CPSS Report: New Developments in Large-Value Payment Systems

Daniel Heller
Swiss National Bank

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Time schedule of report

- July 03 - Mandate of Committee on Payment and Settlement Systems (CPSS) to analyze new developments in large-value payment systems
- Sept. 03 - First meeting of working group
- May 05 - Publication of report on New Developments in Large-Value Payment Systems
www.bis.org/publ/cpss67.htm
Structure of the report

1. Elements of large-value payment system (LVPS) design
2. External influences on LVPS
3. Risk and costs in LVPS
4. Implications of new developments in LVPS
5. Possible future developments

Annexes
- Comparative tables on selected LVPS
- The LVPS efficient frontier
- Framework for cost accounting
New Developments in Large-Value Payment Systems

New LVPS since 1997

- European Union: TARGET, EURO 1
- France: TBF, PNS
- Germany: RTGS\textsuperscript{plus}
- Hong Kong: HKD CHATS, USD CHATS, EUR CHATS
- Singapore: MEPS
- Sweden: E-RIX
- United Kingdom: CHAPS Euro
- United States: NewCHIPS
- Switzerland: euroSIC
- International: CLS

The life cycle of a payment

- Payment obligation incurred
- Submission of payment order
- Irrevocability of payment order
- Finality of payment
- Transfer of settlement asset
Identified trends in LVPS

- Achieving intraday finality without RTGS
- Offsetting of queued payments in RTGS
- More real-time information
- Interactive control measures
- Liquidity control measures
- Extension of eligible collateral
- Implementation of CLS
- New arrangements in correspondent banking
- Increased reliance on SWIFT

Mixing RTGS and netting features

- DNS systems adopt RTGS features → NewCHIPS, PNS
- RTGS systems adopt DNS features → RTGS\textsuperscript{plus}
Advantages of new features

- Former DNS systems: New CHIPS and PNS
  - Now achieve intraday finality and have therefore become
    - safer than DNS systems
    - but probably more costly

- Former traditional RTGS system: RTGS$^\text{plus}$
  - Now provides continuous offsetting and is therefore
    - as safe as RTGS
    - and probably less costly in terms of liquidity

Disadvantages of new features

- High development costs
- Less transparency
- Is liquidity really a problem?

  - There is not one optimal design for all LVPS
  - The report does not recommend any specific design
Risks in LVPS

- Settlement risk can be influenced by LVPS design
- Settlement conditions
- Settlement delay

Risks and settlement delay

- Depends on participants behavior
- The earlier payments are settled, the earlier settlement risk is eliminated
  - Incentive to delay payments in order to use incoming funds
  - Could cause slowdown or even gridlock
- System designs to reduce settlement delay
  - Throughput requirements
  - Sender limits
  - Time-dependent transaction fees
  - Offsetting algorithms
  - Non-binding behavioral conventions or implicit contracts
Possible future developments

- Continuing technological advancement
  - Increase of processing power
    - for sophisticated settlement algorithms
    - for settlement of low-value payments
  - Expansion of range of feasible business continuity arrangements
- Changes in financial market structure
  - Increase of time-critical payments
  - Demand for cross-border and multi-currency settlement services (TARGET2)
  - Competition from large correspondent banks

Conclusions

- Diversity in LVPS landscape persists
  - no universally optimal LVPS design

- Overall positive assessment of new developments in large-value payment systems
  - Reduction of settlement delay
  - Reduction of liquidity needs and costs
  - Better control by participants over the settlement process