COMMENTS ON SESSION 2
PENSION REFORM AND CAPITAL MARKETS

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1 Introduction

I was asked to comment on three of the papers presented in the session that addressed the issue of pension reform and capital markets. More specifically, I will comment on the papers by Draper and Westerhout; Gillingham, Leive and Tuladhar; and Rezk, Irace and Ricca. These three studies cover related issues – pensions and savings – although in a different setting. For instance, the first paper is a theoretical paper presenting simulation results, based on a model capturing life-cycle behaviour of households. The second paper is a descriptive analysis of the consequences of the financial crisis on funded pension saving. On the other hand, the third paper offers an empirical analysis of the effects on saving from the substitution of PAYGO systems by fully funded pension schemes.

2 On "Privatizing Pensions: More than an Interesting Thought?" by Nick Draper and Ed Westerhout

The paper by Draper and Westerhout assesses the privatization of pension systems in an OLG life-cycle behaviour model. The sources of income include labour, capital and intergenerational transfers. One assumption is that equity as a percentage of wealth is roughly constant over time (implying constant return risk aversion).

According to the results, an economy with a defined benefits scheme can see an increase in utility of around 63 per cent and the privatization of pension funds would imply a 48 per cent decrease of utility at the steady state. In addition, in the presence of an annuity market there is a negative effect of 4.5 per cent at the steady state, and precautionary saving for longevity risk is no longer necessary. Finally, considering either endogenous or exogenous labour supply, there only very small differences in terms of utility.

From my reading of the version presented in the workshop, the privatization message and its implications were not too clear from the paper. On the other hand, are there significant changes if perfect capital markets are absent? For instance, short-selling is not always possible (may not even be allowed).

Regarding the calibration of some of the parameters in model I would see it as an added value if the authors are clearer on their sources and possible sources. For instance, the authors use an intertemporal substitution elasticity of 0.5, a rate of time preference of 0.0125 and an expected excess return on equity of 0.01. For example, in order to assess the magnitude of the excess return on equity, we can observe such measure for the U.S. and Japan (see Figure 1 and Table 1). During the period 1970:1-2008:3, the average equity excess return was 0.8 and 3.2 per cent respectively for the U.S. and for Japan, which is somewhat different from the working hypothesis of the model

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simulation. Therefore, some sensitivity analysis with the calibration parameters would be useful to see to what extent some results still hold.

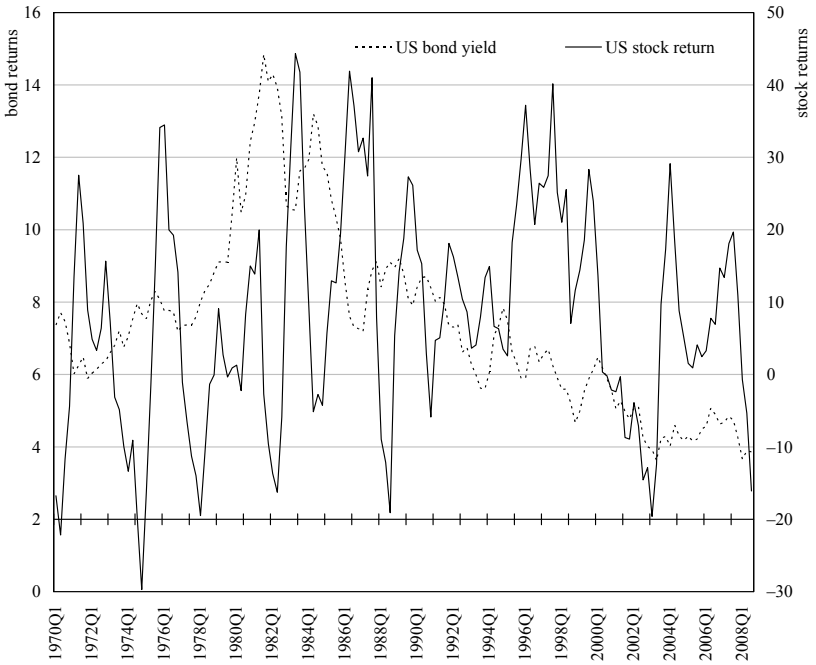
3 On "The Impact of the Financial Crisis on Funded Pension Saving" by Robert Gillingham, Adam Leive and Anita Tuladhar

As already mentioned, the paper by Gillingham, Leive and Tuladhar is a descriptive study of the effects of the financial crisis on pension funds. According to the evidence reported equity is a relevant part of pension funds assets (45 per cent in 2007), and pension funds in the U.S., the U.K., Australia, the Netherlands, Canada and Sweden, seem more prone to the effects of the 2008 crisis, while there is a broader predominance of defined benefits PAYGO systems in the EU. Moreover, and not surprisingly, the richest income quintiles are more exposed to a crisis situation and the ensuing loss in market value of assets in the capital markets. Still, government assistance to pension plans in a situation of crisis should be targeted to

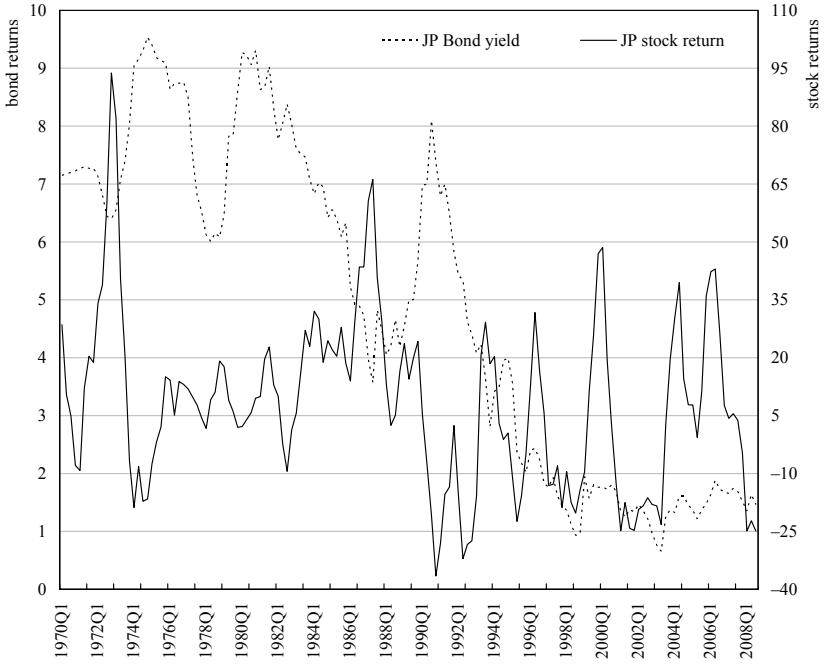
Figure 1

Excess Equity Return

a) United States



b) Japan



Source: International Financial Statistics, IMF. Quarter-on-quarter stock returns.

Table 1

Excess Equity Return Statistics, 1970:1-2008:3

	U.S.			Japan		
	Average	**Maximum**	**Minimum**	**Average**	**Maximum**	**Minimum**
Bond return	7.4	14.8	3.6	4.9	9.5	0.7
Equity return	8.2	44.3	–29.7	8.1	93.7	–36.5
Excess equity return	0.8	29.5	–33.3	3.2	87.3	–43.9

Data source: International Financial Statistics, IMF.

lower-income households. Finally, a natural concern of such government interventions is how the fiscal impact of the financial crisis may impinge on fiscal sustainability.

This paper provides us input for some questions and further thinking on how governments should react under a crisis in terms of supporting the losses suffered by pension funds. For instance, should the government step in to assist depleted pension funds, if they are privately owned and run? On the other hand, if the existence of such pension schemes was mandatory, then the authorities cannot disregard lightly the losses in portfolios. Moreover, if higher (current and future) taxes are needed to finance such assistance, does it matter how big was the share of non-risk free assets in the pension funds' portfolios? In the end, if higher income households are more represented in such pension funds doesn't government help distort income distribution policies?

What policy makers and the public face are, to some extent, alternative ways of thinking government intervention. The simple, somewhat demagogical query seems to be: do we want to pay taxes to finance minimum subsistence social networks or to bail out private business, be it pension funds or not, as for instance in the financial hiccups of 2008? In the end, and after full consideration, pragmatism should help and prevail when dealing with the problem of allowing past private profits to become current of future public losses.

4 On "Pension Funds' Contribution to the Enhancement of Aggregate Private Saving: A Panel Data Analysis for Emerging Economies" by Ernesto Rezk, Mariano Irace and Vanina Ricca

The paper by Rezk, Irace and Ricca assesses the effect of pension fund assets on private saving rates. The main intuitions in the paper draw on Feldstein (1974) well-known study, which discussed how the introduction of social security impinges on private saving. The paper estimates a private saving reaction function in a panel of six Latin American countries for the period 1995-2006. The thesis of the study and the conclusion from the empirical results is that mandatory pension fund regimes have a positive impact on private saving. Interestingly, different results can be found in other studies (see Freitas and Martins, 2009, for OECD countries).

For the simple rationalisation of the issue at end, the standard text-book relationship between external and budgetary imbalances, investment and saving is useful (see the Appendix), in order to recall that the two main sources of saving are private domestic saving and foreign capital inflow (due to the current account deficit), which are used to finance the two main sources of demand for financial capital: private investment and the government budget imbalances.

One alternative way to address the question studied by the authors would be to use a consumption specification as in Feldstein (1974, 1982) to assess how pension funds' assets

impinge on private consumption. In addition, the authors could also link to the current account balances, on the basis of its relationship with private saving, government saving and investment (Afonso and Rault, 2008, provide panel evidence for the EU).

Other points that came to my mind when reading the paper, relate to the need to check formally whether indeed a fixed effects specification is superior (different) to simple OLS or random effects; how to deal with the endogenous behaviour from pension funds; and that instead of short-term interest rates, long-term interest rates (or eventually excess equity returns), could be used in the analysis. In addition, instead of the demographic variable used, the authors could use the old-age dependency ratio, which more clearly proxies the aging burden on saving decisions. Finally, given the rather small sample size (around 60 observations) used in the panel, one necessarily needs to read the results with some care.

APPENDIX

The identity for GDP, *Y*, in an open economy can be written as:

$$Y = C + I + G + X - M \tag{1}$$

where:

C = private consumption

I = private investment

G = government expenditure

X = exports of goods and services

M = imports of goods and services

Private saving *S* is given by disposable income net of consumption expenditure and taxes, *T*:

$$S = Y - C - T \tag{2}$$

Equations (1) and (2) relate the current account balance (*CA=X–M*) to the difference between national investment and national saving, the sum of private and public saving and the government balance (*BUD=T–G*). Thus, the current account balance is usually written as:

$$(X - M) = (S - I) + (T - G) \tag{3}$$

$$CA = (S - I) + BUD\,, \tag{4}$$

and it is evident that the current account (*CA=X–M*) balance is related to the budget balance (*BUD=T–G*) through the difference between private saving and investment. In other words, the current account balance of a given country is by definition identical to the difference between national saving and domestic investment.

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