

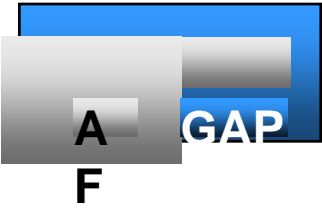


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# Liquidity risk management

## Review of French banks' practices

# Agenda



## AFGAP working group on Liquidity Risk

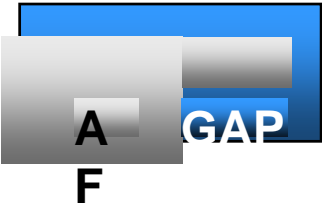
Survey on liquidity risk management practices

Framework for liquidity risk management

Management of liquidity risk in normal situations

Management of liquidity crisis

Conclusions and outlooks



# AFGAP working group on Liquidity Risk

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In 2006, AFGAP established a special working group on liquidity risk with the following objectives :

- Review of French banks practices on liquidity risk management
- National and international comparisons of main practices
- Contribution to regulatory discussions and consultations

# AFGAP working group on Liquidity Risk

## *Working Group members*

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BNP Paribas : Catherine Royère

Calyon: Daniel Guillot

Crédit Agricole : Eric Dupeux

Crédit Immobilier de France : Jacques Demeusoy

Crédit Lyonnais: Issiaka Bérété, Frédéric Robert

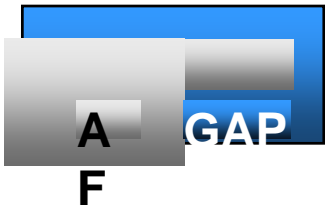
Dexia: Hervé Foyan-Djoudom

Fortis : Stephen de Petiville

Société Générale: Jean-Eric Ferrary, Matthieu Aubin

Banque populaire: Christian Carol

Caisses d'Epargne: Isabelle Laurent



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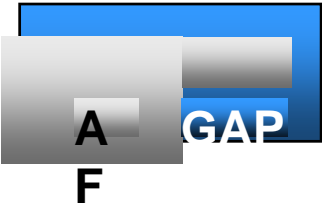
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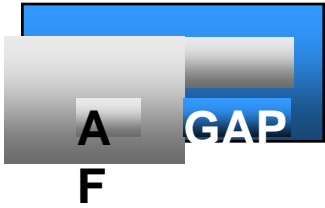


# Survey on liquidity risk management practices

Twelve banking institutions have participated to the survey in answering about ninety questions on their practices

They represent fairly the French banking industry

Type	Size (€bn)	Number
Universal	> 100	5
Retail	> 100	2
Retail	10 to 100	2
CIB	> 100	2
Other	10 to 100	1
		12



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# Framework for liquidity risk management

## *Governance*

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- For all surveyed banks, the definition of the general policy for liquidity risk management is centralised. This general policy includes the principles for measurements, limit setting, transfer pricing, stress testing
- Liquidity management (short term or long term) is most often defined and controlled by the ALM Committee :
  - ALCO decisions may be executed under the control of local or business line specific committees
  - ALCO participants include most often members of the Executive Committee, representatives of ALM, Financial Division, Risk Division



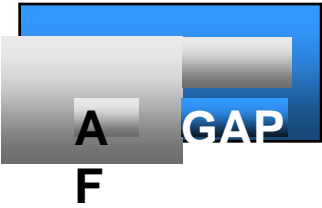
**Centralization**



**Governance  
at top level**

# Framework for liquidity risk management

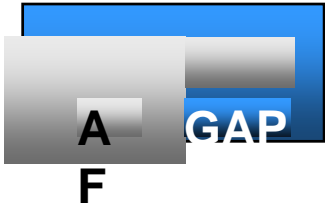
## *Governance*



In most banks the operational management of liquidity is shared between two separate functions, depending on maturities :

- Short term and immediate liquidity risk management is under treasury department responsibility
- Medium and long term (i.e. structural) liquidity risk management is under ALM department responsibility





# Framework for liquidity risk management

## *Measuring, controlling and limit setting*

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### Measurement approaches

**GAPs represent the main indicator to measure liquidity**

Static :

Used by all banks for liquidity analysis on all maturities

Dynamic :

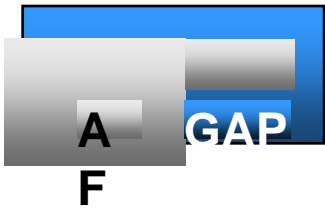
Used by 50% of banks but only for the liquidity analysis beyond one year

### Limits

Almost all banks have a system of limits and/or of targets

Half of the banks have limits both at group level and at entity level

Some banks set also limits by business line



# Framework for liquidity risk management

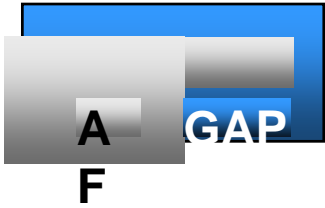
## *Cash Flow modelling assumptions*

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- Almost all banks use both contractual and « economic » maturities
- « Economic » maturities are defined after taking into account statistical analyses and sometimes expert advices
- In many cases liquid assets definitions are derived from accounting classifications



- Usually assumptions are reviewed yearly
- In most cases, assumptions used for interest rate analyses are defined in consistency with liquidity assumptions



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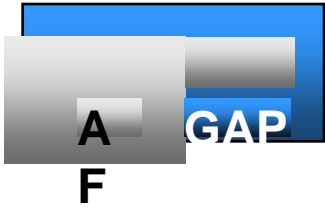
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# Management of liquidity risk in normal situations

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- Today, liquidity is not considered as a constraint for business growth...
- ... except for banks which have business in emerging countries.

# Management of liquidity risk in normal situations

## *Internal approach and regulatory constraints*

- However, all banks have a liquidity management process which goes beyond the regulatory constraints
- Liquidity steering is performed under both internal and regulatory constraints
- Internal constraints may include :

funding costs optimization

funding diversification strategy

requirement to fund  
assets in non liquid  
currencies

temporary closure of a  
refinancing market

tax constraints



# Management of liquidity risk in normal situations

## *Management of liquidity reserve (liquid assets)*

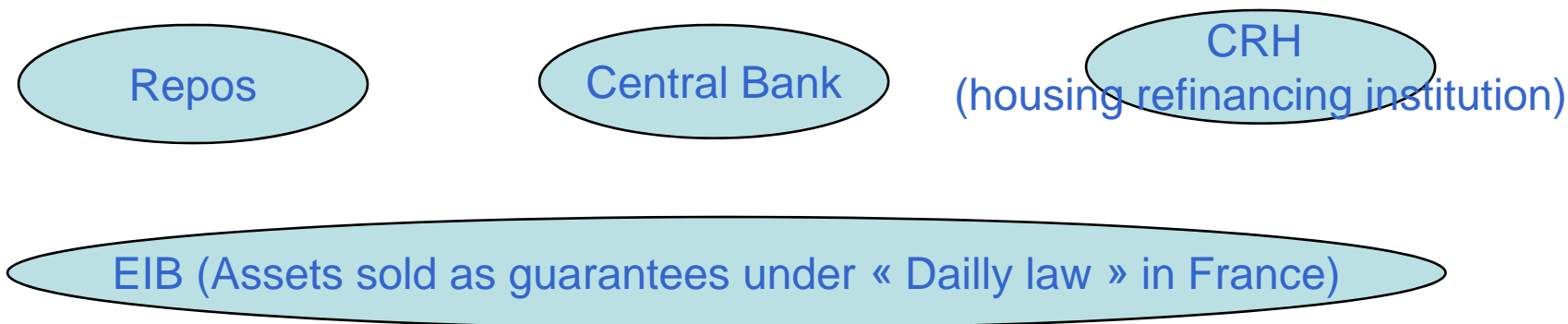
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- Management of a liquidity reserve is part of 'best practice' within banks
- Calibration and monitoring of liquidity reserves are ensured by :
  - the Treasury Department for two third of banks
  - the ALM Department for one third
- For half of the banks the liquidity reserve portfolio size is calibrated on the ongoing funding needs and for the other half, on stress scenarios results
- The costs involved are borne by the Treasury Department (there is no specific transfer within the bank of the liquidity reserves carry cost )

# Management of liquidity risk in normal situations

## *Securitization, asset-backed, collateralized funding*

- Asset-backed and collateralized funding is used by all banks for daily liquidity management :



- Cash securitization :
  - Half of banks have already used securitization as a standard liquidity management tool
  - Other banks are prepared to use securitization only in exceptional situations





# Management of liquidity risk in normal situations

## *Internal Transfer of liquidity costs*

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- Internal transfer of liquidity costs accross the bank is a common practice
- It can be made on a deal by deal basis or on a macro basis
- The ALM Committee defines liquidity fund transfer prices

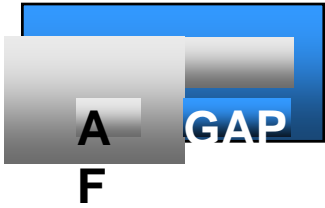
**FTP (Fund Transfer Price) = a tool to « educate » business lines (corporate banking ...) on the cost of liquidity**

# Management of liquidity risk in normal situations

## *Internal Transfer of liquidity costs*

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- Liquidity internal transfer prices are reviewed on a quarterly basis (for one third of banks) or in the event of important funding spread widening or tightening (another one third of banks)
- Liquidity internal transfer prices are taken into account in the process of pricing to customers
- Majority of banks have a distinct internal price standard for assets and liabilities
- Banks systematically use internal liquidity costs transfer for assets and liabilities with contractual maturities
- Only half of the banks use it for assets and liabilities without contractual maturities



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# Management of liquidity crisis

## *Crisis scenarios (1)*

- Majority of banks have implemented group level crisis scenarios
- For three quarters of banks the time horizon is one month
- Bank specific crisis scenario is the most commonly used :

rating downgrade

closing of a  
refinancing market

problem with a  
payment system

- Most commonly used assumptions refer to :
  - liabilities : loss of deposits, credit lines tightening, reduction of interbank loans or « rating sensitive » funds
  - assets : exceptional drawings under committed credit lines

- Very few banks simulate a systemic crisis.
- But real crisis exists

### **11 september 2001: USA liquidity crisis**

- **System failure**
- **US liquidity squeeze: Banks cannot get overnight & term funding while corporates begin to drawdown on their CP back up lines**

# Management of liquidity crisis

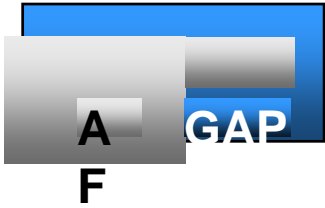
## *Crisis scenarios (3)*

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A  
F  
GAP

- Simulations are made under the constraint of maintaining the bank as being on a on-going basis, with the continuation of commercial activities
- In most cases scenarios are reviewed on a yearly basis and simulations are done quarterly
- Majority of banks declare that scenario testing outcomes have no impact on their operational liquidity management
  - However, it can be assumed that they have an impact on the management of reserve portfolios



# Management of liquidity crisis

## *Crisis management plans*

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- Banks monitor different advanced indicators of liquidity crisis
- Commercial people can play a fundamental role in revealing customers reactions and intentions
- Majority of banks have implemented contingency plans involving treasury, ALM and risk management departments, and in some cases commercial departments
- In most cases the contingency plan has not yet been operationally tested



# Agenda



A  
F  
GAP

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# Conclusions and outlooks

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**Anticipating changes in regulation and supervision**

## **Stress tests and contingency plans**

- Scenarii
- Assumptions
- Limits
- Contingency plan testing

**French regulation**

**European regulation**

**Raising management standards**

**Liquidity assets  
(on economic rules and not  
accounting classification)**

**International comparisons of  
main practices**