Money Markets and Monetary Policy in and after the crisis

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The SNB’s Monetary Policy Framework

- **Price stability**
- **Inflation forecast**
- **Target range CHF 3M-Libor**
- **SNB Bills/Repo transactions**

**Ultimate objective**

**Main indicator**

**Operational target**

**Instruments**
Inflation forecast...

Conditional inflation forecast of June 2010 and of September 2010

Percentage change in national consumer price index from previous year

- Inflation
- Forecast June 2010 (with Libor at 0.25%)
- Forecast September 2010 (with Libor at 0.25%)

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<th>Year</th>
<th>Inflation</th>
<th>Forecast June 2010</th>
<th>Forecast September 2010</th>
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The 3 month Libor: an unusual operating target

- Cons:
  - Controllability
  - Manipulable?

- Pros:
  - Flexibility
  - Economic Relevance
  - Risk premium shield
Libor manipulated?

Kernel distribution

Source: Kränzlin, Schumacher, Guggenheim (2010)
Reference rates for loans...

Government bonds
TOIS
Repo rates
SNB rates
Internal curve
Libor based

Source: SNB
Increase of risk premia in money market...

Source: SNB
Lausanne, 28 October 2010

CHF 3M-Libor and SNB Repo Rate

Sources: SNB Markets Analysis Platform, Bloomberg
QE/CE Measures
EURCHF swaps and longer-term repos

- Repos: maturity < 35 days
- Longer-term repos: maturity > 35 days
- EURCHF swaps

bn CHF liquidity providing

Jul 08  Nov 08  Mrz 09  Jul 09  Nov 09  Mrz 10  Jul 10
Reduction of risk premia...
Monetary stabilizers...
The forgotten money market (1)

Risk premium money market

- CHF Libor 3M - TOIS swap 3M

bp

200

150

100

50

0

-50

2000 2001 2002 2003 2004 2005 2006 2007

Sources: SNB Markets Analysis Platform, Bloomberg

Lausanne, 28 October 2010
The forgotten money market (2)

Risk premium money market

- CHF Libor 3M - TOIS swap 3M

bp

Sources: SNB Markets Analysis Platform, Bloomberg

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Turnover in unsecured market...

Lausanne, 28 October 2010

Lehman

Greece
Turnover in repo market...
Shift towards secured lending...
SNB vs. interbank repos…

CHF billion

- Outstanding volume SNB market total
- Outstanding volume IB market total
- Ratio (SNB/IB)

Jan 05 Jul 05 Jan 06 Jul 06 Jan 07 Jul 07 Jan 08 Jul 08 Jan 09 Jul 09 Jan 10

0 20 40 60 80 100 120 140

0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6
Lausanne, 28 October 2010

Boom im Repo-Markt in October 2008
Interbankmarkt in deep sleep
Interbankmarkt today...
Repo: Where is the risk? (1)
Repo: Where is the risk? (2)

Cash Taker

Cash provider

100% of Cash?

Collateral

Market
What can we do to make the system more robust?

The Central counterparty...
• Concentrates and reduces counterparty risk
• Bears losses upon default of a counterparty
What can we do to make the agents more robust? (1)
What can we do to make the agents more robust? (2)

CHF Billion

- Component III (CoCos with low Trigger)
- Maximum part of the buffer in CoCos (with high trigger)
- Tier 2-Capital
- Tier 1-Capital
- Common Equity (minimum plus buffer)

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What can we do to make the agents more robust? (3)

New Capital requirements

- 6% CoCos
- 8.50%
  Max. 3% CoCos
- 4.50%

Swiss Finish
CoCo bonds...

Systemically important financial institution

Trading positions

Debt

CoCo Bonds

Equity

Equity

Losses!
Conclusions:

• A flexible and adaptable monetary framework
• An unusual operational target
• A solid instrument – the repo market –
  – have withstand the test of the crisis.
• No complacency: how to make the system more robust?
  – Addressing residual risk in repo transactions
  – Making the individual agents more robust