US PUBLIC PENSIONS IN AN ERA OF LOW RETURNS

Defined benefit (DB) pension plans are by definition more generous and more expensive than defined contribution (DC) pension plans, as they entail the future payment of predetermined benefits to certain recipients whatever the future financial performance of underlying assets invested in a given pension fund today- a major "unknown", and the equally uncertain evolution of wage inflation, interest rates and demographic circumstances over decades.

In most DB pension plans, benefits are guaranteed (up to a limit) by a specific federal insurance program called the Pension Benefit Guaranty Corporation (PBGC), which further strengthens the attractiveness of DB plans.

THE SLOW DEATH OF PRIVATE SECTOR DB PLANS

DC pension plans on the other hand are *de jure* far less committal for the sponsoring company (the employer): they're predicated on the far more easily attainable promise of simply serving beneficiaries when they retire benefits that will reflect the real-life evolution of the assets invested on their behalf during their years of service for a given employer, and thus shift more risks to employees. In 1980, before President Reagan was elected, only 38% of private sector workers and employees were enrolled in DC pension plans *(see Figure 1)*, the proportions of DB and DC private sector participants becoming roughly equal in 1984 at the end of his first term… Today, the proportion is more than eight in ten for DC plans as far as the private sector is concerned, with most surviving corporate DB plans practically closed to new employees!

DB PRESERVE OF STATE, LOCAL AND FEDERAL GOVERNMENT

This spectacular "secular shift" constitutes one of the major socio-economic phenomena of the past thirty years and will have long-lasting consequences as generations of American workers and employees retire under inauspicious circumstances[1], with reduced income replacement: considering total lifelong income defined as working life income + pension benefits, private sector workers and employees born after 1960 will have to settle for a rougher deal than their "*Golden Cohort*" elders[2]. Started under a militant Republican administration attached to the tenets of free-market "*individualization*" of social services and "low-labor-costs at all costs", this weakening of the pension promise in the private sector has gone unabated throughout the Clinton and Obama years, as Democratic lawmakers and union leaders focused on *present* metrics reflecting short-term changes in economic growth, unemployment, salaries, health care (which monopolized the attention of Hilary Clinton, then Barrack Obama), vague environmental issues (Al Gore, and now Joe Biden who insists he *"commuted to Washington every day by train for over 35 years, a practice he maintained throughout his career in the Senate"!*), the "fiscal cliff" … etc. thus practically ignoring the coming pension predicament facing tens of millions of private sector workers and employees. This unreasonable lack of focus on pension quality and equity from the part of centrist and progressive political leaders is compounded by the generally short-termist attitude of the "liberal media" itself, which seems to be "*frozen in the perpetual present*"[3] [4]

Meanwhile public sector employees at both federal and local levels have remained practically insulated from such a decline in pension quality as the vast majority of federal, state and municipal employees still enjoy the substantial advantages inherent to DB plans: today, 78% of public sector employees covered by a pension are still enrolled in DB pension plans[5] vs. only 19% of private sector employees[6]. Tellingly, even in Republican-controlled state legislatures (with recent and rare exceptions such as Utah), there have been no real efforts to curtail

VINCENT BAZI IS A DIRECTOR AND HEAD OF EQUITY INVESTMENTS AT NEXTSTAGE, a Paris-based investment fund (with €300m AuM as of december 2012).
He has 25 years experience in equity research, sales and asset management in various investment houses (Cheuvreux, JP Morgan, Schroder, Oddo, and Dexia). He is President of the World Pension Council (WPC) and Deputy Chairman of the French Society of Financial Analysts (SFAF). He is member of the Board of EFFAS (the European Federation of Financial Analysts Societies) and ACIIA (the Association of Certified Investments Analysts). He is a graduate of Institut d'Etudes Politiques de Paris (IEP) and Columbia Business School and holder of CIWM (Certified International Wealth Manager).

M. NICOLAS J. FIRZLI IS THE COFOUNDER AND MANAGING DIRECTOR OF THE WORLD PENSIONS COUNCIL (WPC), a Paris-based think-tank dedicated to pension research and financial law and regulation. A statistician by training, Mr. Firzli has more than 15 years of capital market research and institutional asset management experience, focusing on Canadian, Asian and MENA area pension funds, as well as sovereign wealth funds, central banks and supranational organizations.
Mr. Firzli is a graduate of McGill University, an alumnus of the HEC School of Management and the University of Paris Law School; he conducted research at the Catholic University of Louvain (UCL) Doctoral School of Economics and Management.

the particularly generous DB pension programs enjoyed by career civil servants and their political bosses on both sides of the aisle: *"you are never better served than by yourself"*…

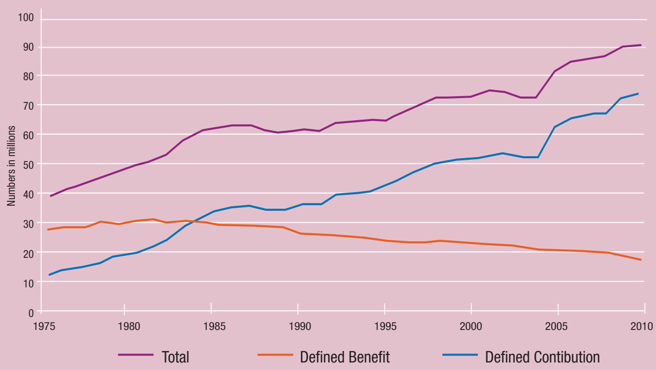
UNTENABLE ACTUARIAL ASSUMPTIONS

Pension funds typically invest resources in a variety of asset classes: *"expected"* or future annualized rates of return on investment ('ARR') for a combination of assets under management over relatively long investment cycles thus constitute the essential actuarial assumption made by pension funds (other important actuarial assumptions relate to longevity, wage inflation and interest rates- discussed in other WPC papers & seminars). Based on the guidelines provided by the Government Accounting Standards Board (GASB), public sector pension professional measure the *present value* of all future benefit payments (which constitute a pension plan's liabilities) using a theoretical discount rate purportedly reflecting the median expected rate of return on investments of a "typical" public pension scheme- currently at 8.0%, a rather rosy figure that may have been correct in the past, but is plainly no longer relevant today.

Ignoring gains from international diversification and sophisticated asset strategies for the sake of simplicity, a generic public pension portfolio ('AVG. PPF') with typically 60% US government bonds (represented here by the Barclays US Gov. Bonds index w/ approx. 5.0 duration) + 40% US equity (S&P 500) would have generated an annualized rate of return of 8.8% from 1990 to 2007 *(see Figure 2)* which may seem to corroborate the GASB's actuarial recommendation. But the rate of return recorded for the same standard portfolio over a more recent period *(see Figure 3)* shows substantially different results, with the annualized rate of return of a typical public pension fund at 3.6%, a meager 150 basis points above inflation… and 440 basis points below the US government's recommended actuarial assumption! Clearly, economic common sense and statistical caution dictate that the discount rate used to assess the present value of pension liabilities should be the current "risk-free" rate [7] i.e. the US Treasury rate, instead of some hypothetical future rate of return, regardless of the variety and quality of assets under management or lack thereof.

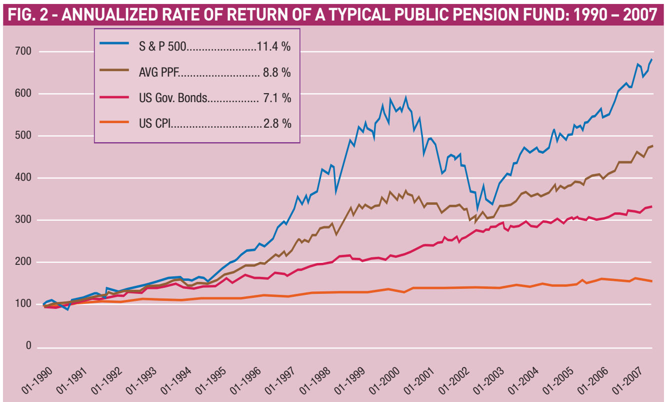
By adopting a more realistic actuarial approach using US Treasury rate to discount future financial obligations, mainstream experts have estimated the present value of public pension plans' unfunded liabilities to total $ 4.4 trillion[8], which represents more than 30% of the US GDP. This figure serves as a stark reminder that issues such as public pensions underfunding and, more generally, pension solvency and public vs. private sector pension equity are essential for the *long-term* stability of the economy as a whole and that *"we should strive to give all pensions a basis more solid and more durable than government funding- this at a time when the government's finances are already stretched thin by the clearly excessive number of entitlements it guarantees"*[9]. ■

FIG. 1 - NUMBER OF ACTIVE PARTICIPANTS IN PENSION PLANS BY TYPE OF PLAN



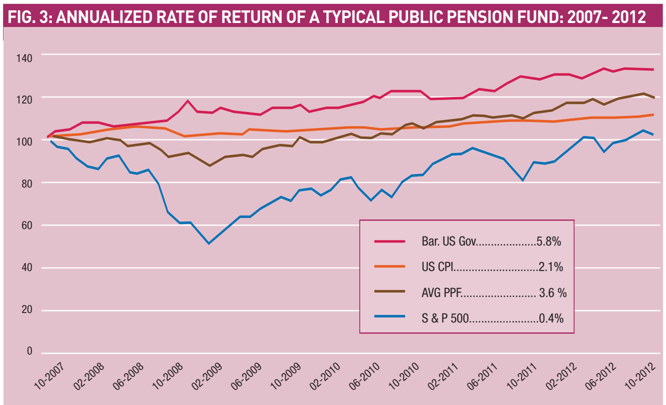
Source : U.S. Department of Labor Employee Benefits Security Administration, 'Private Pension Plan Bulletin Historical Tables and Graphs (1975- 2010 Data)', November 2012, p.9

FIG. 2 - ANNUALIZED RATE OF RETURN OF A TYPICAL PUBLIC PENSION FUND: 1990 – 2007



Source: Bloomberg, World Pensions Council

FIG. 3: ANNUALIZED RATE OF RETURN OF A TYPICAL PUBLIC PENSION FUND: 2007- 2012



Source: Bloomberg, World Pensions Council

(1) Bloom, D. E., & Freeman, R. B. (1992). 'The Fall in Private Pension Coverage in the US' (No. w3973), National Bureau of Economic Research, p.1

(2) Cairns, A. J., Blake, D., & Dowd, K. (2008). 'Modelling and Management of Mortality Risk: a Review'. Scandinavian Actuarial Journal, 2008(2-3), 79-113

(3) Guy Debord, La Société du Spectacle (Paris : Gallimard, 1992 Reprint), p. 192

(4) a recent example of this short-sighted focus on changes in working life net income can be found e.g. in Binyamin Appelbaum, & Robert Gebeloff, 'Complaints Aside, Most Face Lower Tax Burden Than in 1980', New York Times, Nov. 29 2012

(5) Sanford, P., & Franzel J.M., (2012), 'The Evolving Role of DC Plans in the Public Sector', A.N. Caple Foundation/NAGDCA/CSLGE, p.4

(6) U.S. Department of Labor Employee Benefits Security Administration, 'Private Pension Plan Bulletin Historical Tables and Graphs (1975- 2010 Data)', November 2012, p.9

(7) Sharpe, W. F. (1976). 'Corporate Pension Funding Policy'. Journal of Financial Economics, 3(3), pp. 183-193.

(8) Healey, T. J., & Hess, C. (2012). 'Underfunded Public Pensions in the United States', Harvard Kennedy School M-RCBG Faculty Working Paper No. 2012-08, p. 13

(9) Albert de Mun, Discours et Ecrits Divers - Tome Quatrième (Paris : Librairie Ch. Poussielgue, 1895), p. 12

This is an updated version of the article published in the Q1 2013 issue (N° 46) of the review.