

Comments on:  
“Settlement Liquidity and Monetary  
Policy Implementation—  
Lessons from the Financial Crisis”

By David Longworth

John Weatherall Distinguished Fellow, Queen’s Univ.

Adjunct Research Professor, Carleton University

Former Deputy Governor, Bank of Canada

At the Bank of Canada Annual Conference, 17-18 Nov. 2011

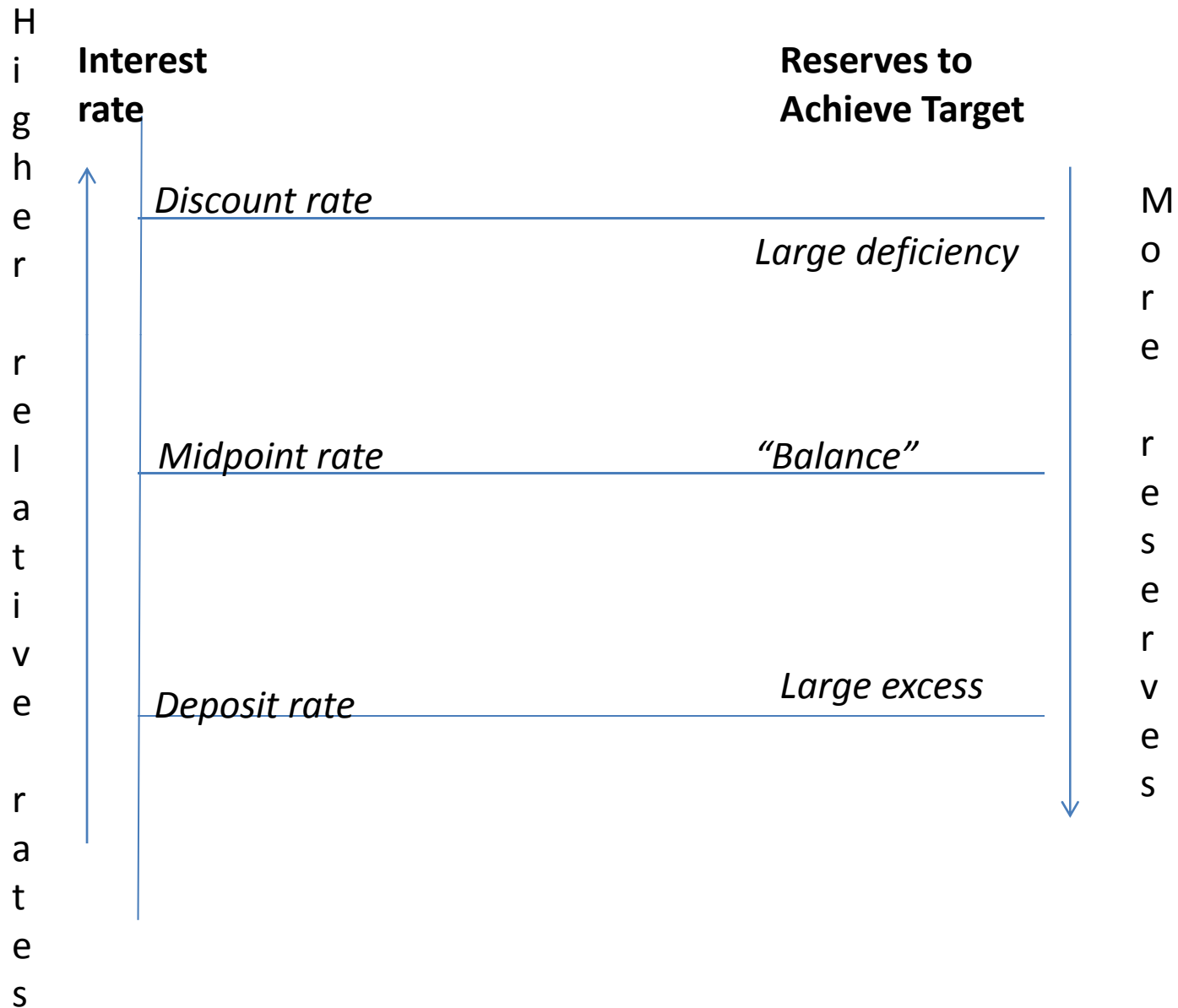
# Overall Comments

- High quality paper: description, context, empirical work
- Connection of settlement liquidity to other forms of liquidity
  - I would place more emphasis on connection with (one-day) funding liquidity
- “any measure of settlement liquidity that also takes behavior into account is likely to be ... system-specific”
  - The rest of my comments will be of a comparative nature

# Outline of Comparison Comments

1. Variants of corridor system—  
is there an optimum policy?
2. Canada – U.S. comparison
  - Monetary policy implementation
  - Settlement liquidity: policy tools
3. Canada during the global financial crisis  
(Aug '07 – Mar '09)
4. Canada at effective lower bound  
(Apr '09 – Jun '10)

# 1. Variants of corridor system



# 1. Variants of corridor system

- Targeting deposit rate with large excess reserves has (micro) advantage of providing lots of settlement liquidity
  - Might be seen as particularly advantageous (with macro benefits) in times of financial stress
- But what are the (macro) costs in normal times? Tax on financial intermediation?
  - Some have argued that (excess) reserves are a macroprudential tool. An efficient or inefficient one?

## 2. Canada-U.S. Comparison

Feature	Canada	United States
Required reserves	No	Small
Interest on reserves	Yes	Yes (new)
Size of excess reserves	Miniscule (\$25 million)	Huge
Target	Midpoint (normal times) Deposit rate (at effective lower bound)	Deposit rate (new)
Collateralized intraday overdrafts	Yes (defaulter pay T1 tranche and survivor pay T2)	Yes (new) or fee for uncollateralized
Fine-tuning rate	Yes (SPRA—repo; SRA)	No, but less necessary
Fine-tuning target reserves	Yes (auction of government balances)	No, not necessary
Acceptable collateral	Same as for Standing Liquidity Facility	Same as for discount window borrowing

## 2. Canada-U.S. Comparison

Changing settlement liquidity: policy tools, etc.

- What can potentially be varied in existing (midpoint target) regime in Canada?
  - Amount of reserves (in a small way)
  - Amount and frequency of fine-tuning (SPRA, SRA)
    - There is a trade-off between the above two (which are both used now to target overnight rate, not settlement liquidity)
  - Range of acceptable collateral
  - (By participants) bilateral credit lines (affects credit cap)
- What can potentially be varied in deposit rate regime in the United States?
  - Amount of excess reserves (in a huge way)
  - Fee for uncollateralized intra-day loans
  - Range of acceptable collateral

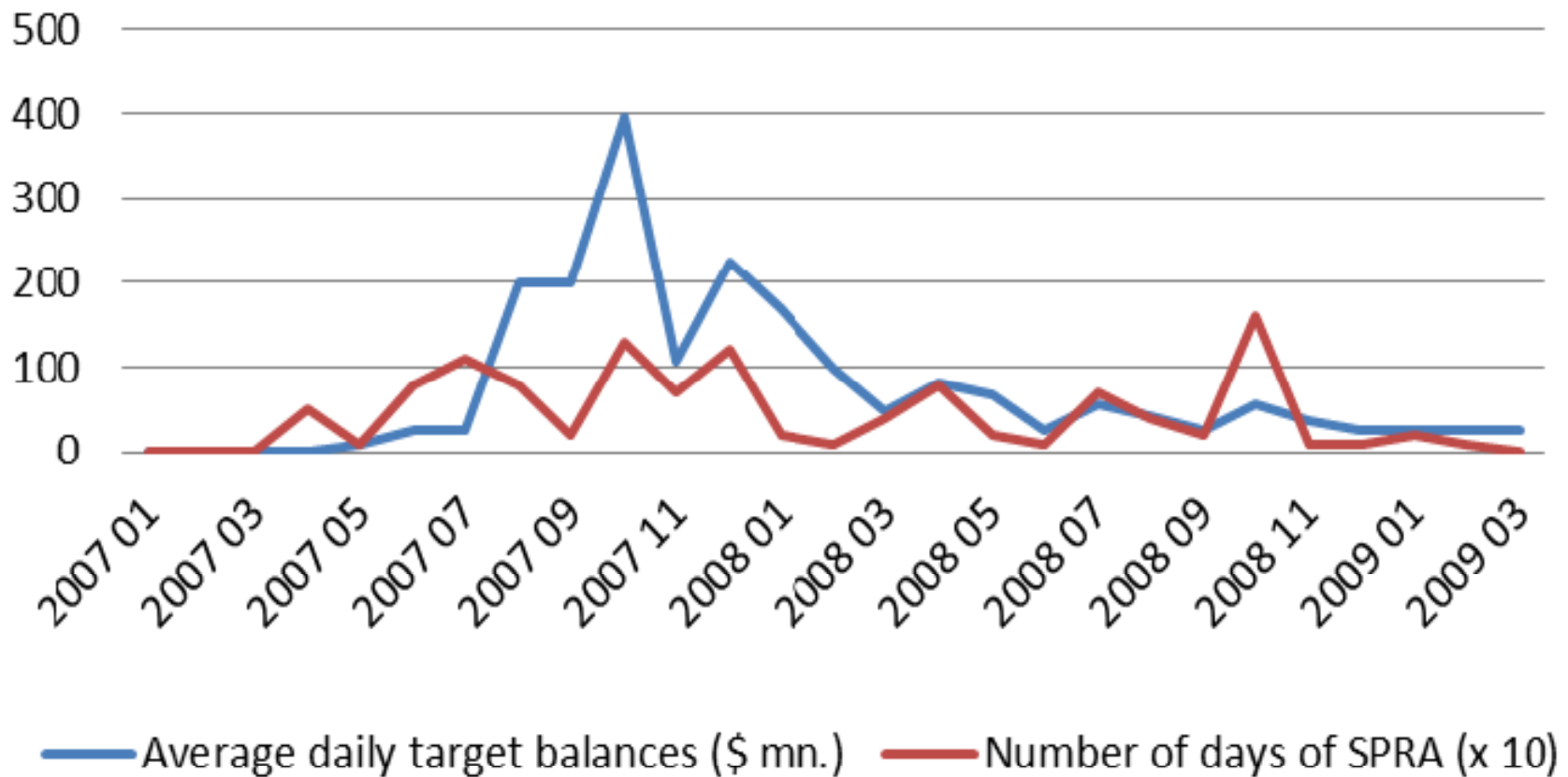
## 3. Canada During the Global Crisis

- What was varied in Canada during the crisis?
  - Target settlement balances (raised)
    - Actual settlement balances higher
  - Frequency and daily time of SPRA
    - At times offered earlier than usual
    - At times offered more than once per day
    - Option not to sterilize effect on end-of-day balances
  - Range of acceptable collateral
    - Increased to include marketable securities issued by the U.S. Treasury and asset-backed commercial paper of eligible programs

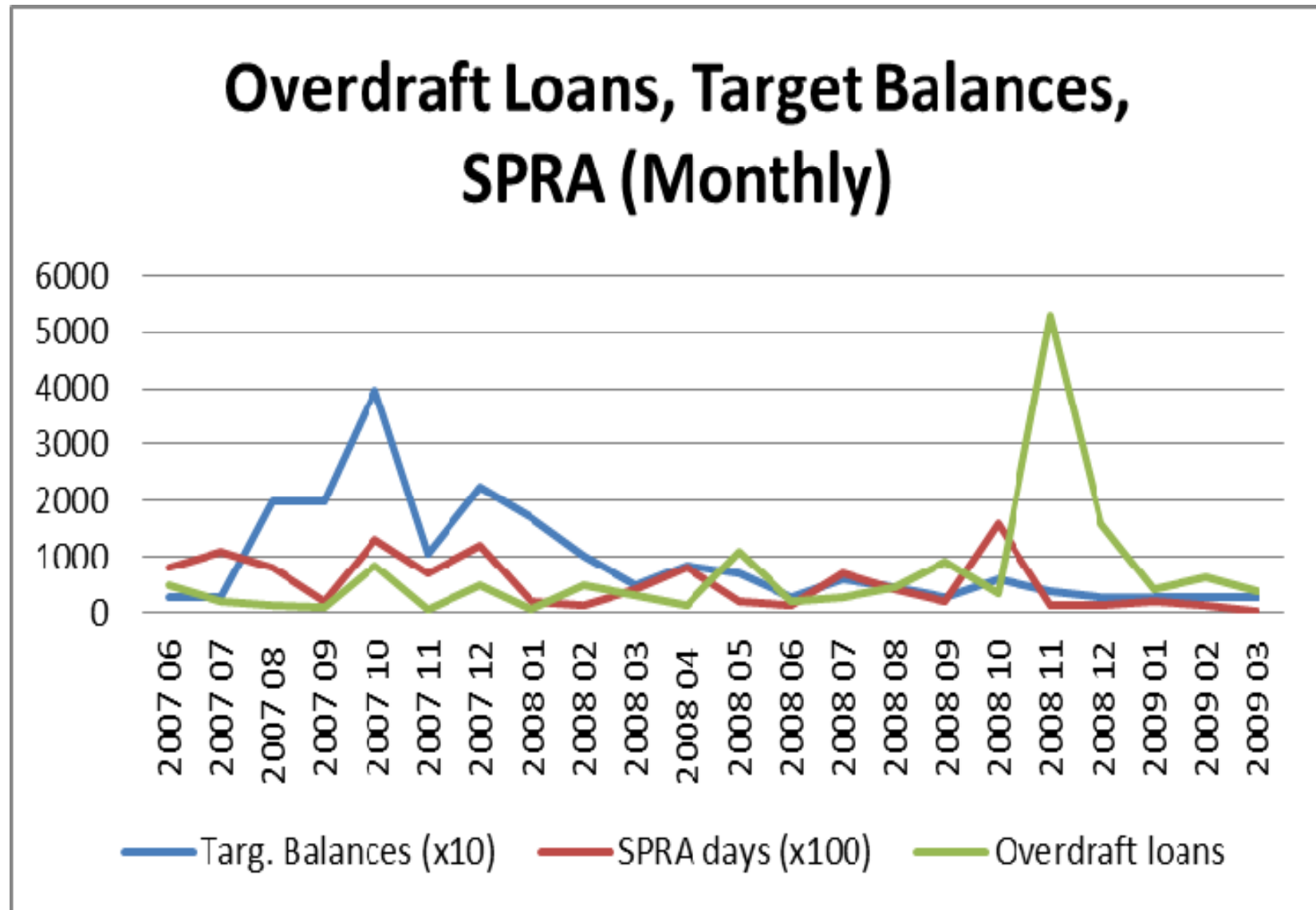


### 3. Canada During the Global Crisis

#### Target Balances and SPRA (Monthly)



### 3. Canada During the Global Crisis



## 4. Canada at the Effective Lower Bound

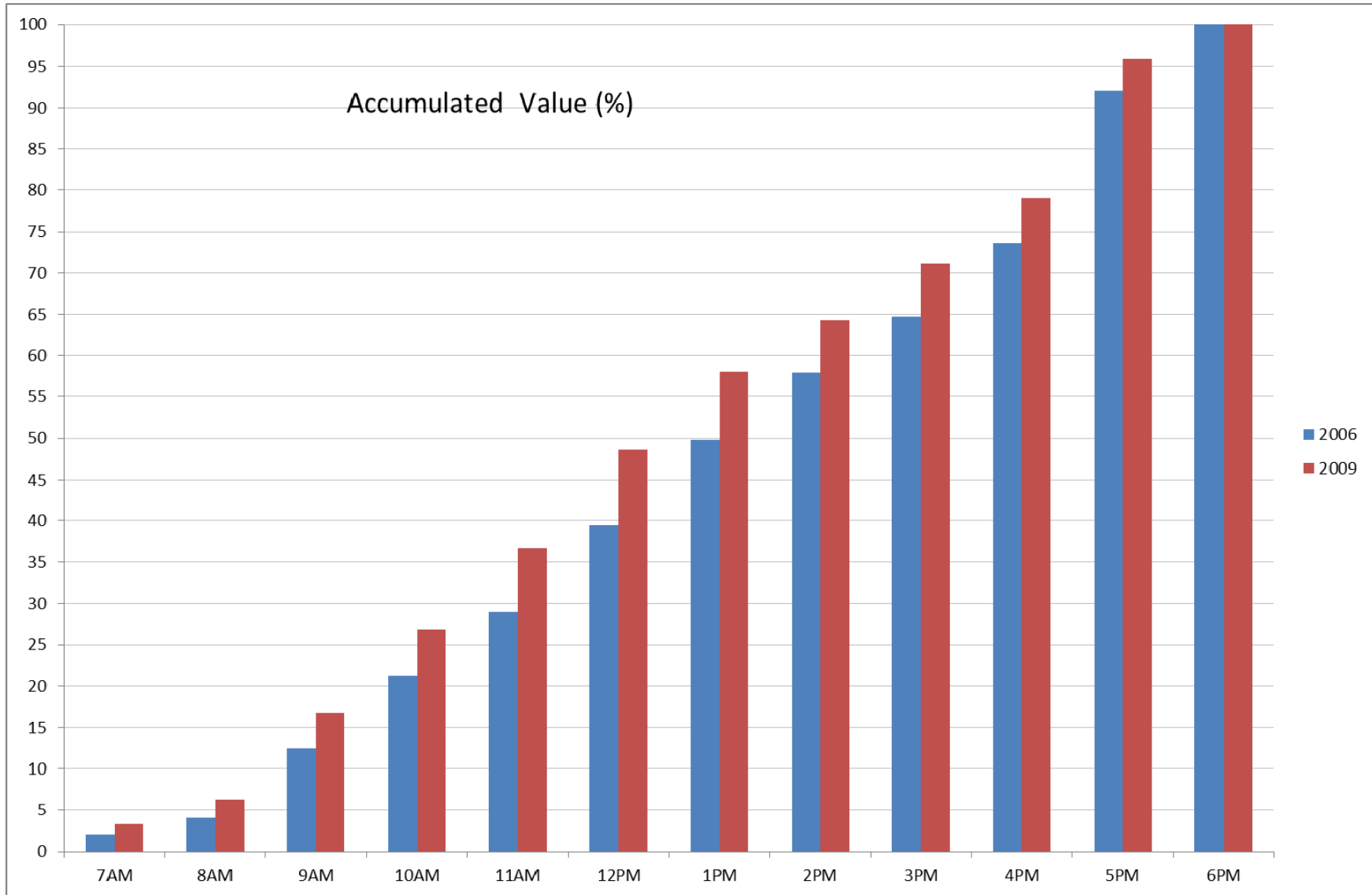
- From 21 April, 2009 – 31 May, 2010, Canada operated a deposit rate regime at 0.25%
- There were \$3 bn. in settlement balances
- Produced less borrowing, fewer SPRA days

Variable	Before (Mar '08- Mar '09)	During (May '09- May '10)	After (Jul '10- Jul '11)
Number of days in period (13 months)	272	272	272
Number of days of SPRA (repo)	49	2	7
Average monthly borrowing	\$919 mn.	\$166 mn.	\$304 mn.
Number of days below target settlement balance (proxy for “satiation”)	8	44	2
Memo: average target for settlement balances	\$42 mn.	\$3000 mn.	\$26 mn.

## 4. Canada at the Effective Lower Bound

- No evidence from monthly data that the excess settlement balances allowed a greater percentage of the value or volume of payments to be made under tranche T2 (survivor pay) rather than tranche T1 (self-collateralized, defaulter pay) (CPA data)
- Next slide shows that payments tended to be made earlier in the day in 2009 (the year when the \$3000 level of settlement balances started in April) than in 2006 (excludes CLS payments)

# 4. Canada at the Effective Lower Bound



# Concluding comments

- It would be useful to undertake decile-based time-of-payment research in Canada, both to:
  - Understand the effects of the financial crisis and policy steps taken to combat upward pressure on the overnight rate (greater target settlement balances, greater frequency and earlier times of SPRA) on settlement liquidity; and
  - Understand the effects of the provision of \$3 billion of settlement balances on settlement liquidity during the period at the effective lower bound
- Examine both micro and macro effects of provision of large settlement balances
  - Policy in Canada in normal times has been to drive settlement balances as small as possible (minimizes direct cost to direct clearers and size of BoC balance sheet). Is this not the right policy?

# References

- Arjani, Neville and Darcey McVanel (2006), “A Primer on Canada’s Large Value Transfer System,” 1 March.
- Bank of Canada (2009), “Operating Framework for the Implementation of Monetary Policy at the Effective Lower Bound for the Overnight Interest Rate,” 21 April.
- Bank of Canada (2010), “A Primer on the Implementation of Monetary Policy in the LVTS Environment,” June.
- Bank of Canada (2010), “Re-Establishment of the Standard Operating Framework for the Implementation of Monetary Policy,” 1 June.
- Federal Reserve System (2011), “Overview of the Federal Reserve’s Payment System Risk Policy on Intraday Credit,” updated to reflect policy revisions effective March 24, 2011.
- Longworth, David (2008) “Work in Progress: The Bank of Canada’s Response to the Financial Turbulence,” remarks to the Canadian Association for Business Economics, Kingston, Ontario, 26 August.
- Zorn, Lorie and Alejandro Garcia (2011), “Central Bank Collateral Policy: Insights from Recent Experience,” *Bank of Canada Review*, Spring: 37-45.
- Zorn, Lorie and Carolyn Wilkins (2009), “Bank of Canada Liquidity Actions in Response to the Financial Market Turmoil,” *Bank of Canada Review*, Autumn.