



# Formulation of Annual Debt Management Strategy in Denmark



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# The overall framework for the Danish Debt Management

- ◆ Legislative basis: The Constitution and the Borrowing Act of 1993 authorises the Minister of Finance to raise loans on behalf of the central government
- ◆ MoF has empowered the DMO in Danmarks Nationalbank to manage the government debt
- ◆ MoF holds the overall political responsibility; including relations to the Folketing (Parliament)
- ◆ The overall objective of the government debt policy is to cover the central-government financing requirement at the lowest possible long-term borrowing costs, subject to a prudent degree of risk
- ◆ The objective has moved from focus on the issuance to the cost-risk relationship



# The decision process in strategy formulation

- ◆ Strategy decided at quarterly meetings between MoF and DMO
- ◆ December meeting
  - ◆ Follow up on the strategy (evaluation)
  - ◆ Strategy for the next year, taking into consideration the medium term perspective (10 years)
- ◆ Other quarterly meetings
  - ◆ Follow up and adjustment of strategy
- ◆ MoF signs the main conclusions
- ◆ DMO operates according to conclusions from Q meetings
- ◆ Strategy is announced to the public
  - ◆ Adjusted semi-annually (December and June)
  - ◆ Principle of transparency ("no surprises for the market")



# The former formulation of debt management strategy

- ◆ Focus on covering the financing requirement
- ◆ Less focus on the cost-risk trade-off
- ◆ Develop domestic market (e.g. T Bills)
- ◆ Focus at the strategy more on short-term issues
- ◆ This reflects the difference between developing a market and a developed market



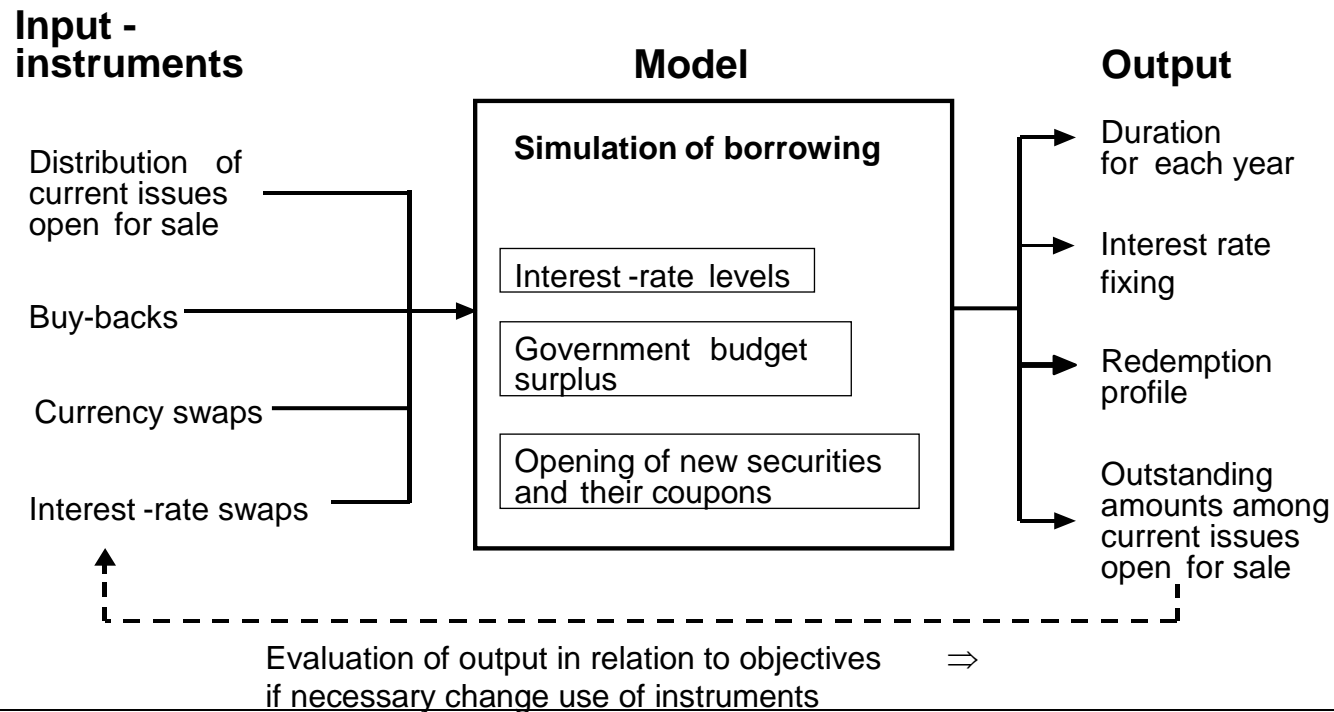
# The present formulation of debt management strategy

- ◆ The political focus on the trade-off between cost and risk
- ◆ Strategy meeting in December mainly about the expected level of costs and the volatility of cost (risk)
- ◆ Split between funding and risk management policy
- ◆ Elements used by DMO in debt management process:
  - ◆ Medium term (10 years)
  - ◆ Scenario analysis (funding instruments; buy backs; swaps etc.) -  
> ensure consistency in debt policy
  - ◆ Cost-at-Risk analysis (simulation model)
  - ◆ Stress-test (changes in budget etc.)
  - ◆ The results are formulated in strategic benchmarks for funding and risk exposure



# Scenario Analysis

## THE SCENARIO MODEL



- ◆ Input medium term forecast of central government budget
- ◆ Requirements for liquidity of bonds in MTS etc.
- ◆ Consistency of policy over the period (realistic funding; buy back; swaps)
- ◆ Important that policy in one year has consequences in other periods
- ◆ Results used for strategic benchmarks related to funding policy

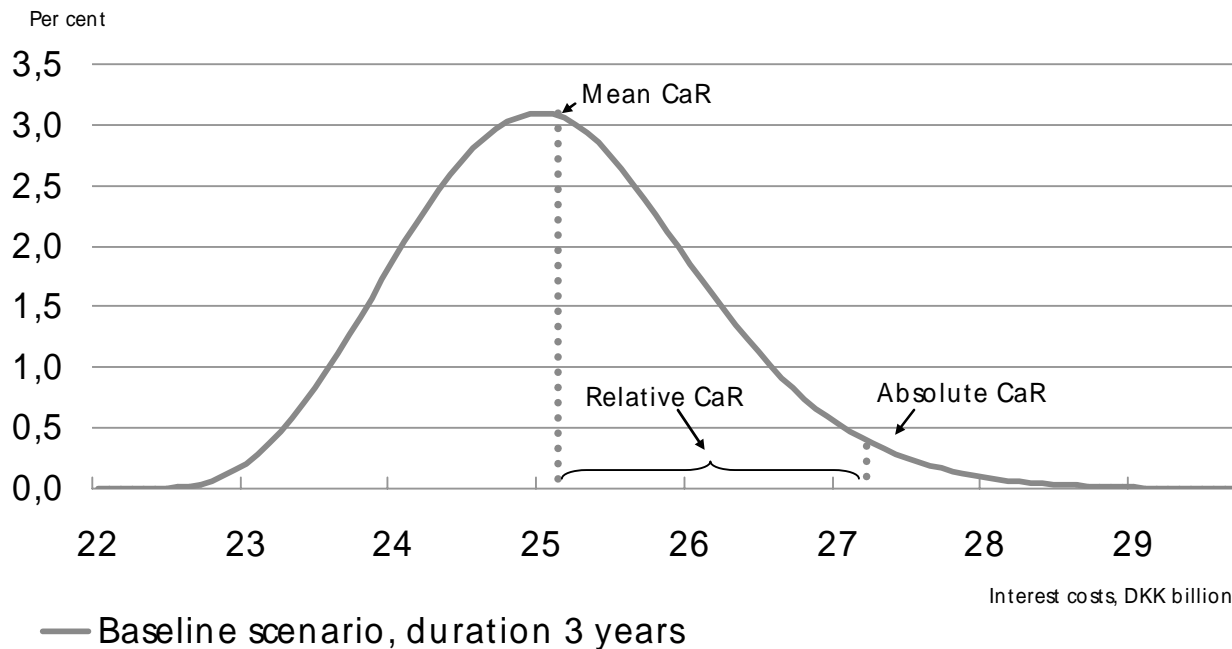


# Cost-at-Risk (CaR) analysis

- ◆ Interest-rate risk is the risk of higher interest costs on the debt due to the development in interest rates
- ◆ CaR model quantifies through simulations expected costs and risks subject to different assumptions on duration and interest-rate fixing
- ◆ Issuance strategy is separated from the management of the interest-rate risk by using swaps and buy backs
- ◆ The objective is measured for duration and interest-rate fixing implemented in the strategic benchmarks
- ◆ CaR is based on 2,500 interest-rate scenarios over a 10-year horizon



# Simulated distribution of interest cost for 2006

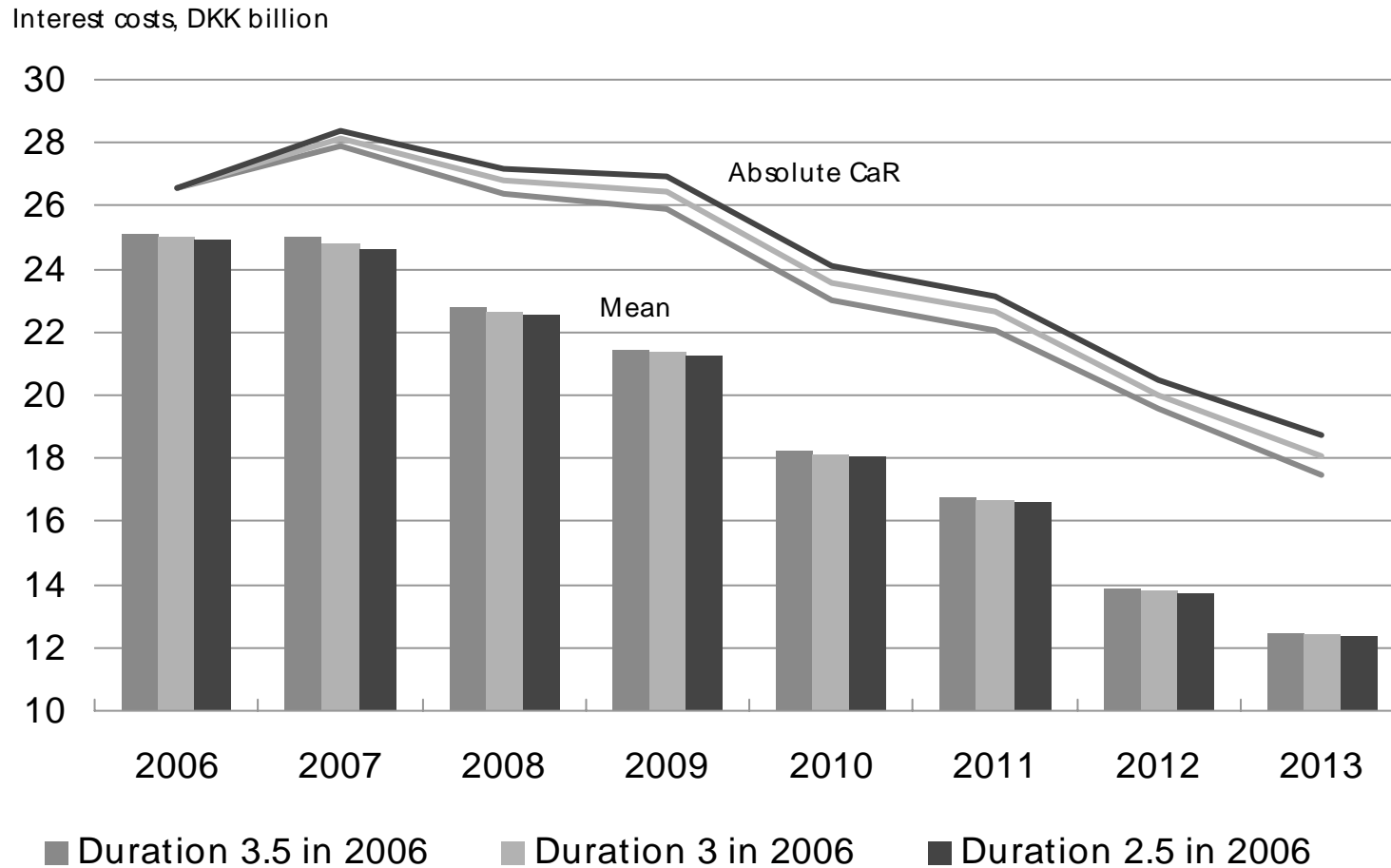


## ◆ Definition of cost and risk:

- ◆ Expected cost: Mean value of calculated annual interest costs
- ◆ Absolute CaR: Maximum costs for a given year with a probability of 95 per cent
- ◆ Relative CaR: Maximum increase in costs from the mean value for a given year, with a probability of 95 per cent



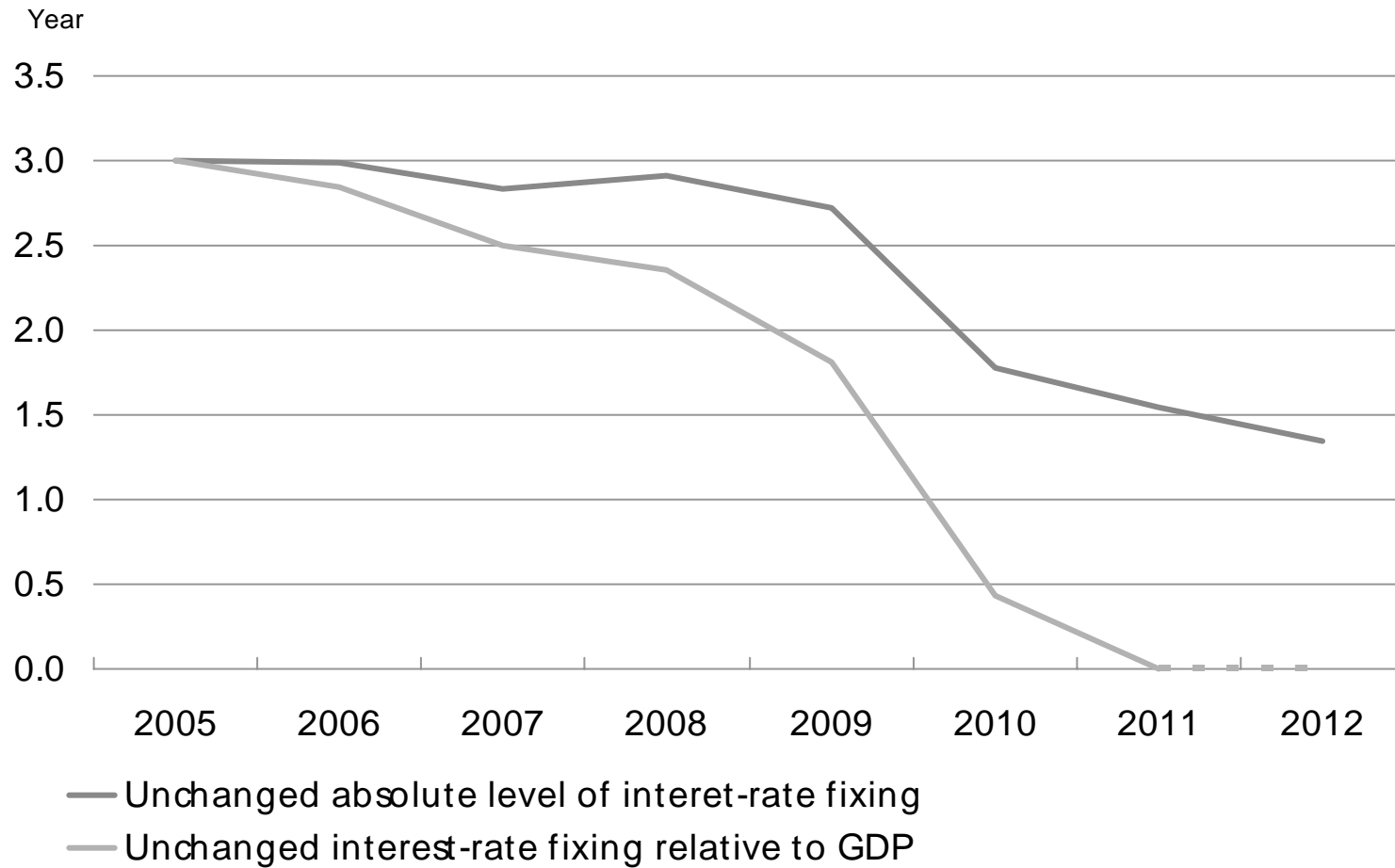
# Trade-off for different levels of duration in 2006



Result reflects the falling debt



# Projection of duration given interest-rate fixing at 2005 level





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## STRATEGIC BENCHMARKS FOR 2006

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- Macauley duration of 3 years  $\pm$  0.5 years.
- Day-to-day management of the duration is based on a duration measure calculated with a fixed discount rate and a balance of the central government's account of DKK 30 billion. The target band for this duration measure is 3 years  $\pm$  0.25 years.
- Interest rate fixing.

### **Liquidity:**

- The final outstanding volume in 4 per cent bullet loans 2010 will reach a minimum of DKK 35 billion.
  - The final outstanding volume in 4 per cent bullet loans 2015 will reach a minimum of DKK 60 billion.
  - The final outstanding volume in 4 per cent bullet loans 2017 will reach approximately DKK 50 billion, of which around DKK 25 billion is expected to be issued in 2006.
  - In the event of unusual market conditions, the central government may issue in government securities maturing after 2006 for small amounts.
  - Net financing contribution of zero from the Treasury bill programme.
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# Implementation of debt management strategy

- ◆ During the given year the overall decisions are implemented by DMO and reported
- ◆ DMO handles issuance of government papers; buy back operations; swaps etc.
- ◆ Transparency means that nearly everything is reported to the market/general public (ex ante and ex post)
- ◆ DMO has flexibility in funding and possibility of taking tactical interest rate positions



# Adjusting the annual debt strategy

- ◆ Adjustment in strategy on debt management has normally "no" limitations related to the political process
- ◆ Flexibility in decisions; but big adjustments discussed at quarterly meetings with MoF
- ◆ Strategic benchmarks give DMO possibilities of adjusting quite a bit on issuance and risk management policies
- ◆ New information is communicated to the public (and market) on an ongoing basis
- ◆ Predictability and transparency. Market has nearly all information (budget development; tax revenue; oil prices; issuance etc.)
- ◆ Transparency important to be trustworthy – openness related to insider problem



# Some conclusions

- ◆ Major changes in the process formulating the debt management strategy
  - ◆ Now split between funding and risk management
  - ◆ Focus on consistency in debt management strategy (longer time horizon)
  - ◆ Trend towards ALM-approach
- ◆ Transparency; predictability and flexibility is consistent