

European Colloquia Series 2010

London, 28 – 29 January

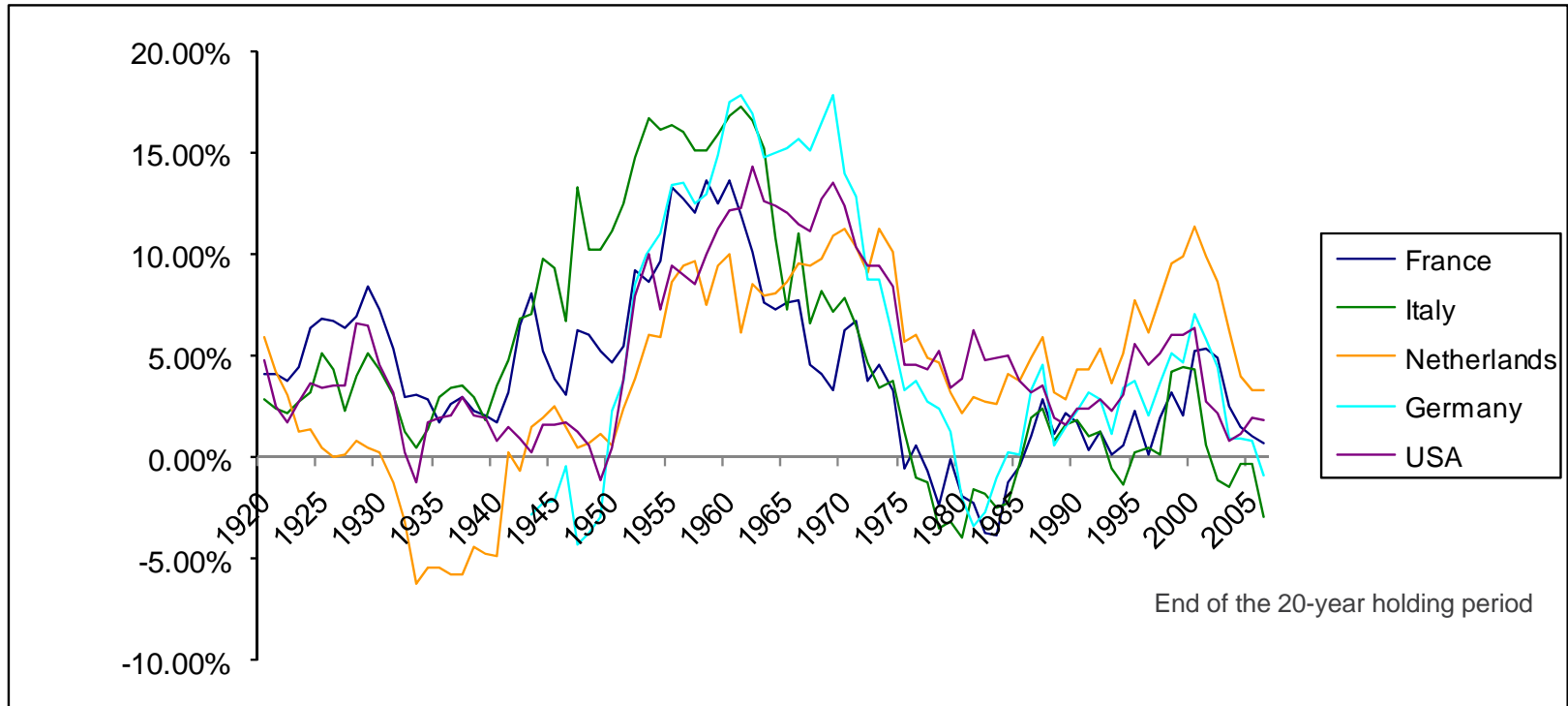
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The social role of long termism

- Short-termism originates from asymmetric information: Credit constraint for consumers; Solvency issues for firms.
- Adverse effects of short-termism: too high discount rate; high volatility of consumption.
- Long-term investors can
 - Smooth financial shocks (at low and high frequencies);
 - Be more risk tolerant, thereby taking advantage of the short-termism of others.
- The existence of long-term investors is good for Society:
 - It can provide insurance at cheaper price to short-term investors;
 - It reduces volatility and the risk premium.

Annualized excess return of stocks over bonds for 20-year holding periods



The social role of long term investors II: Intertemporal risk sharing

- Public institutions with a long-term perspective can smooth financial risks across generations.
- The stakeholders to the fund share the risk efficiently through flexible contributions and benefits.
- Gollier (2007, *J. of Public Economics*) shows that the better intergenerational risk sharing that such institutions generate is equivalent in term of social welfare to an increase of as much as 0.8%/year of the rate of return of savings.

Relevant questions

- Does the long term nature of the objectives of some institutional investors justify adopting specific portfolio strategies and regulatory rules?
 - More aggressive asset allocation?
 - Market timing?
- *Defining the objectives* assigned to the management of the portfolio: The problem of maximizing the expected portfolio return under the constraint that the portfolio risk remains “acceptable”.
- The best risk/return compromise may depend upon:
 - Degree of risk aversion;
 - Liabilities to be financed by the portfolio revenues (ALM);
 - Time horizon.

Interaction of serially uncorrelated risks

- Samuelson's puzzle: "I can recoup transient losses by future gains".
- The fallacious interpretation of the Law of large numbers (Samuelson (1963)). A loss today cannot be compensated by a *risk* tomorrow.
- Doubling the investment duration doubles both the expectation and the variance of total return. Therefore, it (approximately) doubles the certainty equivalent!
- Time horizon is irrelevant for portfolio selection (Merton, Samuelson,...).

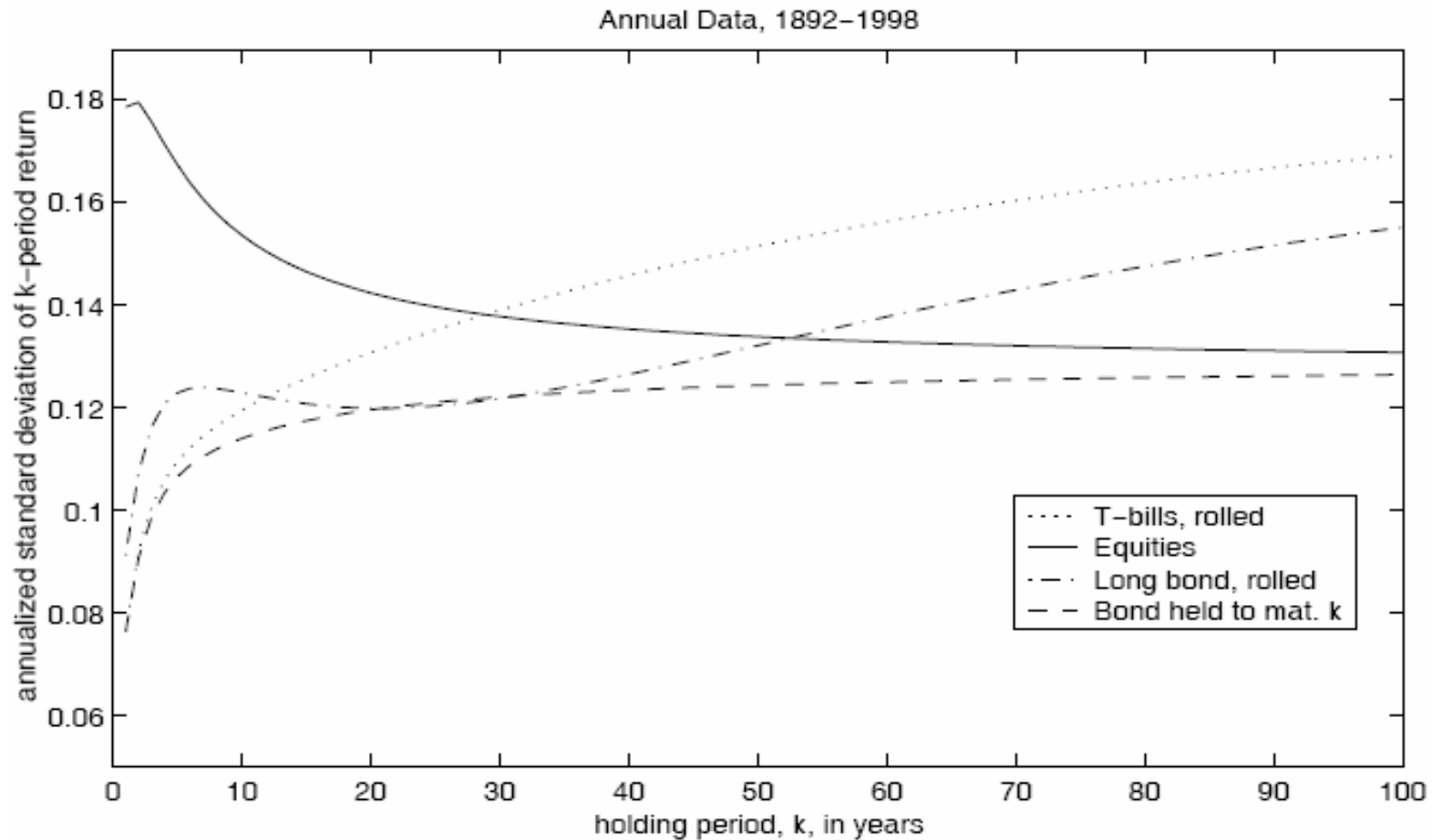
The role of the smoothing of shocks and flexibility

- “I can compensate current capital losses by small changes in future expenses”.
 - Long term investors can smooth large shocks on wealth by small changes in expenses over a long period of time.
 - More flexibility enhances tolerance to risk on wealth. Risk tolerance is proportional to the time horizon.
- Two consequences for agents with a flexible risk management: A longer time horizon raises the efficient share of reserves invested in stocks.
- This argument is limited for agents facing constraints in their dynamic risk management, for example for those expecting future incomes that cannot serve as collateral for a possible recapitalization (borrowing/solvency constraint).

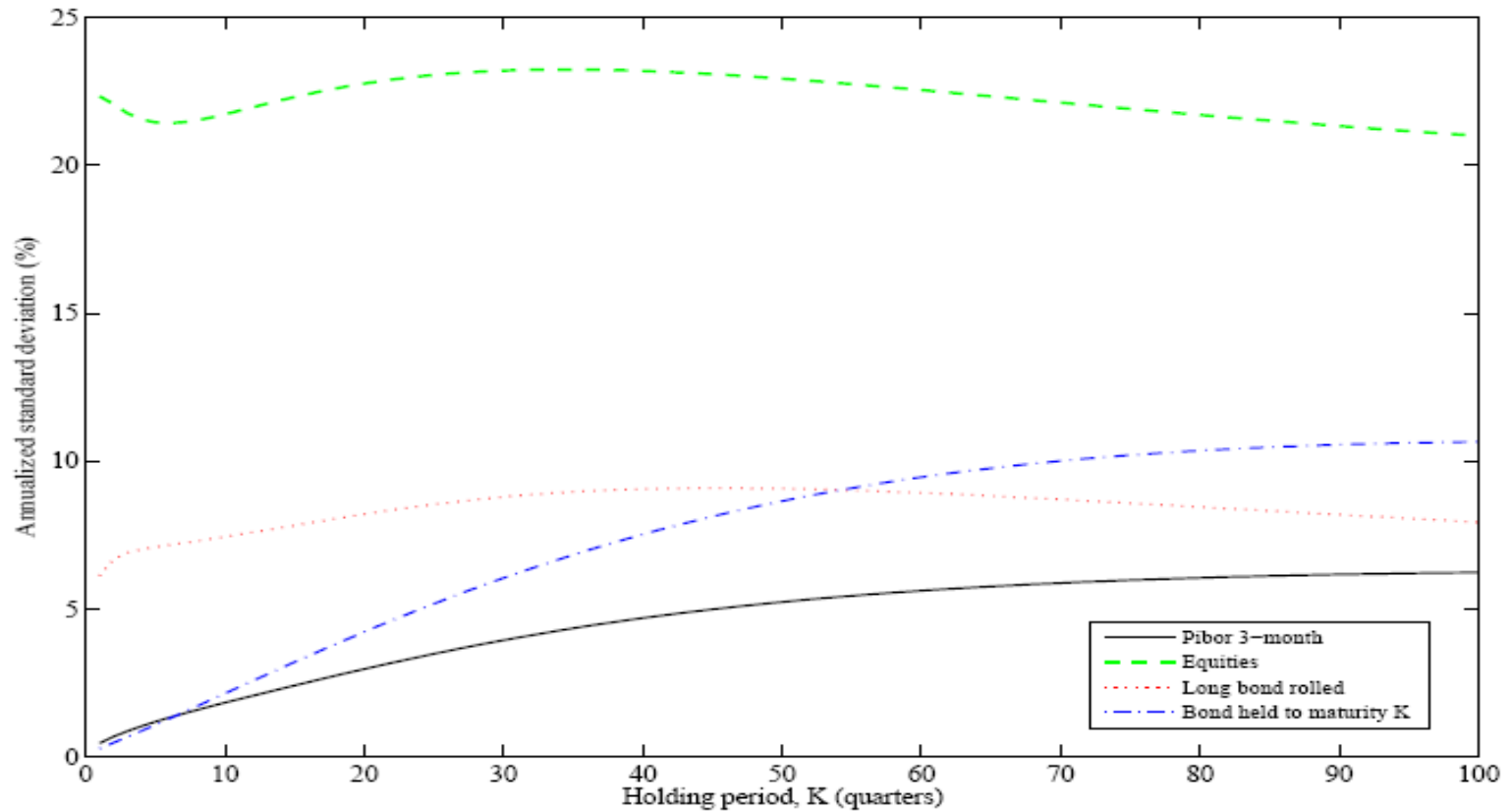
Mean reversion and predictability

- Can we predict future stocks returns? If yes:
 - One should “time the market”, and the regulator should recognize that the VAR may be cyclical;
 - One should try to hedge future changes in the investment opportunity set; and the VAR could depend upon the time horizon of the investor.
- Example: Mean-reversion of stocks return:
 - A larger return today means a lower expected return tomorrow. Reduce stocks demand in booms and raise it in slumps. LTIs stabilize the market.
 - One wants to hedge these shifts by rebalancing the portfolio towards assets that insure against them. In this case, this means that LTIs should invest more in stocks.
- Huge literature since the mid 80s (Shiller, Poterba, Cochrane,...).

Mean reversion (Campbell, USA)



Mean reversion (Bec-Gollier, France)



Role of the solvency regulation

- Long-term investors with a flexible dynamic risk management should be more risk tolerant.
- They can smooth shocks for their stakeholders, and they can reduce volatility on financial markets.
- This requires enough financial reserves, and enough risk-sharing with the counterparts of the LTI's liabilities.
- Solvency capital requirements should be made dependent of
 - Duration and flexibility of liabilities;
 - The position along the financial cycle: countercyclical VAR based on a credible econometric estimation.