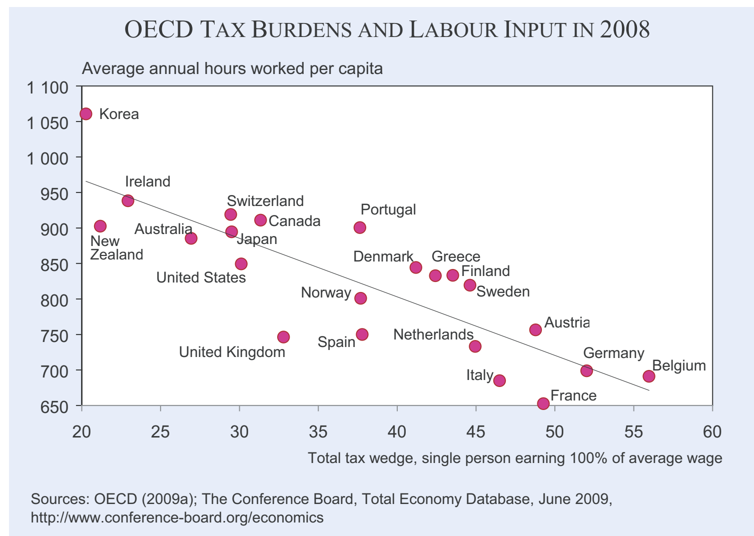
[1] This paper follows the pension taxonomy presented in OECD (2005). Private pensions include personal and occupational pensions in both mandatory and voluntary form. Design can be both defined benefit and defined contribution.

[2] See IPE.com (2009) and Helman et.al. (2009).

[3] Total tax wedge data from OECD (2009a) includes employer payroll taxes. Average annual hours worked per capita data incorporates country differences in labour force participation, unemployment, frequency of part-time work and hours worked by full-time employed. Working hours data is from The Conference Board, Total Economy Database, June 2009, http://www.conference-board.org/economics.

Figure 1



Sources: OECD (2009a); The Conference Board, Total Economy Database, June 2009, http://www.conference-board.org/economics

While it is always dangerous to infer causation from correlation, Figure 1 illustrates the difficulties many OECD countries, especially in continental Europe, face in raising taxes further to pay for future increases in government pension (and other age-related) expenditures. The relationship between average taxation levels and average labour input is strongly negative. Such constraints on reform policy space will continue to nudge the most affected governments in the direction of relying more on complementary DC pension schemes to finance retirement incomes in the future.

The shift from defined benefit to defined contribution is not just a one-way street

It is frequently stated that the shift towards complementary corporate pension provision in the form of DC schemes, especially in the US and UK, is a detrimental development to workers, as DC plans often replace older corporate-defined benefit (DB) plans. In DB plans recipients' benefit levels are guaranteed in a manner resembling public pension systems and typically related to an employee's salary level, employment duration and other factors. However, a narrow view of the DB-to-DC pension provision shift as bad for workers is erroneous and often based on an overly rosy view of corporate DB pensions. Certainly a DC scheme replacing a DB pension entails a large transfer of investment risk from the sponsoring corporation to the individual worker, whose retirement benefit levels will reflect only the balance in the DC account at the time of retirement. Yet as Baily and Kirkegaard (2009, 369–73) explain, a DB pension plan inherently contains a series of other risks to workers:

1. *Funding risk;* DB plan sponsors contribute too little to the pension plan to cover promised liabilities
2. *Portfolio risk;* DB plan sponsors invest DB pension assets at a loss
3. *Bankruptcy risk;* DB plan sponsors encounter financial problems and cannot honour pension promises
4. *Portability risk;* Employees leave the DB plan sponsoring company before acquiring full vested pension rights
5. *Inflation risk;* Unlike public pensions which are invariably annually adjusted to increases in wages/consumer prices, private DB pension plans (almost) never contain such protection of future purchasing power. Similarly to DC plans retirees therefore bear the full cost of inflation after retirement.

Different variations of government mandated obligatory safety-nets for DB pension benefits, such as the Public Benefit Guarantee Corporation (PBGC) in the United States, the UK Pension Protection Fund (PPF) or the Pensions-Sicherungs-Verein auf Gegenseitigkeit (PSVaG) in Germany alleviates the first three risks for workers, but at an invariably additional funding and administrative cost to all DB plan sponsoring companies. Furthermore, as Baily and Kirkegaard (2009, 363–69) state, it is important to note that corporate DB pension plans providing a significant share of the total retirement income never rose above approximately 40 percent of the total workforce in any country, but were instead overwhelmingly concentrated among executives and male employees in erstwhile large manufacturing companies. With the accelerating shift in developed economies' employment towards SMEs and the services sectors, it is therefore highly unlikely that even a stabilisation of overall corporate complementary pension provision could have been achieved without a rapid shift towards DC plans. DB plans contain inherent hard-to-hedge longevity risk (the risk for DB plan sponsors that retirees live and receive benefits longer) and the financial management and compliance costs of DB pension plans far exceed those of DC plans (Baily and Kirkegaard 2009, 382–88). This makes it unrealistic that many SMEs can shoulder the

burden of a DB plan sponsorship. Moreover, portability risk looms larger for workers in the more dynamic services sectors, in which frequent job switches is far more prevalent than in the longer tenured manufacturing sectors. In many regards, DC accounts are therefore better suited for a more flexible and individualised labour market of the 21st century.

The impact of the current global economic crisis on DC pension plans

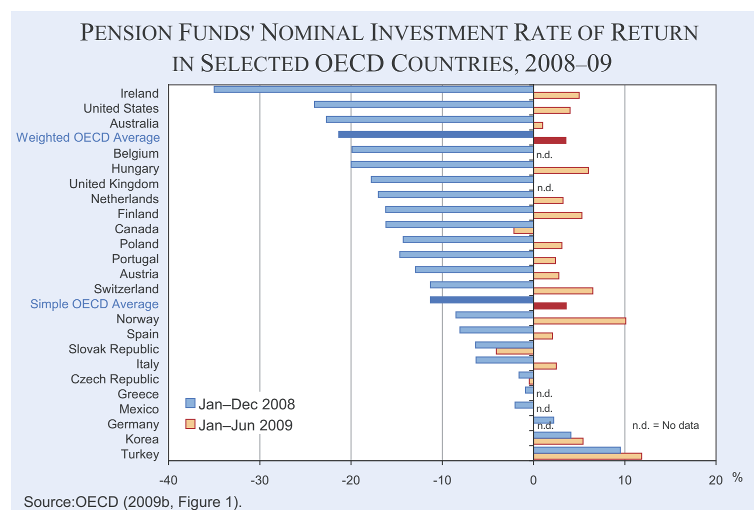
However, the timing of the global economic crisis has brought the importance of investment risk contained in DC plans into sharp focus and discussions of their merit must take into account the perfect storm to hit participants in private DC pension systems during the current global economic crisis. Figure 2 shows early indicative figures for private pension fund investment returns in select OECD countries in 2008–09.

It can be seen how 2008 performances range between 35 and 25 percent losses in Ireland and the US and small 2008 gains in Germany, Korea and Turkey. Meanwhile, it is also clear that the stock and other asset market rebound in the first half of 2009 has, in the most severely affected countries, only made up for a limited share of losses incurred earlier in the crisis. As such, focusing on relatively high average investment returns in the "long run" is not a luxury many DC participants have, for whom a single year of very poor returns in 2008 was particularly badly timed. As laid out in OECD (2009c, 26–27) two groups of DC pension participants are most strongly affected by the crisis: First individuals near retirement age with limited time to make up for recent investment losses and with relatively large shares of their prospective retirement income coming from their DC accounts, especially if they had a large exposure to risky assets (equities) or if they are legally required to annuitise their DC balances immediately upon retirement. And secondly, retirees who did not annuitise their DC balance upon retirement and consequently post-crisis must live off income from a potentially much reduced DC account balance. Particularly the former group of people currently close to retirement age is potentially very large, as it includes the majority of the large baby-boomer generations in many OECD countries. For instance in the United States, 2008 was the year in which people born after WWII could for the first time take early retirement under Social Security at age 62. Furthermore, the current crisis is global in scope rendering standard geographic portfolio diversification strategies less effective and in many OECD countries has also adversely affected the value of workers' largest non-financial asset, namely their homes. Hence, the current economic crisis has severely affected the retirement income security of some participants in DC schemes and done so more immediately than similarly aged participants in DB plans or recipients of public pay-as-you-go pension benefits.

At the same time, though, the overall magnitude of the impact of the current economic crisis on private DC plan participants should not be exaggerated. First of all, public social safety nets, typically guaranteeing a minimum income or operating through means-testing, act as automatic stabilisers and prevent retirement income from falling too low, even if individuals have suffered very large losses in their DC account during the current crisis. Secondly, younger workers will have ample time to make up for recently incurred investment losses before their retirement. And thirdly, but most importantly, as a consequence of the recent strong growth in the number of countries implementing DC pension schemes, most of these are still relatively modest in size and thus account for only a small part of workers' total retirement income. This last point is illustrated in Figure 3.

Figure 3 shows the recorded assets held in DC and hybrid/mixed accounts at the end of 2008 in

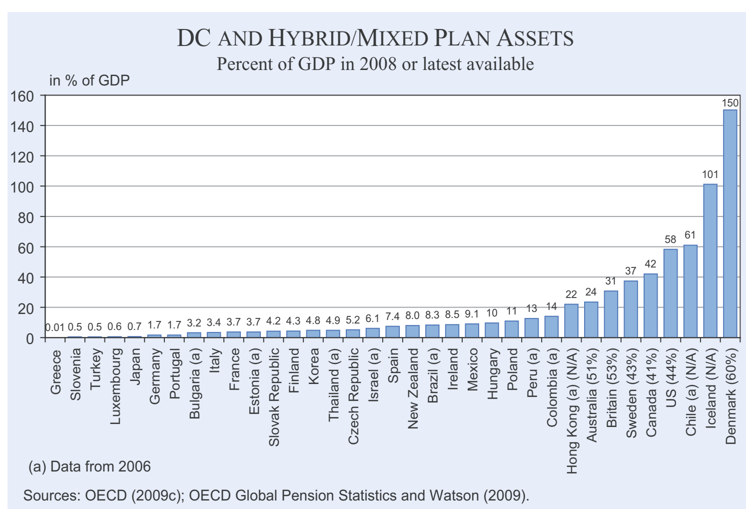
Figure 2



PENSION FUNDS' NOMINAL INVESTMENT RATE OF RETURN IN SELECTED OECD COUNTRIES, 2008–09

Source: OECD (2009b, Figure 1).

Figure 3



(a) Data from 2006

Sources: OECD (2009c); OECD Global Pension Statistics and Watson (2009).

35 countries included in the OECD's Global Pension Statistics data.[4] In only nine countries do private DC and hybrid/mixed assets account for more than 20 percent of GDP, while in most countries which had by 2008 introduced DC plans, such assets still accounted for only a very small share of GDP. Correspondingly, even large investment losses in private DC accounts in most countries will therefore not have affected total retirement income that much, as it is still overwhelmingly made up of payments from public and/or private DB pension schemes. This is indicated in the parentheses, which for the nine countries with the largest DC and hybrid/mixed mix plan assets shows how retirement income in these countries from all types of private pensions is generally around half of average total retirement income[5] and only in Denmark accounts for 60 percent. As such, even in countries with the largest accumulated DC and hybrid/mixed plan assets, the fact that total retirement income comes from several different sources significantly eases the negative income impact of DC investment losses.

The investment losses suffered by DC pension plan participants in the current crisis has clearly underlined the need for maintaining a mixture of public and private sources of retirement income for the vast majority of future retirees in developed countries. However, the economic crisis has adversely affected not just DC pension investments but has also caused, as a result of the unprecedented fiscal stimulus enacted since early 2008, a very significant long-term deterioration in public finances across the OECD. Yet, the long-term costs of ageing populations for governments have not diminished.[6] Another result of the economic crisis is therefore that the need for governments to ensure that people save more towards their own retirement income security has increased dramatically. Preserving some of the government income safety net has proven crucial during the crisis, but the need for expanded reliance on pre-funded DC-type pension schemes to fund increasing shares of total retirement income has become equally evident.

The road forward for DC pensions

Following the collective failure of the financial services sector to protect retirement savings and financial stability, measures must be taken in many OECD countries to restore public confidence and address the investment risk in DC pensions. In many ways it is fortunate that the current crisis has, as Figure 3 shows, hit before many countries' private DC pension systems mature, as this allows for policymakers to make necessary reforms in light of the recent economic crisis before DC schemes make up a large share of total retirement income and political opposition to reforms increase. Broadly speaking the larger a share DC private pension plans make up of total retirement income the more stringent regulation will likely need to be. An effective and sustainable post-crisis private DC pension system should contain several broad characteristics to ensure widespread participation and better protection against investment risk:

1. *Auto-Enrolment with an Opt-Out;* The very positive effects on participation in DC pension schemes from auto-enrolment with an opt-out clause[7] makes this "nudging" approach advanta-

[4] Hybrid/mixed accounts are very small compared to standard DC assets and include pension schemes with some characteristics of both DB and DC plans. See OECD (2005, 14) for details. Only countries with recorded DC and hybrid/mixed assets are included in figure 2. Data include retirement assets held in all contract types, i.e. standard pension funds, insurance contracts and investment company and bank managed contracts.

[5] No data is available for retirement income broken down by types of public and private pension plans. The data in parentheses therefore refer to country shares of total retirement income coming from all private pension schemes, including DB plans.

[6] See for instance European Commission (2009) for a forceful statement of this point.

[7] See for instance Madrian and Shea (2000) and Beshears et. al. (2006).

geous, especially for attracting traditionally low-saving low income groups. Carefully designed and relatively conservative "default options" for procrastinating savers who do not choose an investment portfolio or pension plan should also be included in auto-enrolment provisions.

2. *Age-linked Retirement Portfolios;* Very large losses among older workers with large portfolio exposures to risky assets during 2008 point to the advantages of automatic age linking of DC pension plans. According to this system, workers' DC portfolio would automatically shift towards less risky assets as they approach retirement. A one-size-fits-all approach would not be appropriate, given the large differences in workers' other retirement assets (i.e., home values and general access to public transfers in old age). Rather a range of several different "portfolio age-link options" for DC pensions could shrink investment risk for participants nearing retirement age. Age-linked retirement portfolios could be promoted by limiting tax preferences for DC pension plans that do not offer such automatic links or do not automatically and sufficiently restrict the share of risky assets in a retirement portfolio as the participants nears retirement.
3. *Compulsory Phased Annuitisation;* Longevity risk and the risk of sudden asset price declines adversely affecting income security for retirees with large DC portfolios makes compulsory annuitisation (in effect the conversion of a DC balance into a DB pension plan) upon retirement sensible. Compulsory annuitisation would have to include some measure of inflation protection, too. Yet volatile asset prices, combined with requirements of immediate annuitisation upon retirement exposes retirees to the risk of having to purchase an annuity at the bottom of their DC portfolio value. Instead, annuitisation should only be compulsory in phases. This could mean that annuitisation is only compulsory within a certain time period following retirement, say within 3–5years, or that only a certain (but relatively high) percentage of the total DC balance has to be converted narrowly around retirement. Given the difficulties for private businesses in hedging inflation protected annuities, governments would, as described in Visco (2009, 155–58), need to play an active direct role in annuity markets to ensure that reasonably priced products would be available to retirees.
4. *No Reliance on Financial Education;* It is often argued that there is an urgent need to improve the financial education of the general public in order for them to be able to better manage their own retirement savings. While better educational standards are of course generally socially desirable, the recent economic crisis has however illustrated how the vast majority of highly sophisticated portfolio managers and financial experts "got it all horribly wrong". Healthy scepticism should therefore greet any expectation that improved financial education of the general public will have any discernable effect on their retirement income security. Rather than attempting to arm the general public to better battle the DC retirement product sales forces of a profit oriented financial services sector, government pension regulators and enforcement agencies should emphasise that the utmost simplicity be utilised, when specifying requirements for retirement product disclosure and fee structures.
5. *Credible Ring-Fencing of DC Retirement Assets;* During periods of acute financial stress, it can be tempting for governments to promote consumption by facilitating early access to private DC retirement assets, because, as Willie Sutton said of the reason for him to rob banks, "That's where the money is". However, such easing of access restrictions to tax preferred retirement assets is misguided for the vast majority of DC pension plan participants. Bringing forward consumption spending from retirement to one's working life means intertemporally transferring assets away from a period with few alternative ways of earning income. Similarly such transfers will invariably aggravate any adequacy concerns for future retirement income. Policy makers must therefore end all opportunities for "hardship withdrawals" to avoid leakage of tax-preferred assets needed to ensure retirement income.
6. *A Constant Focus on Lowering Administrative Costs;* For DC pension plans to offer persistent high returns to participants, it is crucial that pension system administrative and overhead costs are kept as low as possible and that government policy and regulation are explicitly designed to achieve this result. The recent successful experiences in Sweden's pension system deserve additional attention in this regard. Administrative cost consciousness for instance suggests, as economies of scale exists in DC contribution collection and asset pooling, that this task is best carried out by a single centralised entity. Costly advertising campaigns by the financial services sector for DC pension plan-type products aimed directly at potential participants must similarly be avoided.

References

All websites visited on 30 October 2009.

Beshears, J., J. J. Choi, D. Laibson and B. C. Madrian (2006), "The Importance of Default Options for Retirement Savings Outcomes: Evidence from the United States", *NBER Working Paper* no. 12009, National Bureau of Economic Research, Cambridge.

Baily, M. N. and J. K. Kirkegaard (2009), *US Pension Reform: Lessons from Other Countries,* Peterson Institute For International Economics, Washington, DC.

Conference Board (2009), Total Economy Database, available at http://www.conference-board.org/economics

European Commission (2009), "2009 Ageing Report: Economic and Budgetary Projections for the EU-27 Member States (2008-2060)", *European Economy* no. 2, European Commission, Brussels.

Helman, R., M. Greenwald and J. VanDerhei (2009), "The 2009 Retirement Confidence Survey: Economy Drives Confidence to Record Lows, Many Looking to Work Longer", *EBRI Issue Brief* no. 328, available at http://www.ebri.org/pdf/briefspdf/EBRI_IB_4-2009_RCS2.pdf.

IPE.COM (2009), "Three in Four Irish Workers Expect Retirement Delay", http://www.ipe.com/news/three-in-four-irish-workers-expect-retirement-delay_32800.php.

Madrian, B.C. and D.F. Shea (2000), "The Power of Suggestion: Inertia in 401(K) Participation and Savings Behavior", *NBER Working Paper* no. 7682, National Bureau of Economic Research, Cambridge.

OECD (2005), *Private Pensions: OECD Classification and Glossary,* Paris.

OECD (2009a), *Taxing Wages 2007/2008,* 2008 edition, Paris.

OECD (2009b), *Pension Markets in Focus 6*, Paris.

OECD (2009c), *Pensions at a Glance 2009,* Paris.

OECD Global Pension Statistics Database, available at http://www.oecd.org/daf/pensions/gps.

Visco, I. (2009), "Retirement Saving and the Payout Phase: How to Get There and How to Get the Most Out if It", *OECD Financial Markets Trend Journal* 1, 143–62.

Watson Wyatt (2009), "2009 Global Pension Assets Study", available at http://www.watsonwyatt.com/europe/research/resrender.asp?id=200901-GPAS&page=1.