

Financial Innovation and Pension Reform

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Key Points

- **Responsibility for providing retirement income is shifting from government and business to individuals.**
- **Financial innovation can facilitate international risk-sharing, improve the tradeoff between risk and reward, and improve product design.**

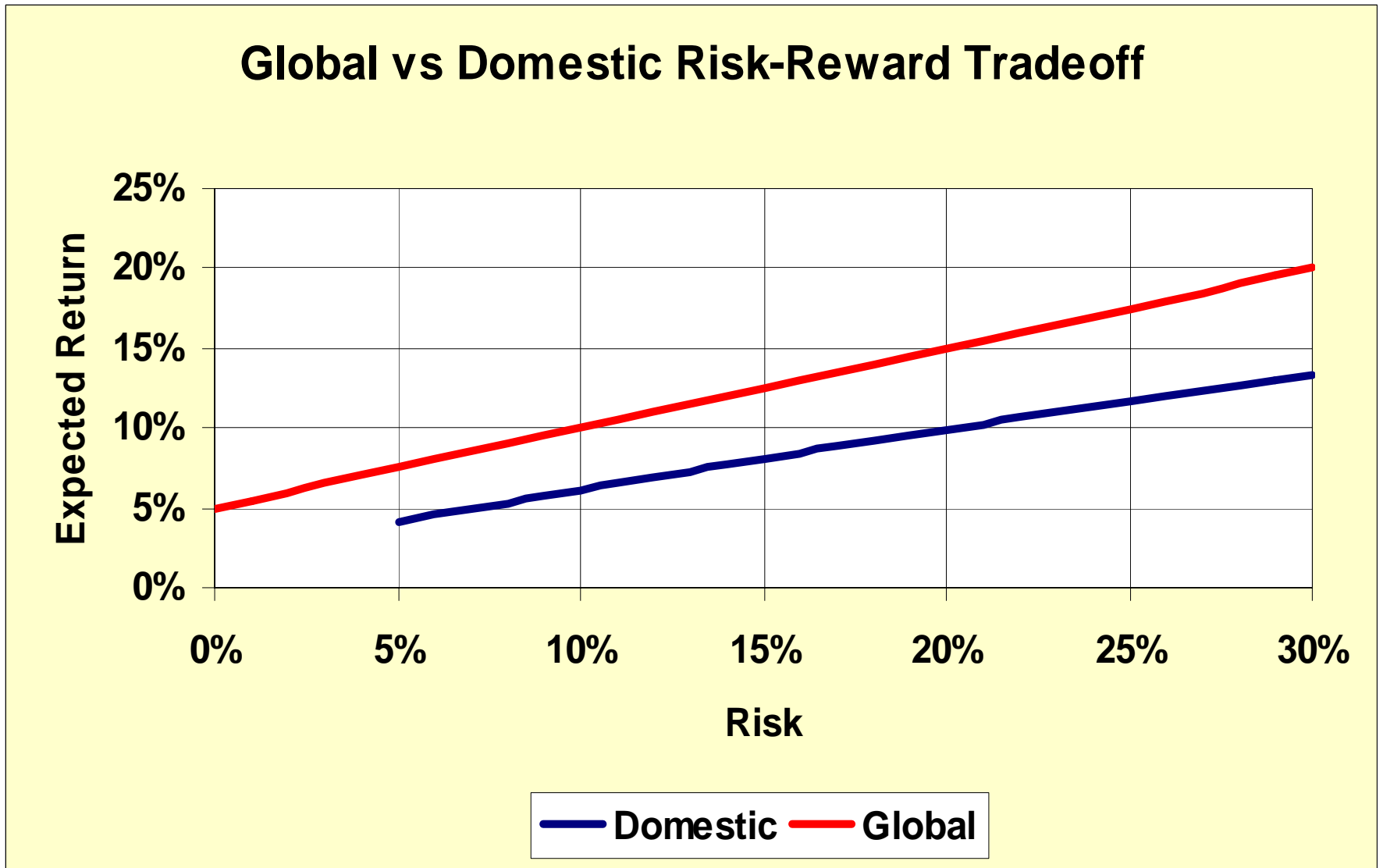
Some Problems With International Investing

- **Governments in “emerging-market” countries fear massive capital outflows from international investing.**
- **Investors in developed countries fear manipulation in emerging-market countries.**

Financial Innovation Can Help To

- **Permit separation of risk transfers from capital flows**
- **Improve hedging possibilities**
- **Improve diversification possibilities**
- **Mitigate manipulation problems**

Better Risk-Reward Tradeoff



Example of Improved Hedging

Tinyland pension fund swaps the total rate of return on its domestic stock index for a fixed rate of interest.

- **Notional principal: \$1 billion.**
- **Payment frequency: 1 time per year.**
- **Maturity: 10 years.**

Example of Improved Diversification

Tinyland pension fund swaps the total return on its *domestic* stock index for the total return on a *global* stock index.

- **Notional principal: \$1 billion.**
- **Payment frequency: 2 times per year.**
- **Maturity: 10 years.**

Problems With Individual Retirement Accounts

Choices offered to ordinary people in self-directed accounts are often quite limited or poorly understood.

Need Better Product Design

- **More “user-friendly” menu of choices**
- **Focus on maintaining standard of living after retirement**
- **Inflation-protected annuities**
- **Equity-participation contracts with principal protection**

Conclusions

Financial innovation can help to:

- **Permit separation of risk transfers from capital flows**
- **Improve hedging possibilities**
- **Improve diversification possibilities**
- **Improve product design and delivery**

Further Reading

- Zvi Bodie, “Financial Engineering and Social Security Reform,” in *Risk Aspects of Investment-Based Social Security Reform*, edited by John Campbell and Martin Feldstein, University of Chicago Press, 2000.
- Zvi Bodie and Robert C. Merton, “[International Pension Swaps](#),” [Journal of Pension Economics and Finance](#), January 2002.