

Pension Guarantees, Capital Adequacy, and International Risk Sharing

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Objectives of paper

- To analyze the principles for efficient management of pension benefit guarantees.
- To suggest how financial innovation and the increasing globalization of financial markets can be employed to manage guaranteed pensions more efficiently than in the past.





Underlying Assumptions

- The primary function of a pension system is to provide retirement income security.
- Citizens in industrialized societies expect their government to provide a social “safety net.”
- Paradox of power: Government cannot credibly commit to refrain from bailing out large pension plans that fail.
- Thus, even in the absence of *explicit* guarantees, there is an *implicit* one.



Guarantees as the default option

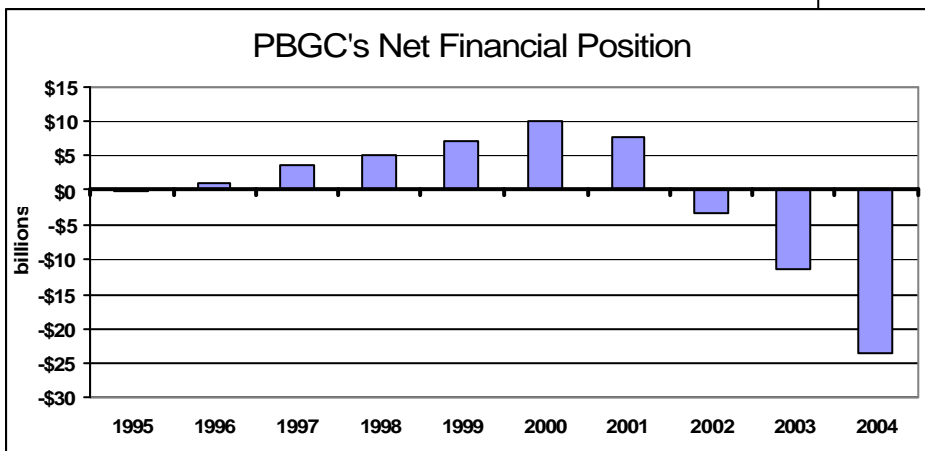
- A guarantee transfers investment risk from consumers to producers, who typically have far greater knowledge and skill in handling it.
- It increases trust, and therefore results in lower marketing costs.
- It makes it more transparent to consumers what they are buying, and therefore reduces the need for costly financial “education.”

Principles for Managing Guarantees



- Transparency – Fair value reporting.
- Capital adequacy
- Matching assets to insured liabilities.
- Charge market price for the guarantee.
- Avoid forbearance “trap” – act quickly to limit magnitude of loss.

The PBGC: A Cautionary Tale

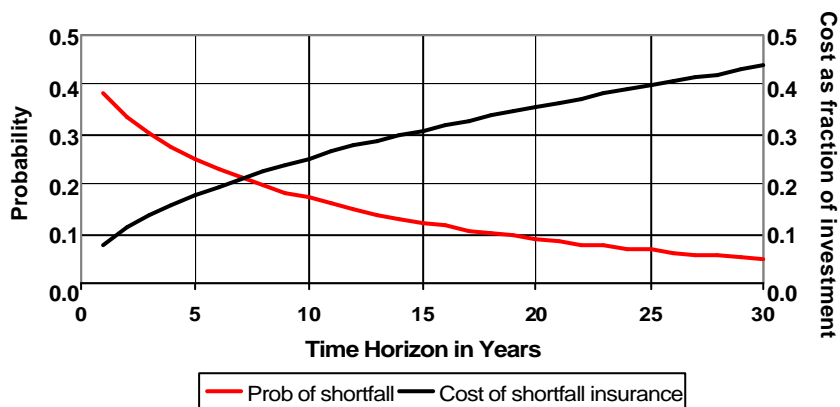


Lessons from the PBGC



- Regulatory forbearance can make problems worse.
- Beware of wishful thinking. There is no free lunch from investing in equities, even in the long run. Greater expected reward requires greater risk-taking.
- Investment in equities and “alternative assets” *increases* the cost to the government of providing pension guarantees.
- Bad pension accounting rules created a strong *disincentive* to match assets to liabilities.

Probability of shortfall vs. cost of shortfall insurance



International Pension Swaps



- Most governments restrict international investing by pension funds.
- By using swaps pension funds can achieve the benefits of international risk sharing without exposing their countries to the perceived danger of unbalanced capital outflows or expropriation of capital.
- Swaps can benefit countries that have open capital markets too by giving them exposure to investments in countries with restrictions.

Improving the Efficient Portfolio Frontier

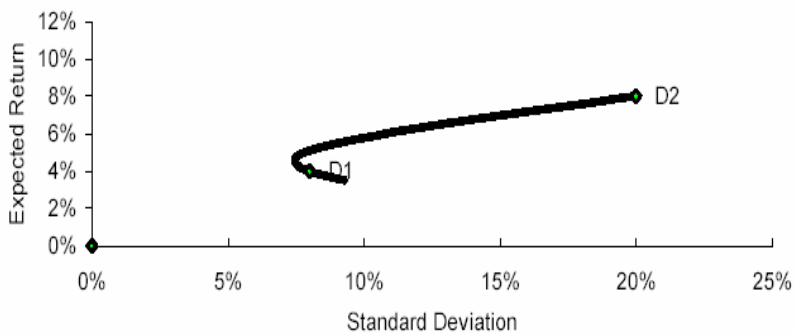


- Swaps can be used to eliminate default risk and purchasing power risk.
- They can be used to broaden diversification to reduce risk for any level of expected return.

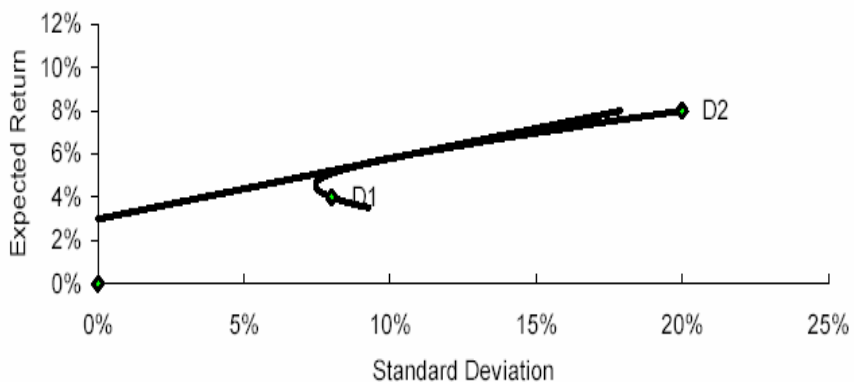


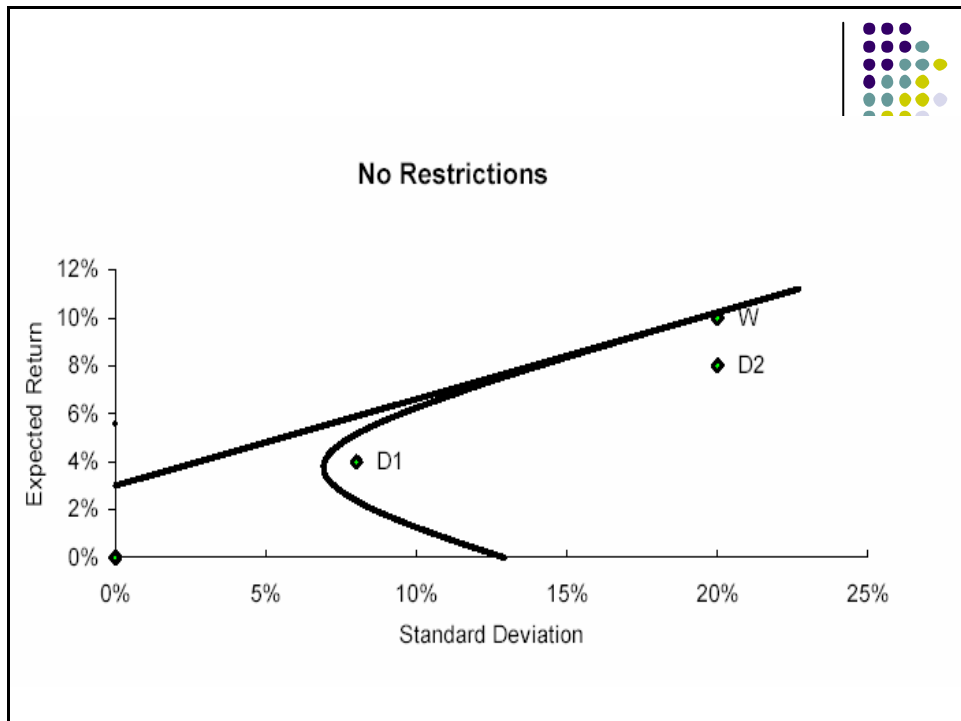
Figure 1. Gains from International Risk Sharing: Restricted versus Unrestricted Efficient Portfolio Frontiers

Domestic Assets Only



Foreign Risk-Free Asset Allowed





Other Potential Benefits

- With international equity swaps, countries have to pay when they can most afford it and receive when they most need it.
- Foreign investors avoid the costs of trading in individual securities in the local markets and by not having the problems of corporate control that arise when foreigners acquire large ownership positions in domestic companies.
- The potential exposure of foreign investors to manipulation by locals is probably less for the swap than for direct transactions in individual stocks.

Policy Recommendations



- Government should require accurate and transparent reporting of the market value of liabilities and assets.
- Individual accounts should be guaranteed as a default option.
- The greater the mismatch risk between the liabilities and the assets backing them, the greater the required buffer and the more quickly a funding shortfall must be eliminated.
- Government can help by providing default-free “building block” securities to serve as hedges and to facilitate correct pricing of guarantees.
- International risk sharing by means of swap contracts and similar market innovations can help to reinforce the pension safety net by providing a much wider and deeper global pool of risk capital to back pension promises.