



Discussion of Presentation: Simulation Based Tools for Regular Oversight of Payment Systems

Christian Schulz
Helsinki, 27 August 2010

EUROPEAN CENTRAL BANK

Approach of the paper

Use of quantitative tools in oversight

What are strengths and weaknesses?

Proposal: Reports library

- Aim is to ensure safety and efficiency of payment and settlement systems
- Overseers follow several inhouse made monthly reports from TARGET2 payment and settlement data
- Simulations and studies using BoF-PSS2 were usually one-time research-type analysis, e.g. induced by change in the system

See SWOT on next page

- Goal identify and develop recurrent reports to serve the oversight function and by taking advantage of the BoF-PSS2
- Change detection reports
 - Payment flow structure and distribution evolution
 - Network indicators
 - Importance of participants
- What-if-scenario reports
 - Technical failures
 - Default of participants
 - New participant
 - Liquidity adjustment

EUROPEAN CENTRAL BANK

2

Key idea is to produce SWOT

Strengths	Weaknesses
<p>Why do we use it?</p> <ul style="list-style-type: none"> • In-depth analysis of large scale payment flows • Robust tool • Incorporates key features of payment system • Calculates settlement statistics • Analysis of liquidity risks, credit risks, operational risks in scenarios 	<p>Why do we not use it?</p> <ul style="list-style-type: none"> • Inexperienced users • Uploading of data difficult • Setting up of simulations is cumbersome • No graphical analysis tools available
Opportunities	Threats
<p>If we do not use it now, why would we use it in the future?</p> <ul style="list-style-type: none"> • Automatic data uploading • Automatic setting up of simulations • Automatic production of visualisations 	<p>If we use it now, why would we not use it in the future?</p>

EUROPEAN CENTRAL BANK

3

Questions for discussion

- **What would be threats for the BoF-PSS2**
 - Loss of robustness
 - Wrong or questionable results
 - Increased Black-box character?
- **How would you deal with these threats?**
- **Examples and more detail on proposed reports?**
 - What could be examples of standardised What-if-scenarios?
 - What would reports look like?

EUROPEAN CENTRAL BANK

4

