Examining the Balance between Risk and Efficiency in Canada's LVTS: A Simulation Approach

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Questions posed and key results

- Does a tradeoff exist between intraday liquidity and settlement risk in LVTS for T2 payments?
  - Yes, the simulation results suggest that such a trade-off exists
- Can this tradeoff be improved if restrictions on usage of the LVTS central queue are lifted?
  - Yes, this trade-off can be improved with more central queuing

Some observations

- The LVTS seems to operate with high liquidity and low settlement delay
- Settlement participants weigh delay costs against liquidity costs
- The time-criticality of payments is likely to be a key determinant of settlement delay costs

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- How such payments are dealt with might also have an important bearing on simulation results (e.g. on the ”real” required liquidity levels)
- Especially relevant if many payments are time-critical (and if such payments account for an increasing share of payments flows)
- Some more discussion or analysis of time-critical payments would be interesting

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- Simulation results show that central queuing reduces settlement delays most at relatively low levels of liquidity

- Have other optimisation features been checked at low liquidity levels, e.g. splitting of payments (just for curiousity!)?

Policy issues

- What are the potential implications of allowing unrestricted use of the LVTS central queue?
  - Behavioural responses are key in evaluating the relative merits of unrestricted central queuing
  - Lower settlement delays from earlier payments submissions are matched by lower expected bilateral credit limits among participants and the potentially greater credit risks associated with queue transparency
  - Might some sort of coordination arrangement enhance the benefits of central queuing?
  - Could new systemic vulnerabilities arise in cases where one bank fails to settle?

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- Simulation results suggest that with only a marginal increase in settlement risk, substantial collateral cost-savings can be achieved

- Introducing unrestricted central queuing might not be motivated as much by achieving lower settlement delays as by banks' desire to economise on collateral costs

- More discussion or analysis of actual collateral costs and potential savings would be interesting

Some concluding observations

- Some issues related to behavioural aspects and time-critical payments
- Suggestions for further investigation seem relevant
- Very interesting paper!