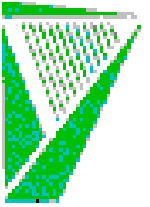


The Design and Use of Strategic Benchmarks in Managing Risk

PAUL SULLIVAN

**Director, Strategy and Risk Management
National Treasury Management Agency
Ireland**



Background

- NTMA in place since 1990
- Strategic and Performance Measurement Benchmark actively used by the Agency

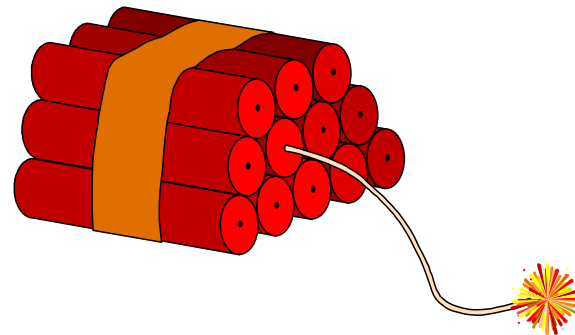
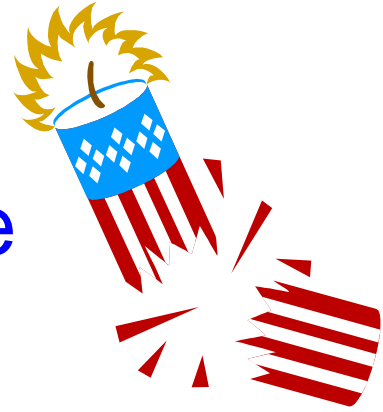
Outline

- Some perspectives on benchmarks in general
- Overview of our approach

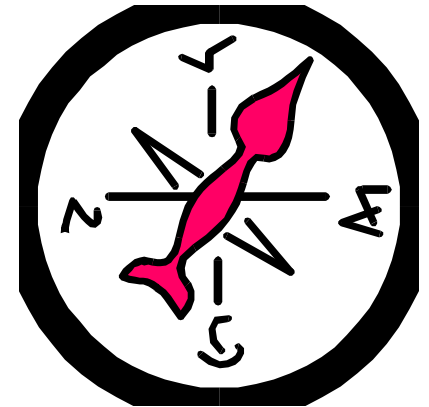
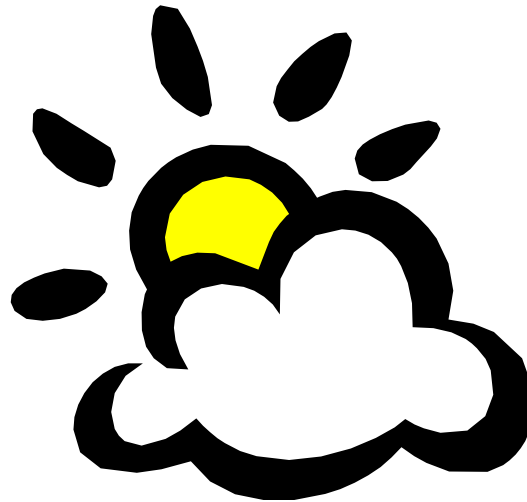


ALL BENCHMARKS SHOULD CARRY
A GOVERNMENT HEALTH WARNING.

If wrongly used, benchmarks can be dangerous.



With care, benchmarks can be very useful



The Wake Up Message.....



....Benchmarks are not trivial

Two key words in title:

- strategic
- risk





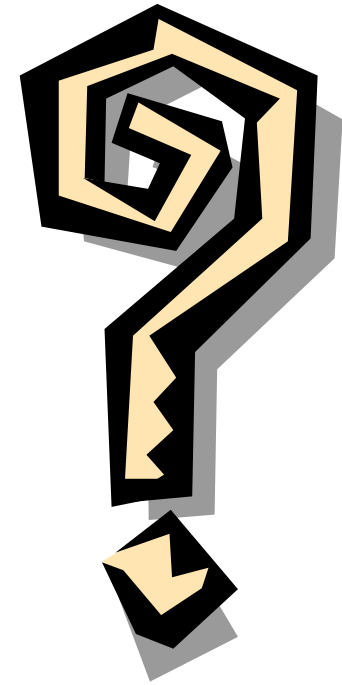
Question:

What is the strategic objective of Debt Management?

- easy question
- not so easy answer

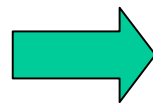
First, however....

Why have a
benchmark?



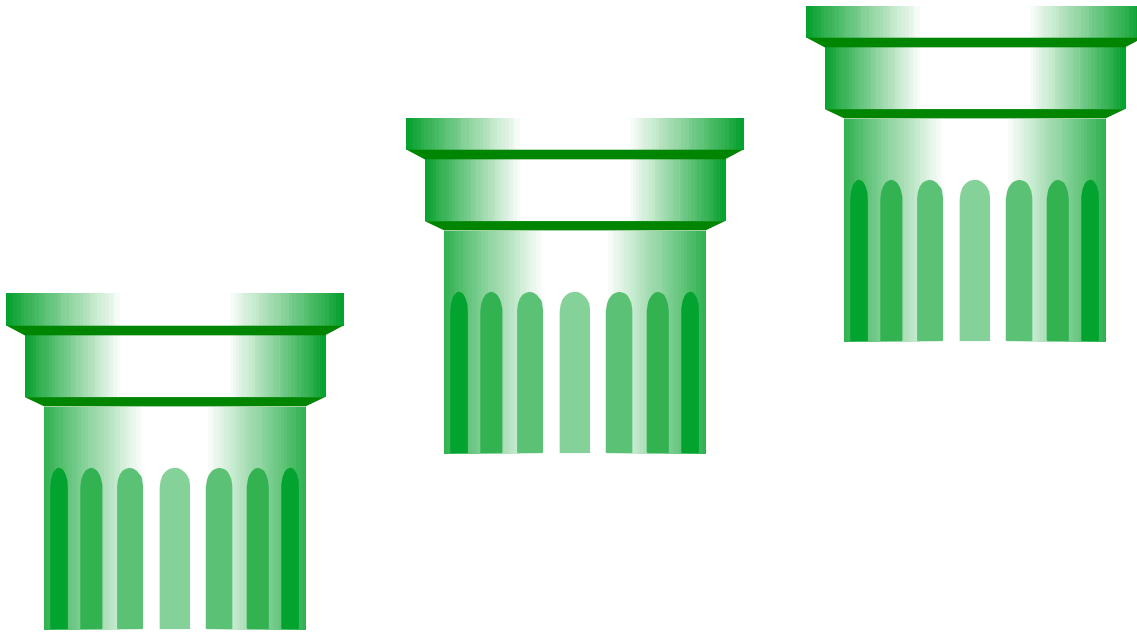
Why have a benchmark?

- one-sided book for a debt manager
- unlike bank or corporate treasury with “given” assets

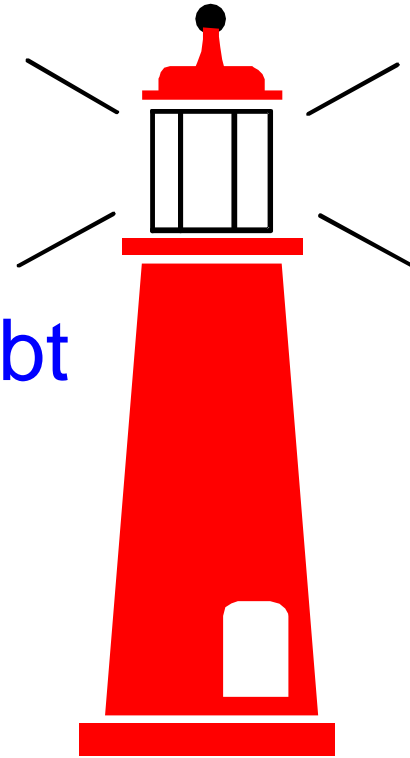


no natural position

- Purpose of a benchmark is to fill that gap



- Benchmark effectively defines the strategy
- It is the risk-free position for the debt manager



What does this really mean.....?

Debt Management Objectives and Risks

Objective:

- Minimise cost over time

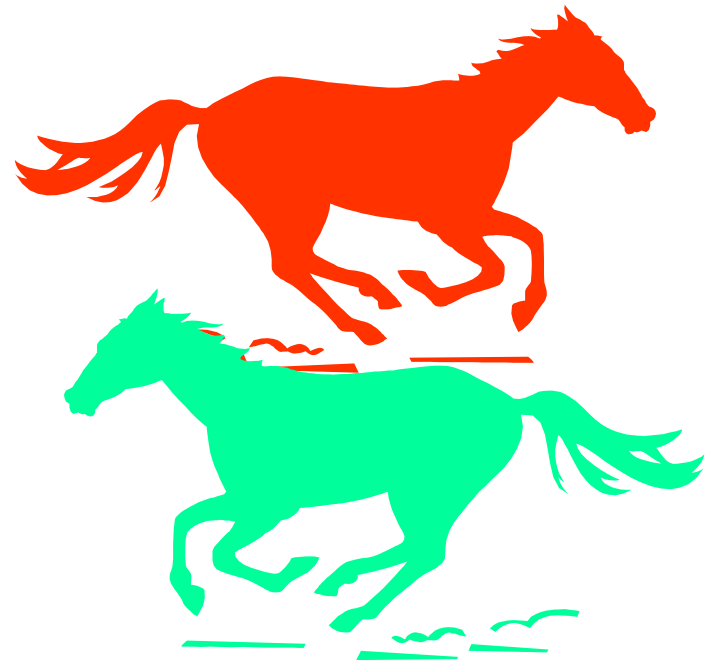


Subject to.....

Debt Management Objectives and Risks

Risks/Constraints:

- Liquidity risk
- Refinancing risk
- Interest rate risk
- FX risk
- Credit risk



Defining strategy:

- the reconciliation of conflicting objectives and constraints

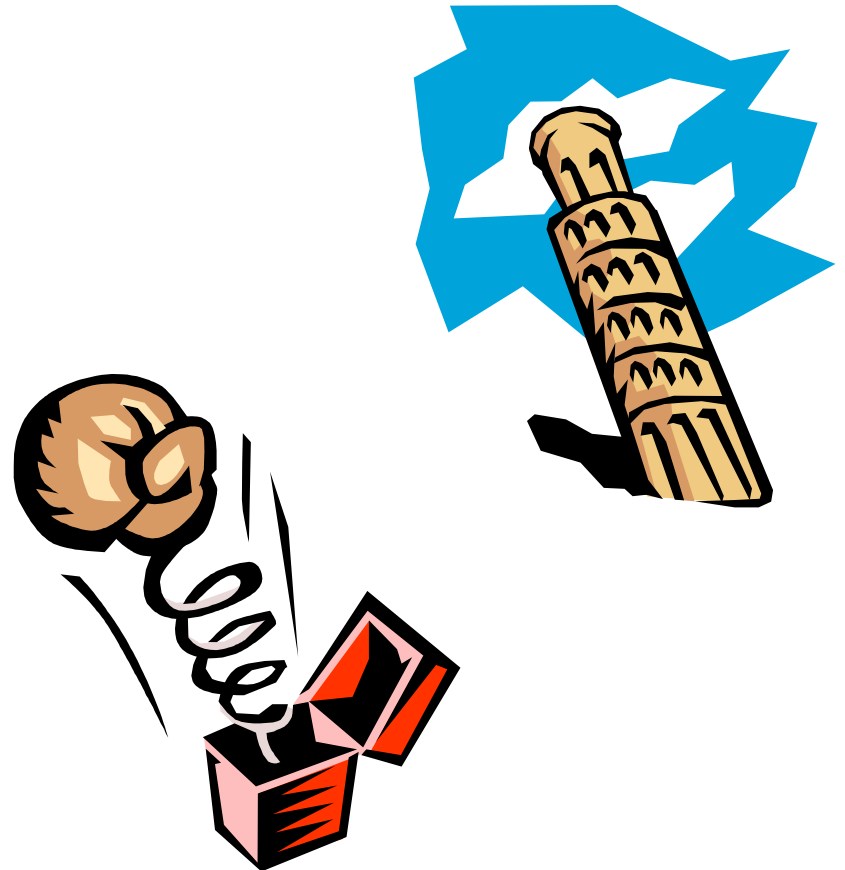
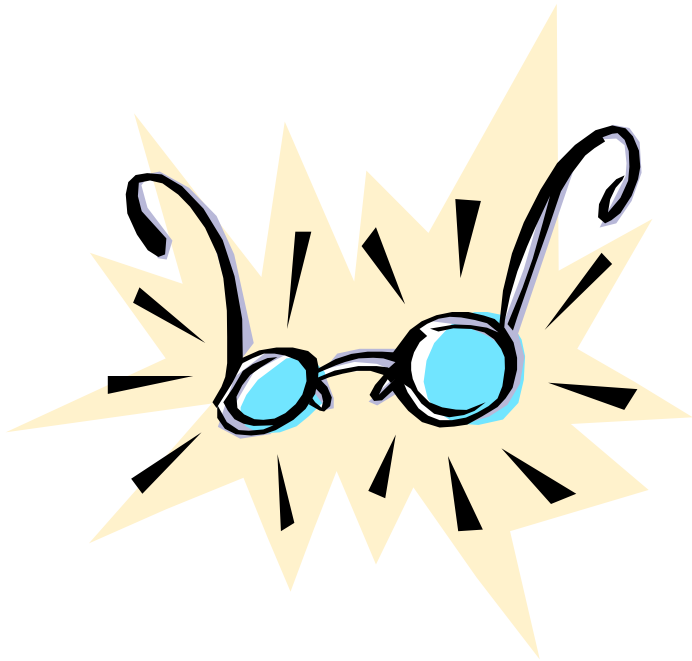


Issues:

- reconciliation/tradeoffs between conflicting objectives and risks must be at a high level of management - eg Minister
- reconciliation must be explicit/written



— otherwise, it is not a real benchmark



Practical Application:

- Define Cost _____ NPV versus cash
- Define Risk _____ fiscal volatility
- Define Time horizon — medium term
- Identify Other Constraints

Analytical Model

- quantitative approach
- importance of robustness
- identify/quantify key cost/risk factors

Benchmark used for two purposes

- strategy
- performance measurement



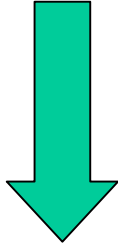
Performance Measurement

- Reinforces the “gravitational pull” of benchmark
- Need to be able to match benchmark
- Need for transparency
-eg ‘Roadmap’

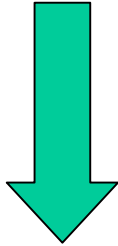


REMEMBER THE HEALTH WARNING!

Role of Benchmark

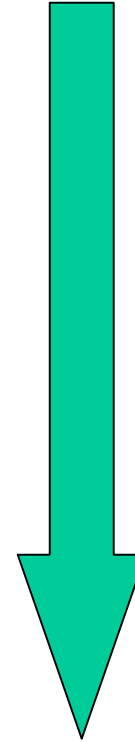


strategy



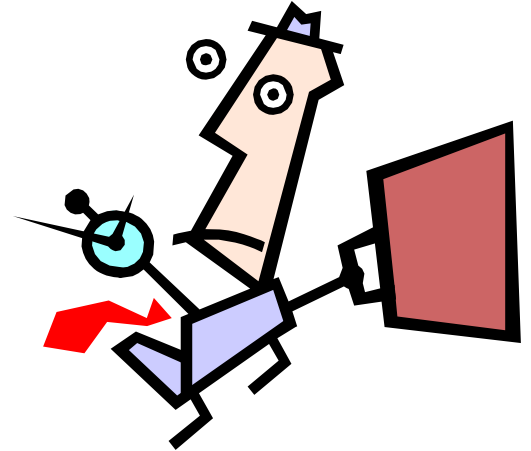
specific transactions

Role of Portfolio Managers



seek outperformance
against benchmark

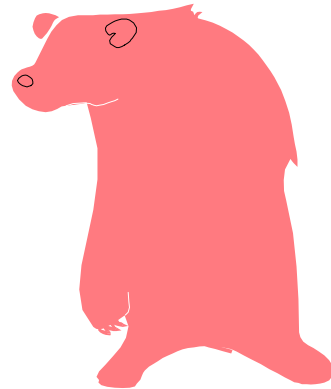
Sources of Outperformance



- aggressive negotiation of transaction pricing
- structured deals
- exercise of options
- market timing
- interest rate/fx positioning

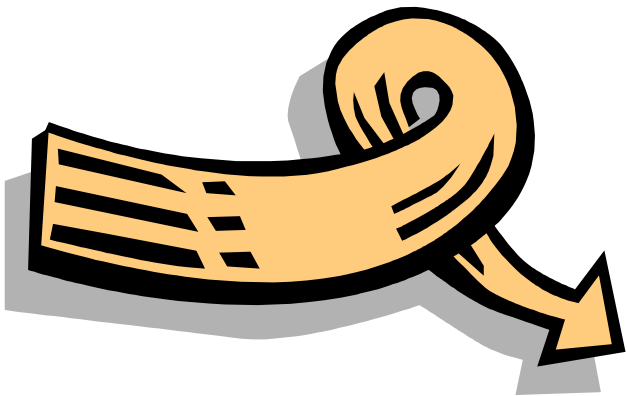


**risk
free**



Management of Performance/Risk

- interest/fx sensitivities
- swap equivalents
- Value at Risk measurement
- Risk limits



Changing the Benchmark

- reflects structural relationships and major policy objectives/constraints



infrequent change

