

Discussion of  
“Optimal policy and simple rules: A unified approach”  
by Øistein Roisland and Tommy Sveen

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Oslo, June 24, 2010

# Introduction

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- To do so: Modify loss function of policymaker.

# Overview

- ① Monetary policy under uncertainty
- ② Approach of the paper
- ③ Selected results
- ④ Questions, (potential) issues and suggestions

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    - ⇒ Robust policy is found by solving a game between a policy maker who attempts to minimize loss and nature that chooses a model from the model space so as to maximize loss.
    - ⇒ No model probabilities need to be specified.

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⇒ Kuester and Wieland (2010): Such an agnostic policymaker [i.e. a policymaker that considers it impossible to define a sensible prior distributions over the model space] could instead ask how to insure herself against worst-case scenarios, i.e. worst-case models.

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- Simple interest rate rules: Tend to be robust across models and can easily be communicated.
  - ⇒ Problem: They always lead to “suboptimal” outcomes.
  - ⇒ Goal of the paper: “Combine the best from these two worlds”.

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  - Optimized rule from worst-case model.

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- ⇒ Question: How does policy relate to robust policy derived from standard Bayesian approach?

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    - ⇒ Idea of minimax approach.

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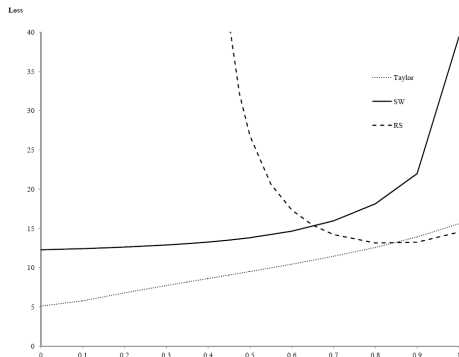


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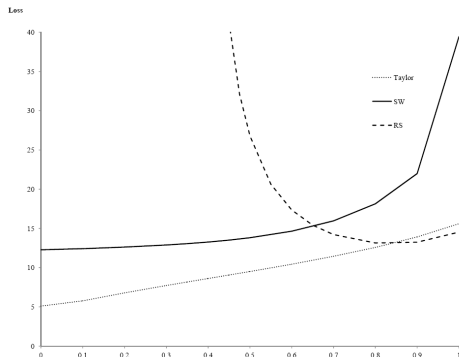


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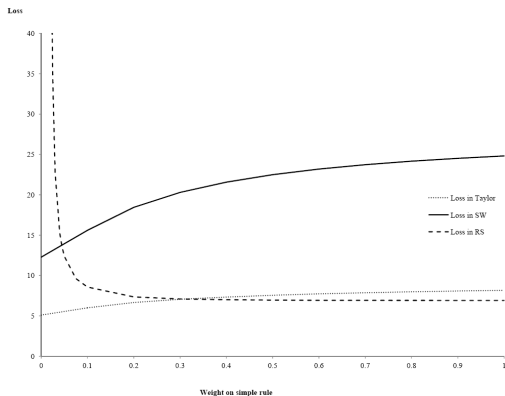


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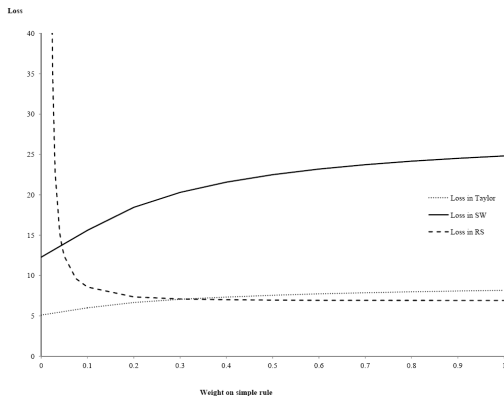


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⇒ Recommendation: Policymaker should choose  $\theta \in [0.018, 0.045]$ .

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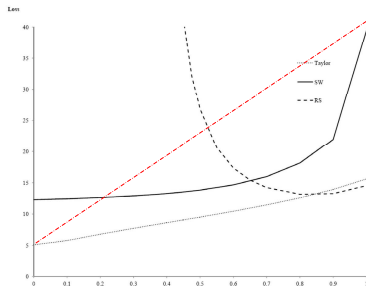


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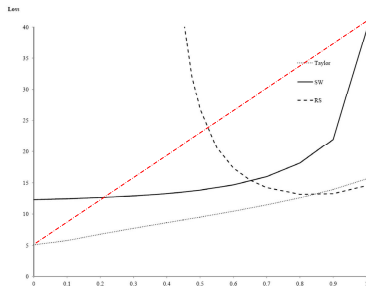


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- Use priors on alternative models?

⇒ Quasi-Bayesian approach?

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  - ⇒ Why exactly these three models?
  - ⇒ How “robust” are their results?
- Illustration of one potential problem with “worst-case scenario”.



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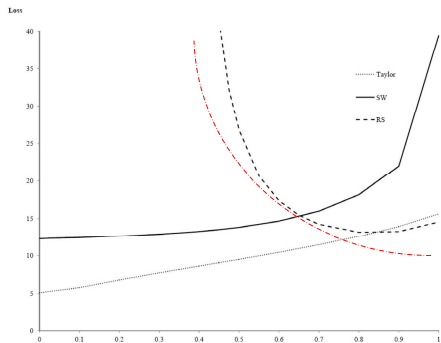


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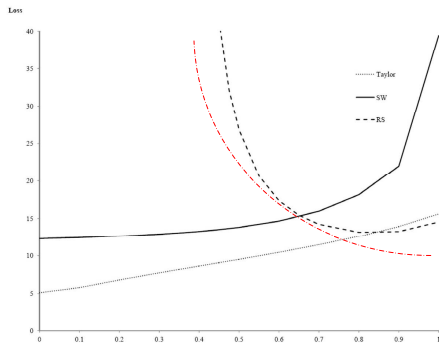


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⇒ Base worst-case scenario on RS model.

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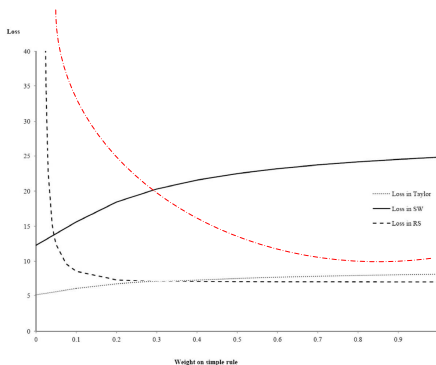


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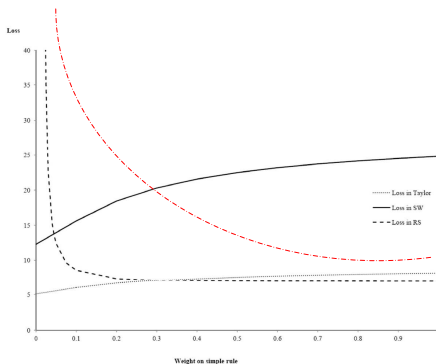


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⇒ Specific to chosen approach?