

30 December 2008

Strictly private and confidential

**[DRAFT]**



Project Horizon



ROTHSCHILD

# Irish bank recapitalisation

## Summary of recapitalisation programme announced 15 December

- €10bn recap facility
- In principle existing shareholders will be given the opportunity to participate
  - Presumably therefore it will consist mainly of rights issues with government underwriting
- Government may invest in ordinary shares or preference shares
  - i.e. similar to UK scheme
- Investments may be via the National Pensions Reserve Fund
- Banks apply for funds as required – but government will “initiate” dialogue
- Each situation will be looked at on a case-by-case basis
- *Financial Times, 15 Dec 08: “Dublin’s plan to inject €10bn of capital into domestic banks is as welcome as it is late. And, for all the time taken, it is remarkably vague. Apart from the worrying suggestion that it might help itself to Ireland’s €18bn state pension scheme – recognition that funding alternatives are high as sovereign bond spreads widen – the government says it might buy preference or ordinary shares or underwrite a share issue”*

### Overview of position of listed Irish banks

	Allied Irish Banks	Bank of Ireland	Anglo Irish Bank	Irish Life & Permanent
Market capitalisation	1,748	884	286	421
P/BV	0.18x	0.14x	0.07x	0.16x
Shareholders' equity ex minorities	9,555	6,382	4,125	2,639
Total assets	182,973	204,279	101,321	76,130
Tier 1 ratio	7.7%	8.7%	8.4%	12.5%
Core Tier 1 ratio	6.20%	6.3%	6.7%	10.1%
Basis	Basel II	Basel II	Basel II	Basel I
Balance sheet date	30/06/2008	30/06/2008	30/09/2008	30/06/2008
Capital injection required for 8.0%				
Core Tier 1 (pre-losses), €bn	3.3	3.5	1.3	n/m
Source Company Information, Factset 15/12/2008				

Assuming no other changes in risk-weighted assets / capital, in order to achieve a 8% Core Tier 1 ratio, a capital injection of €8.1bn is required for the largest Irish banks

# Contents

[DRAFT]

## Sections

1	Executive summary	
2	Classification of the Danish banking sector	2
3	Structuring a solution	4
		8

### **Government objectives**

- Maintaining a functioning, stable banking system
- Unfreezing credit markets / increasing bank lending
  - To households, SMEs, larger corporates
  - Limiting the impact of the credit crisis on the real economy, e.g. bankruptcies
- Preference for private / market rather than state-forced solutions (e.g. nationalisation)
- Equality between banks
- For any Government investment there should be
  - A clear exit timescale and mechanism
  - Value for money for the taxpayer (appropriate upside for the Government's investment)
- Limited use of the Winding-up Company
- Compliance with EU State Aid guidelines
- Any program to be simple and understandable by stakeholders and the public

### **Issues**

- [REDACTED]
- Most banks have difficult shareholder or mutual structures, equity held by the Government would be illiquid
- Banks need to be given choices rather than being forced down a certain route
- If an unwritten route were used, the Government would want to see some shareholders taking up their rights

***It is understood that structuring a program which is fair and transparent but also accessible to the smaller and non-listed segment of the banking system in Denmark is a key objective***

# I. Executive summary

[DRAFT]

## 1.1 Executive Summary

This paper proposes a 'master scheme' for Government support to recapitalise the Danish banking system

- We have tried to meet as many of the Government's objectives (shown on the facing page) as possible – however not all can be reconciled
- The Danish banking system has a number of peculiarities compared to most European countries:
  - The dominance of Danske
  - Restrictions on the shareholder base in other listed banks
  - The number of small local banks and many mutual or foundation ownership structures where there are no existing shareholders
- [REDACTED]
- We therefore believe that the core instrument offered to banks who can demonstrate that they are fundamentally sound should be a [long dated] hybrid bond, the rate on which is set on a case-by-case basis but with reference to a matrix taking into account
  - capital adequacy
  - size of issue
  - CDS spread (if applicable)
  - credit rating or risk profile
- Note that the Government would be directly subscribing rather than underwriting but that this route gives Danske and other listed banks the opportunity to undertake a rights issue on their own at the same time or sequentially

# I. Executive summary

[DRAFT]

## 1.1 Executive Summary (cont.)

- The rate on the hybrid bond would be reduced to the extent that a warrant is offered and is acceptable to the Government
  - We suggest that the Government only consider warrants into listed securities as it gives it liquidity: this therefore covers Danske [REDACTED]
  - [REDACTED]
- In these circumstances we would expect [REDACTED] to be cash paying between (say) 7 to 9 % on the hybrid (plus the upside of a warrant) whereas [REDACTED] may be paying up to (say) 14% on the hybrid as they are riskier and cannot provide a suitable warrant
- However, as this may be an expensive option we also propose that the Government sets up and capitalises (with ordinary shares) a Master Co-operative Bank ("MCB") to give an alternative to the smaller banks. Any smaller bank which did not wish to take up the hybrid could request that they be acquired by the MCB in return for shares, based on an independent valuation at that time
  - E.g. if Foundation X owned Fynbank, that foundation would sell the assets and liabilities into MCB and hold shares in MCB instead. The objectives of Fynbank would be incorporated, where feasible, into MCB's objectives
  - The intention of MCB would be to list in (say) 5 to 7 years time at which stage the Government would intend to exit and participants such as Foundation X could decide whether to continue ownership or to sell.

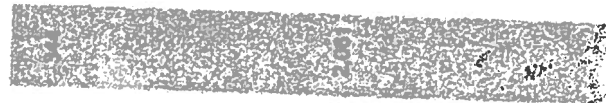
### Group 1

#### 5 banks

- Danske Bank
- FIH Erhvervsbank
- Jyske Bank
- Nordea Bank Danmark
- Sydbank

Composition of total lending exposure (DKK bn 2007)

100% 4 338



80%

60%

40%

20%

0%

#### Groups

1 2 3 4

Total: DKK 2,747 bn

Note included lending activities abroad

Source Finanstilsynet

### Group 2

#### 12 banks

- Alm. Brand Bank A/S
- Amagerbanken Aktieselskab
- Arbejderernes Landsbank Aktieselskab
- Fionia Bank
- Forstædemøns Bank A/S (acquired by Nykredit)
- Nykredit Bank A/S
- Ringkjøbing Landbobank, Aktieselskab
- Roskilde Bank, Aktieselskab (in liquidation)
- Sparbank A/S
- Spar Nord Bank A/S
- Sammenslutningen Danske Andelskasser
- Vesijysk Bank A/S

### Group 3

#### 89 banks

- Lån og Spar Bank A/S, Sjælland, Sparekassen, Dragsholm Sparekasse, bank Trelleborg A/S, Fanøifjord Sparekasse, Sparekassen Lolland A/S, Middelfart Sparekasse, Faaborg A/S, Sparekassen, Svendborg Sparekasse, Saxo Bank A/S, E-TRADE Bank A/S, Basisbank A/S, Finansbanken A/S, Danske Andelskassers Bank A/S, Diba Bank A/S, Max Bank A/S, Skandinaviska Enskilda Banken A/S, Møns Bank, A/S, Skælskør Bank Aktieselskab, Vordingborg Bank A/S, Lokalbanken i Nordjylland a/s, Grønlandsbanken Aktieselskab, BRFbank A/S, Lollands Bank Aktieselskab, Lægernes Pensionsbank A/S, Vestfyns Bank A/S, Nordfyns Bank Aktieselskab, Totalbanken A/S, Østjysk Bank A/S, Aarhus Lokalbank, Bonusbanken A/S, Skjern Bank Aktieselskab, Vindrup Bank, A/S, Søling Bank A/S, Kreditbanken A/S, Tønder Bank A/S, Ringkjøbing Bank Aktieselskab, Bank Danmark A/S, Capinordic Bank A/S, FIH Kapital Bank A/S, Carmegje Bank A/S, Sparekassen Limfjorden, Freløvs Sparekasse, Dronninglund Sparekasse, Sparekassen Vendsyssel øbh bank a/s, Thy Sparekassen, Morsø Sparekasse A/S, Sparekassen Hvidebø A/S, Løkken Sparekasse, Sparekassen, Gudme Raaschou Bank A/S, Dexia Nord A/S, Farsø Sparekassen, Eik Bank Danmark A/S, Midtjyd Sparekassen, Hals Sparekasse, Himmerland A/S Sparekassen, EkspressBank A/S, Sparekassen Spar Mors, Bank DnB Sparekassen, Spar Søling Sparekasse, Sparekassen Belling, Sparekassen Kronjylland, Sparekassen Høbro, Den lille Sparekasse, Sparekassen Djursland, Sparekassen Østjylland Sparekassen for Nr. Nebel og Omegn, Fanø Sparekasse, Dan Jyske Sparekasse, Vorbasse-Hejnsvig Sparekasse, Brørup Sparekasse, Frøs Herreds Sparekasse, Broager Sparekasse, Sparekassen Legumtkøster, Sparekassen Brødbro, Folkesparekassen, Cantobank, Franup Andelskasse, Andelskassen Fælleskassen, Den Almennyttig Merkur

### Group 4

#### 41 banks

- Rejsnæs Sparekasse, Sparekassen for Arts Herred, Sparekassen 'Den lille Bikube', Hårsløv Sparekasse, Kongsted Sparekasse, Flemløse Sparekasse, RISE Spare- og Lanekasse, Leasing Fyn og Factoring Bankaktieselskab, Ø. Brønderslev Sparekasse, Sparekassen Nordmors, Boddum-Ydy Sparekasse, Sønderhå-Hørsted Sparekasse, Kim Sparekasse, Hunsrup-Østerild Sparekasse, St. Brøndum Sparekasse, Vokslev Sogns Spare- og Laanekasse, Rønde og Omegns Sparekasse, Agri-Egens Sparekasse, Helgenæs Sparekasse, Vistoft Sparekasse, Tved Sparekasse, Søby-Skader-Halling Spare- og Laanekasse, Sparekassen Midtdjurs, Fruering-Vivred Sparekasse, Ulfborg Sparekasse, Stedli Sogns Spare- og Lanekasse, Borbjerg Sparekasse, Fjalling-Trans Sparekasse, Lunde-Kvong Andelskasse, Ryslinge Andelskasse, Københavns Andelskasse, Andelskassen ØIKOS, J.A.K. Andelskassen Brendrup, Andelskassen J.A.K. Ebeltoft, Andelskassen J.A.K. Slægelse, J.A.K. Andelskassen Østervraa, J.A.K. Andelskassen Varde, Thisted Andelskasse, J.A.K. Andelskassen Rødding, Funder Fælleskasse Andelskasse

# 2. Classification of the Danish banking sector [DRAFT]

## 2.1 Overview

### 1 Danish banks and mortgage institutions

- The Danish banking system is characterised by a high number of financial institutions. The majority of them are local savings banks
- The Danish FSA uses a four-tier classification of banks
  - Group 1: banks with capital in excess of DKK 50bn (5 banks)
  - Group 2: banks with capital between DKK 10bn and DKK 50bn (12 banks)
  - Group 3: banks with capital between DKK 250m and DKK 10bn (89 banks)
  - Group 4: banks with capital below DKK 250m (41 banks)
- In addition, there are 8 mortgage institutions in Denmark: BRFKredit, DLR Kredit, FIH Realkredit, LR Realkredit, Nordea Kredit Realkreditaktieselskab, Nykredit Realkredit, Realkredit Danmark and Totalkredit

### 2 Key issues and recent events

- Recent problems across Groups 1 and 2
  - Quality of loan portfolios is worsening; increasing loan losses expected in 2009-10
  - Issues with funding and capital, the current bank rescue scheme is thought to be unlikely to adequately address the wider problems
  - Risk of banks becoming insolvent – Roskilde bank has been the largest casualty so far, also FIH's parent Kaupthing was nationalised
- Covered bond markets are difficult to access at the moment. These have been widely utilised, in order to sustain the high loans-to-deposits ratios across the banking system. Danish banks are now facing funding problems as debt falls due for refinancing. Nevertheless, access is still open for better quality issues – e.g. Nykredit bonds were rated AAA by S&P in November
- Banks in Groups 3 and 4 have broadly adopted a savings bank model. It is understood that potential future funding problems and large exposures pose a threat to these Groups



# 2. Classification of the Danish banking sector [DRAFT]

## 2.2 Key metrics and loan exposure of the Groups

### Average key metrics by group (30 Sep 2008)

	Tier 1 ratio (%)	Total capital ratio (%)	Loans to deposits ratio (%)	Loans to equity ratio (x)	Cost-income ratio
Group 1	10.5	13.7	127.1	10.9	61%
Group 2	9.3	11.6	154.7	8.4	132%*
Group 3	16.6	19.2	120.3	5.8	75%
Group 4	22.4	22.8	84.3	3.9	104%

Note Group 4 Tier 1 and Total Capital ratios shown as at 30 Jun 2008

Note \* Cost-income ratio inflated in H1 2008 due to inclusion of Roskilde in official statistics

Data as of 30 Jun 2008

### Sector lending exposures by group (31 Dec 2007)

	Group 1 DKKbn %	Group 2 DKKbn %	Group 3 DKKbn %	Group 4 DKKbn %	Total DKKbn %
Public authorities	64.4 3%	1.7 1%	1.6 0%	0.0 0%	67.7 2%
Business					
Agriculture and forestry	50.5 2%	19.0 6%	23.6 7%	0.4 9%	93.8 3%
Fishing	4.1 0%	0.3 0%	1.3 0%	0.0 0%	6.2 0%
Manufacturing, utilities and energy	194.3 9%	17.5 5%	17.5 5%	0.1 2%	229.7 8%
Construction	35.1 2%	16.3 5%	14.6 4%	0.2 5%	66.3 2%
Retail and leisure	124.0 6%	20.4 6%	20.4 6%	0.3 7%	165.3 6%
Transport and telecoms	68.4 3%	5.4 2%	5.6 2%	0.1 2%	79.6 3%
Financial institutions	667.5 32%	45.7 13%	20.2 6%	0.1 1%	733.9 27%
Property	297.8 14%	76.9 22%	62.3 18%	0.2 6%	437.9 16%
Other	45.3 2%	23.3 7%	30.8 9%	0.2 5%	99.8 4%
Total	1,487.1	225.5	196.3	1.6	1,910.5
Private customers	509.7 25%	116.5 34%	140.6 42%	2.7 63%	770.5 28%
Total	2,061.1	343.7	338.5	4.3	2,747.6

Source Finanstilsynet

One of the key areas of concern in both Groups 2 and 3 is their significant exposure to the property and, to an extent, also the construction sector

## Concentration by total loan exposure within the Groups (2007 data)

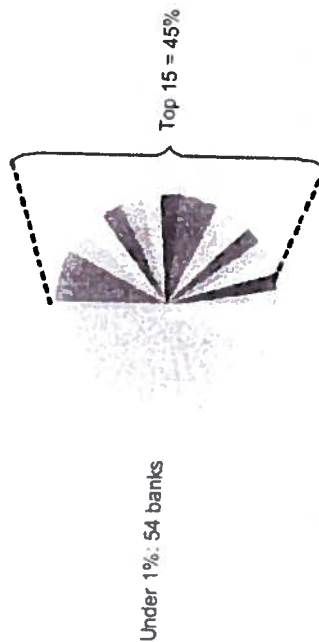
**Group 1 (Total: DKK 2,061bn)**



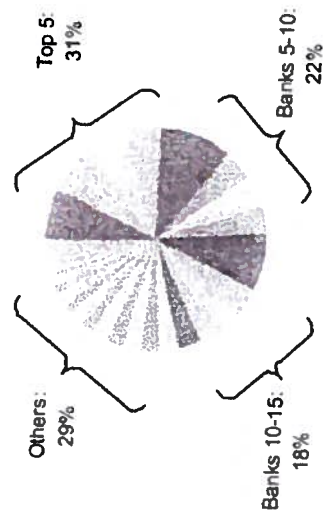
**Group 2 (Total: DKK 344bn)**



**Group 3 (Total: DKK 338bn)**



**Group 4 (Total: DKK 4bn)**



Around 90% of the country's lending base can be accounted for by 25 banks:

- All of Group 1
- Top 5 Group 2 banks
- Top 15 Group 3 banks

Note Danske Bank numbers include lending outside Denmark

Source Finanstilsynet, Company information

## 2. Classification of the Danish banking sector [DRAFT]

### 2.3 Benchmarking the key players

#### Quality metrics (30 Sep 2008)

Name	Tier 1 ratio (%)	Total capital ratio (%)	Loans to deposits ratio (%)	Loans to equity ratio	Cost-income ratio (%)
<b>Group 1</b>					
Danske Bank A/S	12.3	16.6	147.0	10.5x	59.9
FH Erhvervsbank A/S	10.7	14.1	697.0	7.6x	48.3
Jyske Bank A/S	10.1	11.5	113.6	12.2x	61.7
Nordea Bank Danmark A/S	8.0	10.8	114.2	11.7x	64.1
Sydbank A/S	11.2	15.6	133.5	13.1x	61.0
<b>Group 2</b>					
Alm. Brand Bank A/S	7.4	10.2	159.5	14.2x	156.3
Amagerbanken Aktieselskab	7.7	11.6	226.5	10.5x	55.6
Arbejdernes Landsbank, Aktieselskab	11.5	11.5	102.6	4.9x	88.5
Fionia Bank A/S	7.6	10.2	178.4	10.5x	95.2
Forstædemø Bank A/S	7.1	10.7	178.6	11.1x	90.9
Nykredit Bank A/S	7.7	10.4	184.1	9.5x	64.5
Ringkjøbing Landbobank, Aktieselskab	12.6	15.7	158.6	7.8x	32.4
Roskilde Bank, Aktieselskab (in liquidation)	nm	nm	n/a	nm	nm
Sammenslutningen Danske Andelskasser	13.7	13.7	100.1	4.7x	104.2
Spar Nord Bank A/S	10.2	11.8	119.4	9.7x	66.2
Sparbank A/S	9.5	11.1	134.9	7.8x	76.3
Vestjysk Bank A/S	7.3	10.3	158.4	9.0x	61.0

Source Finansstilsynet

Data as of 30 Jun 2008

Tier 1 ratios across Groups 1 and 2 are widely distributed

However, higher Tier 1 ratios (especially so for smaller lenders) may actually be misrepresentative of the absolute impact of potential loan losses on their portfolios

## Benchmarking the key players

### Size metrics (RWAs as at 30 Sep 2008)

Name	Loan exposure (2007, DKKm)	RWAs (30 Sep 08, DKKm)	Largest sector exposures
<b>Group 1</b>			
Danske Bank A/S	1,344,122	646,741	Financial institutions, Property
FH Erhvervsbank A/S	64,313	69,297	Property, Manufacturing
Jyske Bank A/S	144,444	91,935	Financial institutions, Property
Nordea Bank Danmark A/S	414,326	290,065	Financial institutions, Property
Sydbank A/S	93,915	58,994	Property, Financial institutions
<b>Group 2</b>			
Alm. Brand Bank A/S	25,980	16,443	Property, Financial institutions
Amøgerbanken Aktieselskab	27,246	25,132	Property, Financial institutions
Arbejdernes Landsbank, Aktieselskab	18,524	15,820	Financial institutions, Property
Fionia Bank A/S	32,226	20,408	Property
Forstædernes Bank A/S	44,972	26,469	Property, Financial institutions
Nykredit Bank A/S	19,228	64,471	Agriculture and forestry
Ringjæbing Landbobank, Aktieselskab	20,057	14,135	Financial institutions, Property
Roskilde Bank, Aktieselskab (in liquidation)	20,179	n/a	Property, Agriculture and forestry
Sammenslutningen Danske Andelskasser	44,728	12,623	Financial institutions, Property
Spar Nord Bank A/S	17,389	38,132	Property
Sparbank A/S	58,514	15,024	Property, Financial institutions
Vestjysk Bank A/S	14,656	18,199	Agriculture and forestry, Retail and Leisure

Source Finanstillisynet

# 2. Classification of the Danish banking sector [DRAFT]

## 2.3 Benchmarking the key players (cont.)

### Market metrics (30 Sep 2008)

Name	RWAs (DKK m)	Mkt cap (DKK m)	P/Bk ratio	Ownership type	Voting restrictions	Key shareholders
<b>Group 1</b>						
Danske Bank A/S	646,741	35,639	0.34x	Public		A.P. Møller-Mærsk, Realdanmark
FH Erhvervsbank A/S	69,297	nm	nm	Public subsidiary		Kaupthing / Liquidator
Jyske Bank A/S	91,935	6,642	0.64x	Public	Max 4,000 votes	Foreningen Nykredit
Nordea Bank Danmark A/S	290,065	nm	nm	Public subsidiary		Nordea
Sydbank A/S	58,994	4,371	0.61x	Public	Max 5,000 votes	A TP, Foreningen Nykredit
<b>Group 2</b>						
Alm. Brand Bank A/S	16,443	1,227	0.26x	Public	None - access to capital?	
Amøgebanken Aktieselskab	25,132	184	n/a	Public	Max votes 1/1,000 of capital	Alm. Brand af 1972 (policy holders)
Arbejdernes Landsbank, Aktieselskab	15,820	nm	nm	Cooperatives		FFA Pension, Foreningen Nykr.
Fionia Bank A/S	20,408	343	0.20x	Public	Max 10,000 votes / 10% cap.	Unions
Forstædernes Bank A/S	26,469	nm	nm	Private subsidiary		Foundation (Fionia Aktiefond)
Nykredit Bank A/S	64,471	nm	nm	Cooperative		Nykredit
Røngjølbing Landbobank, Aktieselskab	14,135	1,512	0.82x	Public	Max 2 votes	Foreningen Nykredit (policy holders)
Roskilde Bank, Aktieselskab (in liquidation)	n/a	nm	nm	In liquidation		A TP
Sammenslutningen Danske Andelskasser	12,623	nm	nm	Cooperative		No major private shareholders
Spar Nord Bank A/S	38,132	2,448	0.58x	Public	Shareholder regions / delegates	23 cooperative banks
Sparbank A/S	15,024	434	0.27x	Public	Max 1,000 votes / 10% cap.	Spar Nord Fonden, Nykredit
Vestjysk Bank A/S	18,199	443	0.25x	Public	Max 3% of capital	Spar Vest Fonden

Note \* Denotes banks for which estimated potential loan losses applied to 2007 RWAs under a 95% confidence interval (official estimates of 2.65% of RWAs for Group 1; 3.36% for Group 2) would exceed the market capitalisation

Source Factset, Company information, Lånshares, Finansstilsynet

The depressed market values of most listed Danish banks imply that in some cases the potential estimated loan losses exceed the current market capitalisation under a stress scenario (e.g. 5% likelihood)

# 3. Structuring a solution

## 3.1 Government key investment criteria

- 1 ■ We assume the Government will wish to ensure that any investment into the financial system, where taxpayers money is put at risk, will be priced to reflect the nature of the investment / entity. Key criteria in structuring any scheme will include:
  - Application of market terms
  - Preference for liquid instruments or instruments that are as liquid as practicable in the circumstances; or availability of alternative exit routes
  - Securing voting rights in the investee entity where the type of investment being made reasonably requires such rights to be obtained
  
- 2 ■ In addition, we understand that it is the Government's objective to follow a system that ensures, as far as possible, equality between the banks, transparency of process and creation of clear audit trails
  
- 3 ■ Given the significant differences in type of entity in the Danish banking system, the Government's objectives cannot be achieved through a "one size fits all" policy. However, the approach suggested overleaf attempts to reflect an equitable and consistent program but one which is flexible enough to meet the different circumstances of the banks

***Significant differences within the Danish Banking sector pose a challenge for a "one size fits all" solution – but do not necessarily prevent a consistent policy approach***

# 3. Structuring a solution

## 3.2 Program outline (1/2)

1

- Banks filtered into those which are "fundamentally sound" and those which are "distressed"**
- Distressed banks to be dealt with by the Winding-up Company – possibly as a precursor to entry to the "Master Cooperative Bank" (MCB) if appropriate (see overleaf)
  - For fundamentally sound banks, to provide consistency / equality, the program could follow a number of key principles
  - Banks applying for assistance would need to demonstrate they are fundamentally sound by complying with set criteria in a pro forma application

2

- Hybrid instrument with to form the core of the program for all banks (e.g. detachable warrants)**
- Consistent with Government preference not to invest in ordinary shares
  - Direct equity investment not suitable in any case for entities without ordinary shares in issue, limited free float or too small a market capitalisation (the Government stake is so large that it *de facto* becomes a take-over). Banks with limited free float could (if they chose) change the nature of their listing to allow warrants and so benefit from a lower coupon

3

- Warrants provide a mechanism for delivery of upside to the Government**
- Where unsuitable / unable to provide warrants (e.g. where limitation on voting rights in the entity and/or size of market capitalisation), the banks would:
    - Be required to pay a higher coupon on the hybrid; and
    - if the resulting coupon does not appear to be supported by a stress-tested business plan, consideration to be given whether entity must in any event fall into either Winding-up Company or the MCB as appropriate

# 3. Structuring a solution

## 3.2 Program outline (2/2)

4

### Coupon to be paid before ordinary dividends

- Dividend-linked step-up provisions on the coupon / call price step-up to encourage redemption; where not practical to link to increase in the ordinary dividend (such as for mutuals), consider ability to link to an alternative metric such as increase in retained profits

5

### In addition, Government to create and capitalise (through ordinary shares) a new co-operative bank - Government's "Master Cooperative Bank" (MCB)

- Fundamentally sound savings banks may apply for the MCB to acquire their businesses in return for shares to be issued to policy holders or newly established charitable foundations (i.e. Fionia Fondation model)
- On each acquisition, an independent valuation at the time to determine a) if the bank is fundamentally sound and b) the number of shares to issue to the owner
- State has medium term (say, 5-7 years) intention to IPO the MCB so Government, and members, can realise value
- Given the nature of the smaller non-public or heavily protected listed banks, the market terms for hybrid instruments are likely to be so expensive that the MCB is an attractive alternative. It gives fair credit to the value of the institution / franchise while allowing for continued service of customer / geographic markets (MCB assumed to continue to operate acquired operations / branches). The option to sell assets into the MCB may also be considered



# 3. Structuring a solution

## 3.3 Application of the criteria

Banks divided into four groups reflecting their circumstances, with the outlined general criteria applied:

- 1** **Listed banks capable of implementing their own market solution**
- Hybrid investment with warrants

**2** **Subsidiaries of overseas banks**

- Hybrid invested at the country level
- Provisions to ensure that the capital retained at the level invested and not channelled up to the parent
- Warrants for ordinary shares at the parent / listed company level if available (would reduce coupon)

**3** **Other Danish listed banks**

- Following the general principles (hybrid instrument with warrants) but with higher coupon where offering warrants would be impractical
- Option to also be available to sell into the MCB

**4** **Unlisted banks**

- As with option 3, with ability to sell into the MCB
- It is envisaged that all participating institutions will be given the option to "upgrade" to a cheaper coupon when steps are taken to address voting and liquidity issues (e.g. abolishment of voting restrictions and dilution of foundation holdings blocking market solutions, capital raisings or mergers)

**Pricing**

- To follow EC / ECB guidelines
- Negotiations bank by bank (or at least by category of bank) to reflect circumstances
- Base coupon on hybrid with warrants to be [at least 9% - to be adjusted for voting restrictions and lack of liquidity]


10 Jan 2008

Strictly private and confidential

[Draft for Discussion: work in progress]

# Project Horizon

 Illustrative coupon analysis: Worked Examples

 ROTHSCCHILD

# Illustrative coupon analysis: Worked example

## 1.1 Basic illustration

### Assumptions

Current share price (DKK)	10
Fixed Coupon (p.a. as a % of Issue Price)	8%
Dividend linked coupon multiplier**	125%

	Per security (DKK)
Issue price	DKK 12.50
Number of Securities	1
Conversion ratio (No. of shares underlying each security)	1
<b>Fixed Coupon (nominal amount p.a.)</b>	<b>DKK 1.00</b>

\* Dividend Linked Coupon = ordinary dividend declared per share for financial year \* Conversion Ratio  
 \*\* Dividend linked coupon multiplier

Actual Coupon Payment vs. ordinary dividend paid				
Dividend paid per share (DKK)	Fixed Coupon (DKK)	Dividend Linked Coupon (DKK)	Actual Coupon Payment (DKK)	Actual Coupon Payment (DKK)
0.3	1.00	0.38	1.00	1.00
0.4	1.00	0.50	1.00	1.00
0.5	1.00	0.63	1.00	1.00
0.6	1.00	0.75	1.00	1.00
0.7	1.00	0.88	1.00	1.00
<b>0.80</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>
0.9	1.00	1.13	1.13	1.13
1	1.00	1.25	1.25	1.25
1.1	1.00	1.38	1.38	1.38
1.2	1.00	1.50	1.50	1.50
1.3	1.00	1.63	1.63	1.63

The above table provides a simple theoretical worked example of how the Government's income payment is calculated:

- If the Issue price of 1 security is 12.5 DKK, the annual income (Actual Coupon Payment) will be the higher of:
  - a fixed nominal coupon of DKK 1 p.a. (i.e. 8% of the issue price); and
  - 125% of the nominal ordinary dividend paid per share for the relevant financial year
- The table highlights that if the ordinary dividend per share is greater than DKK 0.8 then the Actual Coupon Payment received by the Government per security will be higher than the Fixed Coupon (i.e. DKK 0.8\*125%= DKK1)
- Finally, the table also highlights that the income received by the Government is linked only to the nominal dividend paid by the issuer and is not linked to the share price at the time (i.e. the prevailing dividend yield)

**Nominal dividend paid per share and not the dividend yield drives actual income received**

# Illustrative coupon analysis: Worked example

## 2.1 Illustration for [REDACTED] Assumptions

### Assumptions: Illustration for Danske capital injection

Risk weighted assets (DKK)m	[REDACTED]
Issue size (% of risk weighted assets)	2.0%
Number of outstanding shares (m)	[REDACTED]
Market Capitalisation (DKK)m	[REDACTED]
Current share price (DKK)	[REDACTED]
Conversion premium	25%
Fixed Coupon (p.a. as a % of Issue Price)	8%
Dividend linked coupon multiplier*	125%

	Per security	Total Issue Size
Issue price	DKK [REDACTED]	DKK [REDACTED]
Number of Securities	1	[REDACTED]
Conversion Ratio (n.o of shares underlying each security if converted)	1	[REDACTED]
Fixed Coupon (nominal amount p.a.)	DKK [REDACTED]	DKK [REDACTED]

\* Dividend Linked Coupon = ordinary dividend declared per share for financial year \* Conversion Ratio \* Dividend linked coupon multiplier

The illustrative assumptions above represent a theoretical capital injection for [REDACTED]

# Illustrative coupon analysis: Worked example

## 2.2 Illustration for [redacted]: Analysis

**Actual Coupon Payment per Security vs. ordinary dividend paid**

Dividend paid per Share (DKK)	Actual Coupon Payment (DKK)			Dividend paid per Share (DKK)	Implied ordinary dividend yield (for reference purposes only)				
	Fixed Coupon (DKK)	Dividend Linked Coupon (DKK)	Actual Coupon Payment (DKK)		-50%	0%	50%	100%	150%
1.00	1.00	1.00	1.00	1.00	3%	2%	1%	1%	1%
2.00	2.00	2.00	2.00	2.00	6%	3%	2%	2%	1%
3.00	3.00	3.00	3.00	3.00	9%	5%	3%	2%	2%
4.00	4.00	4.00	4.00	4.00	12%	6%	4%	3%	2%
5.00	5.00	5.00	5.00	5.00	15%	8%	5%	4%	3%
6.00	6.00	6.00	6.00	6.00	16%	8%	5%	4%	3%
7.00	7.00	7.00	7.00	7.00	18%	9%	6%	5%	3%
8.00	8.00	8.00	8.00	8.00	21%	11%	7%	5%	4%
9.00	9.00	9.00	9.00	9.00	24%	12%	8%	6%	4%
10.00	10.00	10.00	10.00	10.00	27%	14%	9%	7%	5%
11.00	11.00	11.00	11.00	11.00	31%	15%	10%	8%	6%

**Total Income vs. dividends paid on underlying shares**

Dividend paid per Share (DKK)	Fixed Coupon (DKK/m)		Dividend Linked Coupon (DKK/m)		Actual Coupon Payment (DKK/m)	
	Fixed	Linked	Fixed	Linked	Fixed	Linked
1.00	1.00	1.00	1.00	1.00	1.00	1.00
2.00	2.00	2.00	2.00	2.00	2.00	2.00
3.00	3.00	3.00	3.00	3.00	3.00	3.00
4.00	4.00	4.00	4.00	4.00	4.00	4.00
5.00	5.00	5.00	5.00	5.00	5.00	5.00
6.00	6.00	6.00	6.00	6.00	6.00	6.00
7.00	7.00	7.00	7.00	7.00	7.00	7.00
8.00	8.00	8.00	8.00	8.00	8.00	8.00
9.00	9.00	9.00	9.00	9.00	9.00	9.00
10.00	10.00	10.00	10.00	10.00	10.00	10.00
11.00	11.00	11.00	11.00	11.00	11.00	11.00

**Government's coupon payment would start to increase if the Issuer paid a nominal dividend greater than DKK 5.24 per share in this illustration**

- In this example, once the dividend paid by the Issuer exceeds DKK 5.24 per ordinary share the Actual Coupon Payment to the Government will begin to increase
- DKK 5.24 would represent a crude dividend yield to shareholders of 8.0% if the share price remained unchanged over 3 years and 3.2% if the share price increased 150%
- This analysis would apply for any year in which a dividend was paid although we have assumed/note that the first dividend will likely not be paid until the 3<sup>rd</sup> financial year following issue

13 January 2009

Strictly private and confidential

[DRAFT: WORK IN PROGRESS]

# Project Horizon: Instrument worked examples

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**Capital analysis**

SEKm, as at 3Q 2008

	Nordea	Swedbank	SEB	Handelsbanken
Core tier 1 (note 1)				
Hybrid capital	133,816	61,122	64,863	61,556
Tier 1 capital	14,485	8,670	11,448	11,324
Hybrid as % of Tier 1 capital	148,301	69,792	76,311	72,880
	9.8%	12.4%	15.0%	15.5%
Tier 2 capital				
Total capital	51,136	27,764	33,051	45,465
RWAs (transition period)	199,437	95,606	97,651	108,018
RWAs (post transition)	2,118,214	847,400	936,906	1,052,568
Capital ratios (transition rules) (note 2)	1,879,641	666,612	770,200	709,222
Core tier 1 ratio				
Tier 1 ratio	6.3%	7.2%	6.9%	5.8%
Total capital ratio	7.0%	8.2%	8.1%	6.9%
Capital required to achieve 8.0% core tier 1 ratio	9.4%	11.3%	10.4%	10.3%
Capital ratios (post transition)	35,642	6,670	10,089	22,649
Core tier 1 ratio				
Tier 1 ratio	7.1%	9.2%	8.4%	8.7%
Total capital ratio	7.9%	10.5%	9.9%	10.3%
Capital required to achieve 8.0% core tier 1 ratio	10.6%	14.3%	12.7%	15.2%
	16,556	(7,793)	(3,247)	(4,818)

Source Company 3Q reports

**Notes**

- 1) Core Tier 1 capital = Tier 1 capital less hybrid capital (core capital contribution): Swedbank capital adjusted for cSEK12bn capital raised (net of SEK 400m expenses) Handelsbanken adjusted for SEK 2.1bn capital raising
- 2) Transition period calculations are based on the transitional rules, applicable over the three year transition period to Basel II ending in 2009

# Responding to the credit crisis

## **Handelsbanken hybrid Tier 1 capital loan issuance**

Swedish banks are now able to include up to 30% in hybrid Tier 1 capital loans in their Tier 1 capital

### Overview

- The Swedish Financial Supervisory Authority announced 12/12/08 that Swedish banks, like their counterparts in most EU countries, can include up to 30 percent in hybrid Tier 1 capital loans in their Tier 1 capital
- Handelsbanken has issued a hybrid Tier 1 capital loan of SEK 2.1bn
  - The issue was subscribed for by a small group of institutional investors
  - The loan leads to an increase in Handelsbanken's capital base and thus boosts the bank's potential lending capacity
- Handelsbanken said in their statement (16/12/2008):
  - *"The issue has attracted a great deal of interest and it was carried out on good terms. Our assessment is that this was helped by the Government's stabilisation fund, which includes Handelsbanken. At present, many companies need to renew their loans, while many international lenders have disappeared from our domestic markets. To meet this need, we are further increasing our lending capacity by issuing this hybrid Tier 1 capital loan. The Swedish Financial Supervisory Authority has decided that the loan may be included in Tier 1 capital when calculating the Bank's capital base. Thus our Tier 1 capital ratio will be strengthened by about 0.2 percentage points."*
- Following yesterday's issue, Handelsbanken has the capacity to issue approximately SEK 10bn more under the new regulations

## **Handelsbanken raised SEK 2.1bn hybrid Tier 1 capital following the increase of regulatory limit for Tier 1 hybrids to 30%**



# 1. Further thoughts on pricing

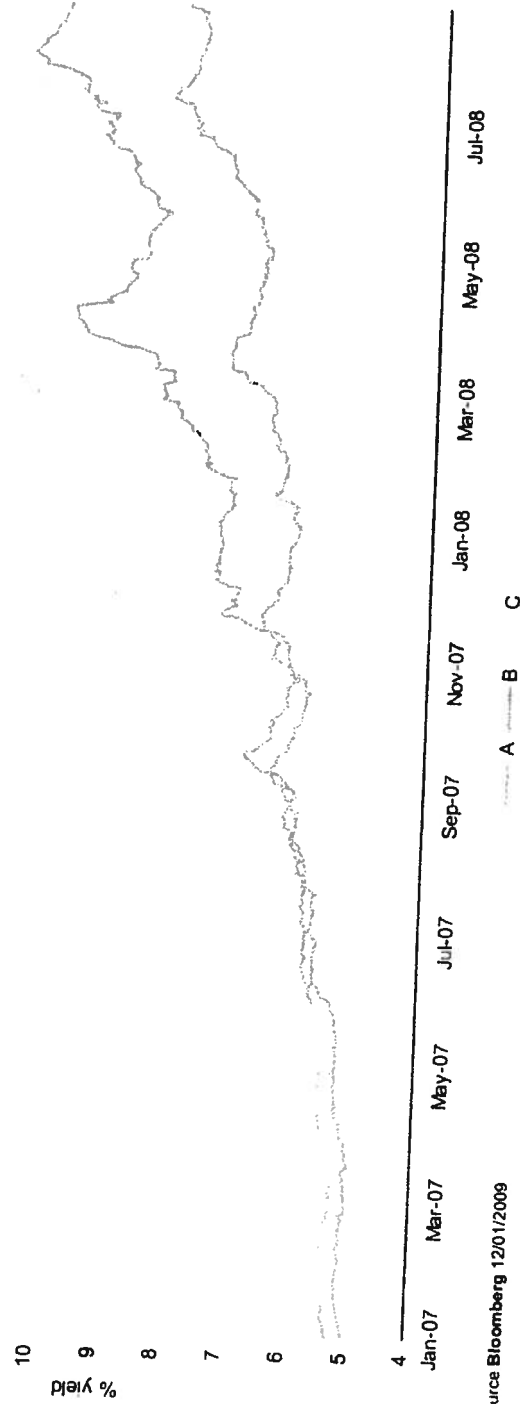
## 1.2 Yield and spread analysis

The chart below sets out the results of the analysis and the range of Risk Premium for banks belonging to Group B and Group C

**Yield and spread analysis of tier 1 instruments of different quality banks since January 2007**

bps	A	B	C
Min	501	515	518
Max	838	1059	1307
Mean	627	712	849
Mean change vs. A		84	221

We estimated that the risk premium for Group B is c. 0.8% and for Group C is 2.2% (1.4% above B)



Source Bloomberg 12/01/2009

Group A: BBVA, BNP Paribas, Deutsche Bank, ING, RBS  
 Group B: Banco Popolare, Fortis, SNS  
 Group C: OTP, Bancaja

Project Horizon

2

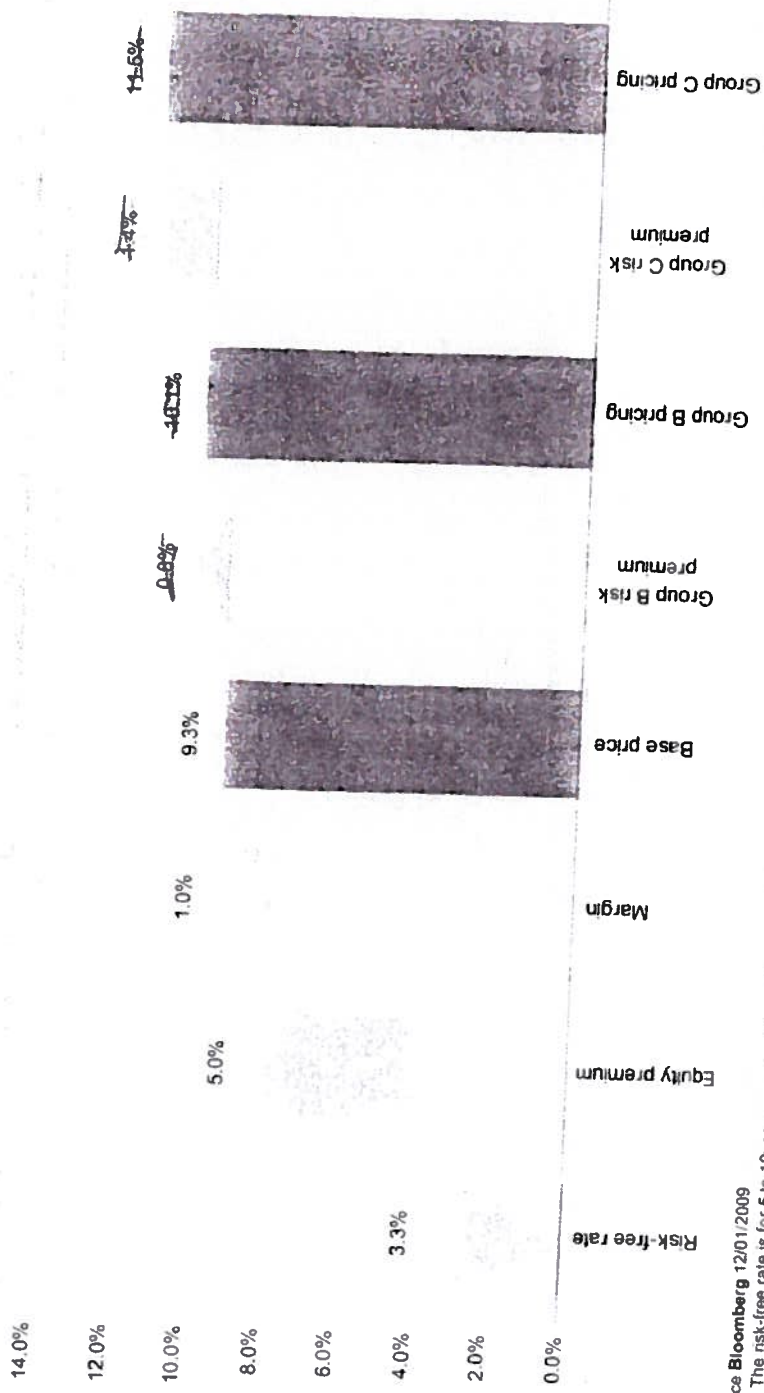
Further thoughts on pricing

# I. Further thoughts on pricing

## 1.3 Preliminary pricing analysis

The chart below summarizes our approach to price setting

### Overview



Source Bloomberg 12/01/2009

Note The risk-free rate is for 5 to 10 years maturity, i.e. when the security is expected to be called. For longer term maturity the risk-free rate is 3.8 / 3.9%

Group A: BBVA, BNP Paribas, Deutsche Bank, Handelsbanken, ING, RBS  
Group B: Banco Popolare, Fortis, SNS  
Group C: OTP, Bancaja

13 January 2009

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# Project Horizon: Supplementary materials on pricing

 **R** ROTHSCHILD

# I. Further thoughts on pricing

## 1.1 Overview

As requested, we summarize below few considerations for the approach to pricing  
Our approach is based on a combination of:

- **A. ECB guidelines for equity like instruments**
  - the required rate of return for equity like instruments is: *Benchmark Government rate (3.3%) + 500bp equity risk premium + 100bp margin*

If we apply the formula above the resulting pricing is 9.3% (**Base Pricing**)

- **B. Risk premium.** This is derived from an analysis of the spread on Euro-denominated Tier 1 securities issued by European banks with different credit rating for the period 1/1/2007 - 31/8/2008 (period consistent with the ECB guidelines for the CDS analysis). The purpose is to assess the implicit risk premium that the market requires for banks with a higher risk and hence to determine the additional risk premium to be applied on top of the Base Pricing

We have then identified 3 groups of banks based on rating (taking into account all the main rating agencies)

1. **Group A:** top rated banks (rating AA- or above)
2. **Group B:** Mid rated banks (A- to A+)
3. **Group C:** Low rated banks (BBB+ or below)

We have then calculated the differential spread (**Risk Premium**) of Group B and Group C versus the top rated banks (Group A)

**Credit rating is a key indicator when considering the pricing of the instruments**

# 1. Project Horizon: Instrument worked examples

## 1.1 Coupon Payment analysis

### Assumptions

Current share price (DKK)	10
Fixed coupon (p.a. as a % of Issue Price)	8%
Divided linked coupon multiplier	125%
	<b>Per security (DKK)</b>
Issuer Price	12.50
No. of securities	1
Conversion ratio (No. of shares underlying each security)	1
Fixed coupon (nominal p.a.)	1.00

Note 1 Dividend Linked Coupon = ordinary dividend declared per share for financial year x Conversion Ratio x Dividend linked coupon multiplier

### Illustrative payment scenarios

Dividend per share (DKK)	Fixed Coupon (DKK)	Dividend Linked Coupon (DKK)	Actual Coupon Payment (DKK)
0.30	1.00	0.38	1.00
0.40	1.00	0.50	1.00
0.50	1.00	0.63	1.00
0.60	1.00	0.75	1.00
0.70	1.00	0.88	1.00
0.80	1.00	1.00	1.00
0.90	1.00	1.13	1.13
1.00	1.00	1.25	1.25
1.10	1.00	1.38	1.38
1.20	1.00	1.50	1.50
1.30	1.00	1.63	1.63

- The above table provides a simple theoretical worked example of how the Government's income payment is calculated:
- If the Issue price of 1 security is 12.5 DKK, the annual income (Actual Coupon Payment) will be the higher of:
  - i. a fixed nominal coupon of DKK 1 p.a. (i.e. 8% of the issue price); and
  - ii. 125% of the nominal ordinary dividend paid per share for the relevant financial year
- The table highlights that if the ordinary dividend per share is greater than DKK 0.8 then the Actual Coupon Payment received by the Government per security will be higher than the Fixed Coupon (i.e. DKK 0.8 x 125%= DKK1)
- Finally, the table also highlights that the income received by the Government is linked only to the nominal dividend paid by the Issuer and is not linked to the share price at the time (i.e. the prevailing dividend yield)

**Nominal dividend paid per share and not the dividend yield drives actual income received**

# 1. Project Horizon: Instrument worked examples

## 1.2 Coupon payment analysis – coupon paid in scrip ordinary shares

### Initial assumptions (at issue)

Current share price (DKK)	10
Fixed coupon (p.a. as a % of Issue Price)	8%
Divided linked coupon multiplier	125%
	<b>Per security (DKK)</b>
Issue price	12.50
No. of securities	1
Conversion ratio (No. of share underlying each security)	1
Fixed coupon (nominal p.a.)	1.00

### Level of share issuance to meet coupon payments

Issue size (DKK m)	1,000					
Total securities / shares underlying (m)	80					
Fixed coupon (p.a. as a % of Issue Price)	8%					
Total coupon payment p.a. (DKK m)	80					
	<b>Illustrative share issuance</b>					
Assumed VWAP (DKK)	5.0	6.0	7.0	8.0	9.0	10.0
No. of shares issued (m)	16.0	13.3	11.4	10.0	8.9	8.0

- The coupon is assumed to be paid annually for the purposes of this illustration only. We assume that a fixed coupon of 8% is paid for the duration of the instrument's life
- In this case we assume that cash payment is not available for regulatory solvency reasons, but sufficient distributable reserves are available such that the coupon is payable in shares
- The value of 1 share is the average of the daily Volume Weighted Average Share Prices ("VWAP") for the [14] days prior to the Coupon Date
- If we assume the value per share is calculated using DKK 7.00, the issuer will have to issue 11.4m new shares to meet the total Coupon Payment of DKK 80m

**[14] day VWAP prior to coupon date will determine the no. of shares required**

# I. Project Horizon: Instrument worked examples

## 1.3 Call price calculation at 3 years + 1 month after issue for [8]% return p.a.

### Initial assumptions (at issue)

Current share price (DKK)	10
Fixed coupon (p.a. as a % of Issue Price)	8%
Divided linked coupon multiplier	125%
Issue Price (DKK)	Per security (DKK)
	12.50
No. of securities	1
Conversion ratio (No. of shares underlying each security)	1
Fixed coupon (nominal p.a.) (DKK)	1.00

### Required return assuming call between 3 -5 years

Issue Price (% par)	100%
First call date: 3 yrs + 1mth (in yrs)	3.08
Return p.a. required	8%

Required call price as % issue price at 3 yrs + 1mth <sup>1</sup>	Coupon payment schedule			Required call price as % issue price (at 3 yr + 1mth)
	Year 1	Year 2	Year 3	
Scenario 1	8%	8%	8%	100.62%
Scenario 2	0%	8%	8%	110.01%
Scenario 3	-	-	-	126.75%

Note 1 Required call price includes accrued coupon for additional month after due date of coupon payment in year 3 and reflects a calculation to generate a [8]% Internal Rate of Return to call date

- The instrument is non-callable until 3 years and 1 month post issue. Thereafter the instrument is callable until the 5<sup>th</sup> year post issue under the following conditions:
  - Callable for cash at a price that ensures an internal rate of return ("IRR") of [8]% p.a.
  - Subject to consent of FSA and replacement using junior capital
- After the 5<sup>th</sup> year post issue the instrument is callable for cash at 100% of face value regardless of whether or not the coupons have been paid in the preceding years
- If we look at Scenario 2, where the Issuer is unable to pay the coupon in Year 1, but resumes payment in Years 2 & 3, the required call price will be c.110% of par. This is based on the following conditions:
  - Pricing at c.110% ensures the Government receives an IRR of 8%

***The required call price, if called before year 5, ensures that the Government receives a minimum IRR of [8]% on the investment***

# 1. Project Horizon: Instrument worked examples

## 1.4 Net Share Settlement in the event of conversion following an Issuer call

- After 3 years and 1 month, the Issuer calls the security (assuming Scenario 2 on page 3) at a price of c.110%
- The Government now has 2 options:
  - (i) redeem and accept the call price in cash; or
  - (ii) convert and receive the Conversion Value (in a mixture of cash and shares)
- The tables to the right highlight at different share prices what options are available to the Government and the consideration received
- If we take the scenario where the share price prior to conversion is DKK 15, the Government has the option to choose between option A - Call Value consideration of DKK 1,101m or B - the Conversion Value consideration of DKK 1,200m
- The Government chooses to convert and receive the Conversion Value of DKK1,200m of which DKK 1,101m will be in paid cash and DKK 99m in shares
- Assuming a 30 day VWAP of DKK15 post conversion 6.6m shares will have to be issued to create DKK 99m of value

- There is an additional level of detail that protects the Government from a fall in the share price between the beginning and the end of the 30 day period following conversion (See Sections 1.10 and 1.11)

Call Price and Conversion Value comparisons	
Option A - Call Value	
No. of securities issued (m)	80
Issue Price (DKK)	12.5
Issue size (DKK m)	1,000
Call price per security (as a % of par)	110.10%
Call Value (DKK m)	1,101
Option B - Conversion Value	
Share price pre-conversion (DKK) <sup>1</sup>	5
No. of securities issued (m)	80
Conversion Value (DKK m)	400
<b>Consideration received:</b>	
A - Call Value (DKK m)	1,101
B - Conversion Value (DKK m)	400
Government decision	ReDEM
Total recd (Higher of A and B)	1,101
Cash received (DKK m)	1,101
Share top-up value (DKK m)	n/a
No. of shares required	n/a
30 day VWAP post conversion (DKK) <sup>2</sup>	5
Share top-up value (DKK m)	n/a
No. of shares required (m)	n/a

Note 1 14 day VWAP share price minus a 10% discount to make sale process easier  
 Note 2 Based on the 30 day VWAP post conversion which can only be calculated 30 days after the conversion date. As a result of this there will be a delay before the shares can be paid by the issuer and the number of shares to be received will be unknown



# 1. Project Horizon: Instrument worked examples

## 1.5 Mandatory stock settlement upon Emergency Regulatory Event ("ERE")

### Initial assumptions (at issue)

Current share price (DKK)	10
Fixed coupon (p.a. as a % of Issue Price)	8%
Divided linked coupon multiplier	125%
Issue Price (DKK)	12.50
No. of securities	1
Conversion ratio (No. of shares underlying each security)	1
Fixed coupon (nominal p.a.)	1.00

### Illustrative conversion ratios in the case of an ERE

Mandatory stock settlement upon Emergency Regulatory Event	12.50	12.50	12.50	12.50	12.50
A. Issue Price	12.50	12.50	12.50	12.50	12.50
B. 30 day VWAP post announcement of ERE (DKK)	8.0	6.0	3.0	3.0	1.5
C. Shares received per security (A/B) <sup>1</sup>	1.56	2.08	4.00*	4.00*	4.00*

Note 1 The conversion ratio based on 30 day VWAP post announcement of ERE must be no less than the current conversion ratio i.e. no less than 1:1 and no more than 4 times the prevailing conversion ratio i.e. no more than 4:1 \* Conversion ratio capped at 4:1

- In the case of an Emergency Regulatory Event ("ERE") the conversion ratio (i.e. the number of shares received per security) may be adjusted upwards to reduce the amount of loss suffered by the Government depending on the share price at the time
- The new adjusted conversion ratio is calculated by dividing the issue price of 1 security (in the current example DKK 12.50) by the 30 day VWAP post the announcement of the ERE
- If we assume the 30 day VWAP post announcement is DKK6 we see the new ratio rises to 2.08:1 from the current conversion ratio of 1:1 to compensate the Government for the subsequent fall in the share price
  - It should be noted that the new adjusted conversion ratio must be no less than the current conversion ratio i.e. no less than 1:1 and no more than 4 times the prevailing conversion ratio i.e. no more than 4:1 to prevent the Government from taking full ownership of all shares
- The clause is structured to take into account a likely fall in the share price post announcement of an ERE

**The Government's value will be protected for a share price fall up to 75% below the Issue Price**

# 1. Project Horizon: Instrument worked examples

## 1.6 Listed but Illiquid Banks: Using an Equity Linked element

- The Government could consider the following illustration as a mechanism to restrict the use of an equity linked upside option by illiquid Banks to either a maximum relative size or even altogether

### Restriction

- All capital injections (excluding Banks where the holding company resides in a foreign jurisdiction) will include an Equity Link in the form of a conversion option embedded in the tier one capital instrument; unless the number of shares required to underlie the total size of the capital injection required exceeds the lower of:
  - (a) The average number of shares traded on a daily basis over the previous year multiplied by 260 (days)<sup>1</sup>; or
  - (b) 50% of the enlarged share capital, post conversion
- In the event that the total injection required breaches the lower of the above threshold's the Government could reserve the right to either:
  - (i) Permit a two tranche issue where convertible hybrids are issued up to the threshold amount provided above (i.e. the lower of (a) and (b) and the remaining capital injection is issued in the form of straight hybrid only with no Equity Link; or
  - (ii) Offer the Bank in question a straight non-convertible hybrid investment only, where coupon = required return
- Please see practical worked illustrations that follow in Sections 1.8 and 1.9

<sup>1</sup>Note 1 Number of trading days in a calendar year

***A mechanism is available to restrict the Equity Link to more liquid stocks only...***

# 1. Project Horizon: Instrument worked examples

## 1.7 Practical considerations for the Government when considering the impact of receiving illiquid shares

- From a theoretical, equity capital markets perspective, the rational buyer would prefer the equity linked element to be restrained under the liquidity criteria outlined in 1.6 to protect his ability to exit through a sale of any shares received upon conversion
- However, from the Government's perspective, holding a conversion option into a large amount of underlying equity in an illiquid investment may actually result in the following benefits:
  - Could be a useful "stick" to ensure management develop the business in a manner expected by the Government, otherwise conversion will occur in order to control the votes
  - Sources of capital, in order to be able to call a large straight tier one hybrid instrument for redemption, are likely to be limited for illiquid Issuers (i.e. ability to raise equity constrained). This reduces the probability of an exit even without an Equity Linked element
  - Conversion into shares will increase the Government's influence and therefore ability to force a merger or sale of the business to provide an exit
  - The shares are likely to be easier to sell to a strategic investor for example (although pricing discount will be very large) compared to an unlisted tier one hybrid instrument
  - Such influence will allow the Government to force / encourage consolidation within the sector should this be a priority or a potential objective going forward

***A mechanism as outlined in 1.6 provides a way to ensure the Government avoids conversion into illiquid shares in illiquid companies which are not applicable for a private investor***

***...but there may be Government specific benefits from an Equity Link to be considered***

# 1. Project Horizon: Instrument worked examples

## 1.8 Basic illustrations of calculations in 1.6

- Issued Share Capital: 100m shares
- Current Share Price: DKK 10
- Market Capitalisation: DKK 1,000m
  
- Assumptions for convertible instrument:
  - Conversion Premium (required pricing if a convertible permitted): 25%
  - Issue Price per security: DKK 12.5 (=10 x (1+25%))
  - Average number of shares traded on a daily basis over the previous year: 50,000 shares
  - Required total return: 10%
  - Coupon: 8%
  - Total capital injection required: DKK 600m
  
- Permitted issue size is the lower of:
  - (a) 50% of enlarged share capital = 100m shares x DKK 12.5 (Issue Price) = DKK 1,250m permitted issue size
  - (b) 50,000 shares x 260<sup>1</sup> days = 13m shares x DKK 12.5 (Issue Price) = DKK 162.5m permitted issue size
  
- The permitted Equity linked tranche would therefore be: DKK 162.5m paying an 8% coupon convertible into 13m shares
- The non-convertible hybrid tranche would therefore be: DKK 437.5m paying a 10% coupon
- Given the required capital injection is in excess of the Equity Linked tranche permitted under the mechanism, the Government could choose whether it purchases DKK 600m of non-convertible hybrids or the package two different instruments detailed above

<sup>1</sup>Note 1 Number of trading days in a calendar year

# I. Project Horizon: Instrument worked examples

## 1.9 Illustration of calculations in 1.6 for [REDACTED] (using previous assumptions shown)

- Issued share capital: [REDACTED]
- Current Share Price: [REDACTED]
- Market Capitalisation: [REDACTED]
  
- Assumptions for convertible instrument
  - Conversion Premium: 25%
  - Issue Price per security: DKK [REDACTED] (= [REDACTED] x (1+25%))
  - Average number of shares traded on a daily basis over the previous year: 3,036,956 shares
  - Illustrative total return: 10%
  - Equity Linked Coupon: 8%
  - Total capital injection required: DKK [REDACTED] (2% of Risk Weighted Assets<sup>1</sup>)
  
- Permitted issue size is therefore the lower of:
  - (a) 50% of enlarged share capital = [REDACTED] shares x DKK [REDACTED] (Issue Price) = [REDACTED] m
  - (b) [REDACTED] shares x 260 days<sup>2</sup> = [REDACTED] shares x DKK [REDACTED] (Issue Price) = [REDACTED] m
  
- In this case the issue size of a convertible hybrid for the total required capital injection would be well within both limits and therefore would automatically become fully convertible

Note 1 Source Brokers' notes  
Note 2 Number of trading days in a calendar year.\*

# I. Project Horizon: Instrument worked examples

## 1.10 Net Share Settlement – additional protection for the Government

*The Conversion Value is calculated using the 30 day post conversion share price, but subject to a floor set pre conversion*

- There are further protection mechanisms for the Government (when calculating the Conversion Value) if it chooses to convert when the instrument is called
- Following conversion by the Government (after the call date) the share price is more likely to fall than increase as the Issuer attempts to sell the Shares on behalf of the Government, therefore given part of the consideration will be in the form of shares the Government's Conversion Value would be more likely to fall in this period
- To help protect the Government, the calculation for the amount of value received is based on the higher of:
  - (i) a 10% discount to the average share price for the 2 weeks prior to the Conversion Date (so the minimum value attributable to the Government will be known); and
  - (ii) the average of the daily share prices for 30 days after conversion (so if the share price rises substantially for any reason the Government will receive the upside in the Conversion Value)
- The number of shares the Issuer needs to deliver to top-up the value of the cash call price will then be calculated based on the share price performance post conversion (and will not necessarily reflect the calculation used for the Conversion Value unless the share price has risen)
- If the share price falls following conversion their will be a floor to the Government's Conversion Value (as indicated in (i) above), but the number of shares the Issuer will need to deliver will increase as the post conversion share price falls
- Please see a worked illustration of how the number of shares received will vary depending on the share price performance during the first 30 days post conversion on the following page

***The value received upon conversion is subject to a floor (set pre-conversion)***

# I. Project Horizon: Instrument worked examples

## 1.11 Net Share Settlement – illustrative workings for Conversion Value calculation

If the share price post conversion falls from say DKK 13.5 (post a 10% discount) to DKK 4 after 30 days, the Government's incremental value above the cash call price will be protected through the receipt of 20m shares instead of the initial 5.9m

**Illustrative table to show effects of change in 30 day VWAP post conversion on the number of shares issued**

Issue Price (DKK):	12.5
Issue size (DKK m):	1,000
No. of securities issued (m):	80
Conversion Ratio:	1 for 1
Total shares underlying (m)	80
Call Price (DKK):	12.5

Share Price Scenario (post conversion)	Dramatic fall	Marginal fall	Flat	Marginal increase	Substantial increase	Extreme increase
A. 14 day average share price pre-conversion (DKK):	15.0	15.0	15.0	15.0	15.0	15.0
vs.	13.5	13.5	13.5	13.5	13.5	13.5
B. 30 day VWAP (post conversion)	4.0	11.0	13.5	16.0	25.0	50.0
C. Conversion Value owed (DKK) (higher of A and B):	13.5	13.5	13.5	16.0	25.0	50.0
D. Value to be delivered in Cash (DKK)	12.5	12.5	12.5	12.5	12.5	12.5
E. Value to be delivered in Shares (DKK) (C-D)	1.0	1.0	1.0	3.5	12.5	37.5
F. No. of Shares delivered per security (E/B)	0.25	0.09	0.07	0.22	0.50	0.75
G. Total no. of Shares received (m) (F x Total shares)	20.0	7.3	5.9	17.5	40.0	60.0

**Conversion value is protected if share price falls post conversion as no. of shares increases (favourable structure for the Government)**

January 2009

Strictly private and confidential

## Examples of step-ups in bank recapitalisations

 ROTHSCCHILD



# Overview

## *The use of step-ups in precedent bank recapitalisations by Governments*

Step-ups have primarily been used in two contexts in recent bank recapitalisations:

### 1 Uplifts in the coupon on the issued instrument over time

- Example: dividend-linked coupon uplift to representing a multiple (e.g. 125%) of any ordinary dividend paid shareholders
- Should be compliant with EU, issuer, Government and regulator objectives
- Was first used in the Dutch and Belgian cases (ING, SNS Reaal, KBC)

### 2 Uplifts in the redemption price at which the company can buy back the instrument

- The issuer's call feature has a graduating annual step-up in price
- Example: uplift from 101% to 111% of nominal value after 6 years in the BNP/French State case, where the starting annual coupon was 7.75%
- Without upside, limited step-up does not provide any real incentive over the longer term to redeem nor significant upside yield for market return
- It also appears to contradict the EU's broader regulatory position
- Positive for shareholders if yield is low

**Both mechanisms are exit incentives: they are designed to encourage the redemption of Government money and its replacement with private capital**

# I. Examples of step-ups in coupons

## 1.1 US Capital Purchase Plan

Securities that can be purchased	Terms	Implied capitalisation	Dividend policy and corporate governance	Other observations
<ul style="list-style-type: none"> <li>Senior preferred with stapled warrants</li> </ul>	<ul style="list-style-type: none"> <li>\$250bn available to invest in senior preference shares paying a cumulative dividend of 5% for the first five years, and 9% thereafter. The shares are callable at par after three years</li> <li>Treasury will receive warrants to purchase common stock with an aggregate market price of 15% of the preferred investment. The strike price on the warrants is a trailing 20-day average at issuance. These would be effective for 10 years</li> </ul>	<ul style="list-style-type: none"> <li>Minimum subscription: 1% of RWAs</li> <li>Maximum subscription: the lesser of \$25bn or 3% of RWAs</li> </ul>	<ul style="list-style-type: none"> <li>These standards generally apply to the CEO, CFO plus the next three most highly compensated executive officers:               <ul style="list-style-type: none"> <li>Banks to ensure that incentive compensation for executives does not encourage "unnecessary and excessive risks"</li> <li>Required clawback of any bonus or incentive compensation paid to a senior executive based on statements later proven to be materially inaccurate</li> <li>Limits on golden parachute payments to senior executives</li> <li>Agreement not to deduct for tax purposes executive compensation in excess of \$500,000 for each senior executive</li> </ul> </li> <li>Institutions can, however, continue to pay dividends but cannot increase them without Treasury approval for the first three years (or until the Treasury no longer holds any of the securities)</li> </ul>	<ul style="list-style-type: none"> <li>The preference shares issued to the Government may be redeemed within three years, as long as this is at least partially financed with the proceeds from a "qualifying" equity offering of any Tier 1 perpetual preferred or common stock, hence encouraging the replacement of public capital with private</li> <li>The Treasury Department is currently developing an additional programme to potentially provide direct assistance to certain failing firms on terms negotiated on a case-by-case basis</li> </ul>
	<ul style="list-style-type: none"> <li>Subscriptions to date:               <ul style="list-style-type: none"> <li>Bank of America \$15bn</li> <li>BoNY Mellon \$3bn</li> <li>Citigroup \$25bn<sup>1</sup></li> <li>Goldman Sachs \$10bn</li> <li>JP Morgan \$25bn</li> <li>Merrill Lynch \$10bn</li> <li>Morgan Stanley \$10bn</li> <li>State Street Corp \$2bn</li> <li>Wells Fargo \$25bn</li> </ul> </li> </ul>			

**Note**

<sup>1</sup> Assistance to Citigroup further extended in Nov 08 to include (a) an additional \$7bn of preferred stock, (b) a Government guarantee on a portfolio of \$306bn (primarily assets backed by commercial and residential real estate), (c) approximately \$2.7bn of warrants issued by Citigroup to the Treasury and FDIC; (d) an agreement for Citic not to pay a dividend of more than \$0.01 per ordinary share for three years

# 1. Examples of step-ups in coupons

## 1.2 Dutch Government investments into ING and SNS Reaal

Securities issued	Terms	Implied capitalisation	Dividend policy and corporate governance	Other observations
<ul style="list-style-type: none"> <li>Core Tier 1 securities</li> </ul>	<ul style="list-style-type: none"> <li>€10bn ING; €750m SNS</li> <li>Newly issued non-voting deeply subordinated Core Tier 1 securities ranking pari passu with ordinary shares</li> <li>Convertible into ordinary shares at the issuer's option after three years, at which point the Dutch State can also elect to receive cash at par</li> <li>Pay the higher of a fixed coupon of 8.5% or up to 1.25x the dividend on ordinary ING / SNS Reaal shares, payable only to the extent that dividends are paid on ordinary shares</li> <li>This mechanism works because the nominal value of the securities issued to the Government was referenced to the banks' respective share prices</li> </ul>	<ul style="list-style-type: none"> <li>ING Bank's Core Tier 1 ratio following the transaction: 8%</li> <li>SNS Reaal's Banking Tier 1 ratio: 10%</li> <li>SNS Reaal's Insurance solvency 200%</li> </ul>	<ul style="list-style-type: none"> <li>While the securities acquired by the State do not carry voting rights, the State has been granted certain corporate governance rights over ING and SNS Reaal, including the right to appoint two directors to the supervisory boards and the audit, corporate governance, nomination and remuneration committees of both institutions</li> <li>The State's representatives will thereby have the ability to veto major decisions</li> <li>ING's and SNS Reaal's Executive Directors have relinquished their 2008 bonuses, and "golden parachute" arrangements have been substantially curtailed</li> <li>Both institutions have decided to pass over the final dividend for 2008</li> <li>However, this was a business decision rather than a restrictive measure taken by the Government as part of the injections</li> </ul>	<ul style="list-style-type: none"> <li>Some or all of the securities can be repurchased by the issuer for a 50% premium to the issue price at any time</li> <li>The securities are only transferable with the permission of the issuer and the Dutch Central Bank</li> <li>SNS Reaal has the additional right to repurchase €250m of the €750m of securities issued within one year of the issue date for the issue price plus the higher of accrued interest of 8.5% over the relevant period or the coupon according to the coupon formula (see "Terms") – a repurchase fee of up to €32.5m would be payable</li> <li>SNS Reaal simultaneously raised an extra €500m from its Foundation on similar terms – however, these securities are not convertible</li> </ul>

# 1. Examples of step-ups in coupons

## 1.3 Belgian Government investment into KBC

Securities issued	Terms	Implied capitalisation	Dividend policy and corporate governance	Other observations
<ul style="list-style-type: none"> <li>Core Tier 1 securities</li> </ul>	<ul style="list-style-type: none"> <li>€3.5bn newly issued non-dilutive Core Tier 1 securities</li> <li>Issued at 3-day average closing price (€29.50)</li> <li>Non transferable and non voting               <ul style="list-style-type: none"> <li>Pay the higher of up to 125% of the ordinary dividend and 8.5% of the issue price, but only to the extent that an ordinary dividend is paid</li> </ul> </li> <li>Rank pari passu with existing ordinary shares</li> </ul>	<ul style="list-style-type: none"> <li>Banking:               <ul style="list-style-type: none"> <li>Tier 1: 10.7%</li> <li>Core Tier 1: 8.2%</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>KBC had already decided to forego all bonuses – either in cash, options or shares – relating to performance in 2008</li> <li>The Government has the right to nominate two members for KBC Group's Board of Directors</li> <li>A representative of the State will sit on the Audit Committee, the Remuneration and the Nomination Committee with approval rights for a limited number of decisions, including               <ul style="list-style-type: none"> <li>Those relating to share issuance or share buybacks</li> <li>Acquisitions whose value equal more than one quarter of KBC's share capital and reserves</li> <li>The remuneration policy for the members of the Executive Committee</li> </ul> </li> <li>KBC will not pay a dividend in 2008 (business decision)</li> </ul>	<ul style="list-style-type: none"> <li>The securities can be repurchased by KBC for 150% of the issue price at any time (cash settlement)</li> <li>The Government was originally able to require that the buyback be settled by a 1-to-1 conversion of the securities into ordinary shares – this condition was later removed</li> <li>Furthermore, KBC is entitled to exchange some or all of the securities into ordinary shares (also 1-for-1) from four years after issuance onwards. If KBC chooses to do so, the Government can opt to redeem the securities in cash at 115% of the issue price (originally set at 100%), with a 5% step up every subsequent year up to a maximum of 150%</li> </ul>

# 1. Examples of step-ups in coupons

## 1.4 German Government investment into Commerzbank

Securities issued	Terms	Implied capitalisation	Dividend policy and corporate governance	Other observations
<b>Phase 1</b> <b>(19 Dec 2008)</b> <ul style="list-style-type: none"> <li>■ Tier 1 securities (Dec 08)</li> </ul>	<ul style="list-style-type: none"> <li>■ €8.2bn newly issued non-dilutive Tier 1 securities (in two €4.1bn tranches)</li> <li>■ Non transferable, non listed and non voting</li> <li>■ Priced at 9% with 0.01% step-up for each €4.4m cash dividend paid</li> </ul>	<ul style="list-style-type: none"> <li>■ Tier 1: 11.2%</li> </ul>	<ul style="list-style-type: none"> <li>■ No dividends to be paid in 2009 and 2010</li> <li>■ Bonuses for 2008 and 2009 will not be granted</li> <li>■ Management Board member's salary and CEO compensation capped at €500,000 for 2008/9</li> <li>■ No changes to current corporate governance structure</li> </ul>	<ul style="list-style-type: none"> <li>■ Stabilisation fund will also guarantee additional debt securities to be issued by Dec 2009 up to €15m (charging 50bps, or 95bps if maturity over 12 months)</li> <li>■ Committed to repaying the silent participation mid-term if sound capitalisation</li> <li>■ Commerzbank agreed to an additional €2.5bn in loans available to Germany's Mittelstand (SMEs)</li> </ul>
<b>Phase 2</b> <b>(9 Jan 2009)</b> <ul style="list-style-type: none"> <li>■ Ordinary shares</li> <li>■ Cash in return for assets</li> </ul>	<ul style="list-style-type: none"> <li>■ Additional €8.2bn "silent participation" as per terms above in Jan 09</li> <li>■ However, included €1.7bn common equity as upside participation</li> <li>■ Allianz (selling Dresdner to Commerzbank at the same time) bought €1.45bn of CDOs from Dresdner for €1.1bn cash</li> <li>■ Allianz also took €750m silent participation</li> </ul>		<ul style="list-style-type: none"> <li>■ No changes</li> </ul>	<ul style="list-style-type: none"> <li>■ The Federal Government holds a stake of 25% plus one share in the new Commerzbank (if one were to include the silent participations, which do not imply voting rights, the Government would hold more than half of the entity)</li> <li>■ Allianz will hold 14% in the new Commerzbank + Dresdner</li> </ul>

# 2. Examples of step-ups in the redemption price

## 2.1 French bank assistance package

Securities that can be purchased	Terms	Implied capitalisation	Dividend policy and corporate governance	Other observations
<ul style="list-style-type: none"> <li>Subordinated debt</li> <li>Preference shares</li> </ul>	<ul style="list-style-type: none"> <li>€40bn made available to directly invest in French banks</li> <li>€10.5bn already deployed by way of subordinated loans in Oct 2008 to boost the capital of the six largest banks</li> <li>The banks receiving aid:               <ul style="list-style-type: none"> <li>Crédit Agricole: €3.0bn</li> <li>BNP Paribas: €2.55bn</li> <li>Société Générale: €1.7bn</li> <li>Crédit Mutuel: €1.2bn</li> <li>Caisse d'Épargne: €1.1bn</li> <li>Banque Populaire: €0.95bn</li> </ul> </li> <li>Fixed rate of return for the first five years, calculated as French Gov't risk free rate + 300bps + 20 month trailing average of the banks' 5 year senior CDS</li> </ul>	<ul style="list-style-type: none"> <li>The six banks receiving loans will improve their Tier 1 Ratios by an average of 50bps</li> <li>The subordinated debt will have no impact on Core Tier 1 capital</li> </ul>	<ul style="list-style-type: none"> <li>Although the Government will not be obtaining any Board representation, Banks benefiting from the scheme will have to respect pay curbs for top managers, with restrictions on severance payments and stock-options</li> <li>All French banks have agreed to abide by a code of practice setting out these curbs</li> <li>There will not be an impact on dividend policy</li> </ul>	<ul style="list-style-type: none"> <li>It is understood that banks wishing to access the facility would have to promise to increase their stock of credit at an annual rate of 3-4% to qualify</li> <li>The same will apply to banks receiving support under the Government's €320bn loan guarantee fund</li> <li>The Bank of France, which also acts as the country's banking regulator, is expected to raise from 25% to 35% the proportion of Tier 1 capital that can be a hybrid of equity and debt instruments</li> <li>The banks have a five year call option on the debt; however, to encourage this, the redemption price rises every year by:               <ul style="list-style-type: none"> <li>1% of the nominal value between the 1<sup>st</sup> and 2<sup>nd</sup> years since issue</li> <li>3% between the 2<sup>nd</sup> and 3<sup>rd</sup> years</li> <li>5% between the 3<sup>rd</sup> and 4<sup>th</sup> years</li> <li>7% between the 4<sup>th</sup> and 5<sup>th</sup> years</li> <li>9% between the 5<sup>th</sup> and 6<sup>th</sup> years</li> <li>11% after the 6<sup>th</sup> anniversary</li> </ul> </li> <li>An earlier reimbursement is allowed in agreement with the Government if the securities are replaced by hybrids of equivalent subordination and value</li> </ul>