# Risk Report 2011Q1

Published 16 May 2011



### **0** Contents



The Risk Report has been prepared by Realkredit Danmark's analysts for information purposes only. Realkredit Danmark will publish an updated Risk Report quarterly.

The Risk Report offers an update on the performance of mortgage collateral supporting mortgage bonds and mortgage covered bonds (covered bonds) issued by Realkredit Danmark.

Contents of the report falls into two parts. The first part contains general market information relevant to the performance of mortgage collateral. The second part contains Realkredit Danmark specific information. Contents of the report are:

- Key Market Indicators
  - House Prices
  - Homeowners Equity
  - ☐ Unemployment and Real Wage Growth
  - Homeowner Affordability
  - Foreclosures
  - □ Danish economic outlook
  - Geographical Dispersion
- 2. Key Collateral Indicators
  - Dispersions Loan to Value Ratios
  - Loan to Value Ratios and Borrower Classifications
  - □ Mortgage Collateral Breakdowns Total and Capital Centre S
  - Borrower Exposure to interest rates
  - Arrears and Repossessions
  - Over Collateralisation and Capitalisation
  - Supplementary Collateral
  - Guarantees
  - Market Risk Exposures and Liquidity

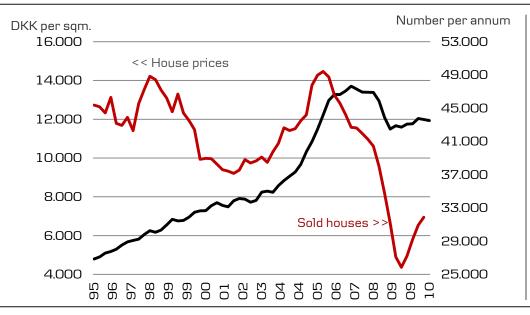
# **Key Market Indicators**

**General Market Information** 



### **1** House Prices and Homeowners Equity



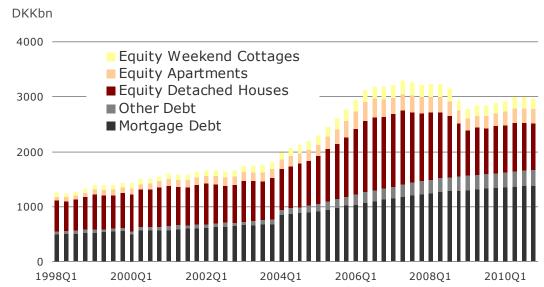


#### House Price Trends

- Signs of a housing price rebound has been recorded
- House prices are down 12.9 per cent for detached housing from the peak mid 2007 and 21.9 per cent for apartments from the peak mid 2006
- Expectations are that house prices will increase slightly from current level or stabilize – but uncertainty is high

### Homeowners Equity

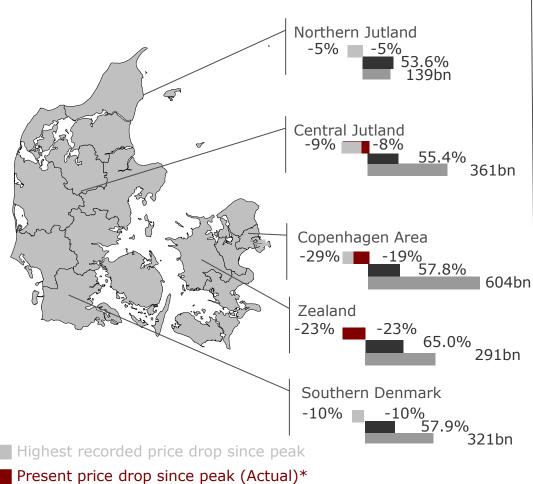
- Homeowners' equity peaked 2006Q3 at 1,888bn. Since then equity has dropped by 590bn (notice that due to new collection methods concerning house prices, the levels has changed compared to previously versions of our risk report)
- Only 37 per cent of the drop can be explained by house price deflation – 63 per cent is due to additional lending



### **Geographical Dispersion**



#### Private lending in Denmark in total



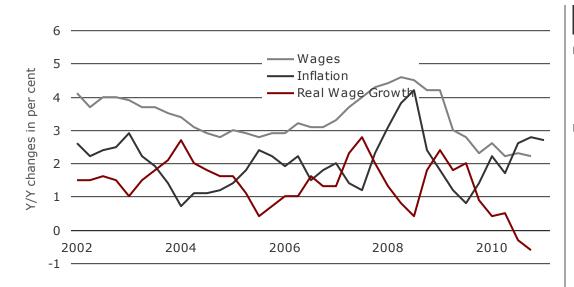
- From the beginning of 2009 we have seen house prices stabilizing in Denmark throughout all areas
- The Copenhagen area was the first to suffer from house price deflation, following a decade of soaring house prices. From the mid 2006 peak prices have dropped by a total of 29 per cent
- Since mid 2009 deflation is partially reversed in the Copenhagen area. Prices have increased by 14 per cent thus, prices are now down by 19 per cent from all time high end 2006

- LTV detached housing
- Total household mortgage debt
- \* If actual price drop is lower than the highest recorded price drop it means that prices are recovering

Slide 5 Risk Report Q1 2011

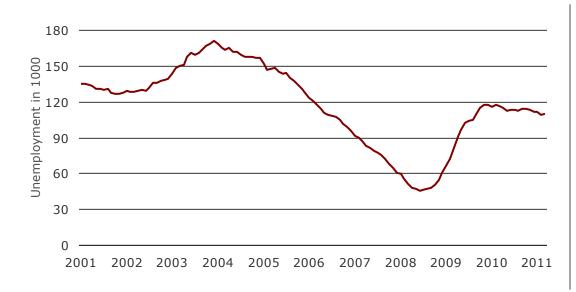
### 1 Unemployment and Real Wage Growth





### Real Wage Growth

- Real wage growth is negative in Q4 due to inflation outpacing the growth in nominal wages
- Disposable income for households will stay almost flat in 2011. There are smaller tax increases but on the other hand lower interest rates will mitigate some of the negative effect. Wage development will be close to the inflation rate.

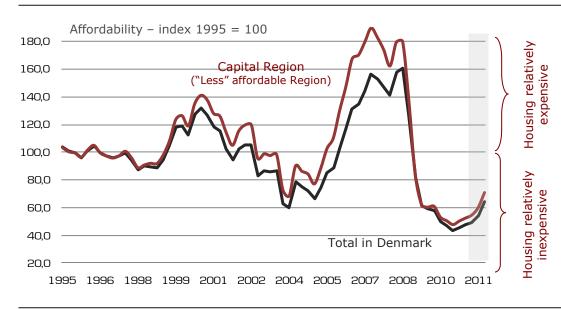


### Unemployment

- □ Unemployment stood at 109,400 end Q1 2011 up from a historical low of 45,400 in mid 2008
- This is equivalent to an unemployment (net) rate of 4.0 per cent which is expected to stay at the current level in 2011
- Present unemployment equals structural unemployment levels in Denmark (NAIRU)

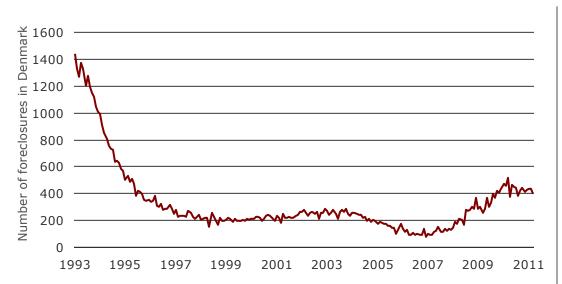
# **1** Homeowner Affordability and Foreclosures





### Homeowner Affordability

- House price deflation and lower interest rates has made housing more affordable even in the Copenhagen area
- Housing costs are now close to the lowest level since 2004
- We expect housing affordability to fall due to higher interest rates and house price inflation



#### Note: Seasonally adjusted, all product categories included

#### Foreclosures

- The number of foreclosed properties in Denmark in March 2011 was 392
- There is still an upward trend in the numbers of foreclosed properties recorded, but we expect the numbers to stabilise or even fall in the coming years
- The duration of a foreclosure is approx. 6 months from missed payments to completion

### 1 Political measures and outlook



Denmark Euro Zone	2010		2011		2012	
GDP	2,1	1,7	2,1	2,0	1,7	1,8
Private Consumption	2,2	0,7	1,5	1,3	1,9	1,5
Fixed investments	-4,0	-0,9	1,4	3,8	1,5	4,1
Export	3,5	9,7	5,9	6,6	4,6	5,0
Unemployment %	6,0	10,0	5,9	9,8	5,8	9,4

Source: Danske Bank, May 2011

### Danish Economy Outlook

- The growth in the Danish economy is expected to be around 2 per cent in 2011
- We have seen a stabilisation of the labour market and this trend is expected to continue in 2011. This will give a helping hand to the private consumption
- Exports are also in better shape helped by a rebound in international trade and the economic upswing in especially Germany and Sweden
- Interest rates are still a key element in the household economy and therefore a key element in how much the private spending will rise
- Interest rates have increased during the last 6 months. We expect still low interest rates – but the level will slowly increase during the next 12 months

# **Key Market Indicators**

Realkredit Danmark Specific Information

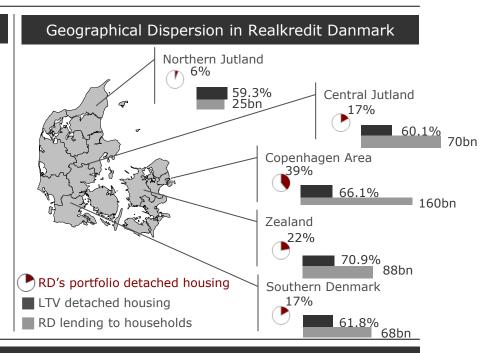


### 2 Dispersion and Loan to Value Ratios



### Dispersion of RD's portfolio

- RD's loan portfolio is concentrated in the Copenhagen area and on Zealand where prices have been reduced the most
- Homeowner equity remains highest in the Copenhagen area although LTV ratios have been exposed to the largest increase
- All though the affordability ratio in the capital region is expected to rise it is still below index 100
- ☐ The highest growth in household mortgage debt is recorded in the Copenhagen area

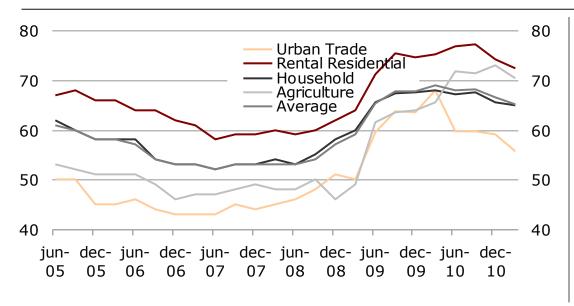


#### Loan To Value Ratios

- Covered bonds are secured by a first claim on the mortgage collateral and the reserves of the issuer
- □ Loan to value ratios of the mortgage collateral are maximised by legislation at 80 per cent in residential segments and 60 per cent in commercial segments (70 per cent if the outmost 10 per cent are secured by additional collateral). Lending beyond these limits is prohibited
- □ Loan to value ratios are monitored on an ongoing basis based on current market values of the property and current prepayment value of the mortgages
- □ 36 per cent of mortgage collateral securing covered bonds issued by Realkredit Danmark has a current loan to value ratio of 20 per cent or less. More than 65 per cent has a current loan to value ratio lower than 40 per cent
- □ Foreclosure costs are typically less than 15 per cent of the outstanding loan balance

### **2 Loan To Value and Borrower Classifications**





#### Loan to Value

- Average loan to value ratios across market segments are 65 per cent in Q1 2011 compared to 69 per cent in Q12010
- With house price stability and even inflation observed in some parts of Denmark LTV ratios are now decreasing.
- □ LTV for private household has stabilised over the last year and we expect this trend to continue in 2011

DKKbn	Rating Category (Scaled 1-11)					
LTV	1-3	4-7	8-11	Total		
0-20 %	56	163	31	250		
20-40 %	38	134	28	201		
40-60 %	22	96	23	141		
60-80 %	11	50	14	75		
> 80 %	7	15	7	28		
Total	135	459	102	695		

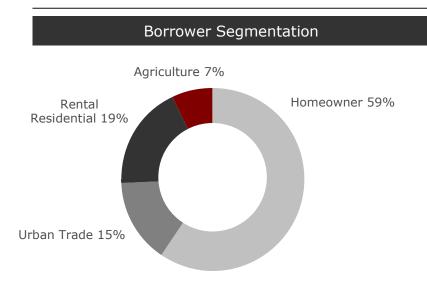
Note: RD total

#### **Borrower Classifications**

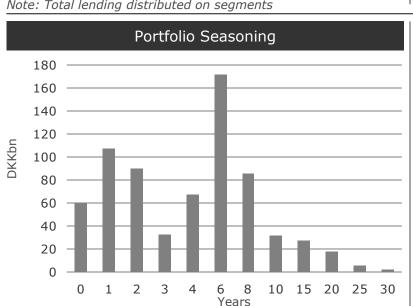
- Borrowers' financial strength is classified on a scale from 1 to 11, 1 being the highest score
- Approx. 7bn of total lending is secured by mortgages above the 80% LTV limit for which the borrowers' financial strength is classified 8-11 equivalent to 1 per cent of the portfolio

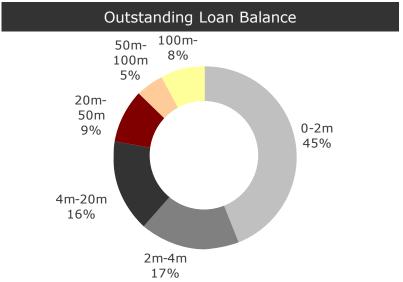
## 2 Collateral Breakdowns - Total portfolio











Note: Total lending distributed on outstanding loan balances

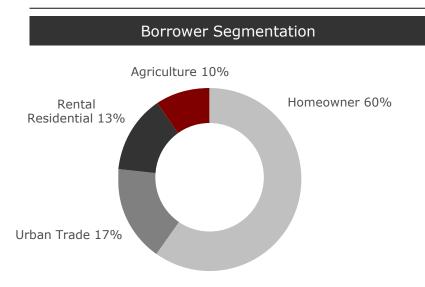
Outstanding Debt in DKKbn by LTV ratio	)
--	---

Segment	0- 20%	20- 40%	40- 60%	60- 80%	> 80%	Total DKKbn
Household	144	121	86	47	12	411
Urban trade	41	32	21	7	1	104
Agriculture	17	14	10	6	3	50
Rental Residential	47	33	24	15	11	130
Weighted dist.	36%	29%	20%	11%	4%	100 %
Total, DKKbn	250	201	141	75	28	695

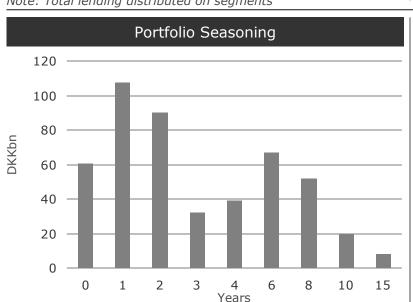
Slide 12 Risk Report Q1 2011

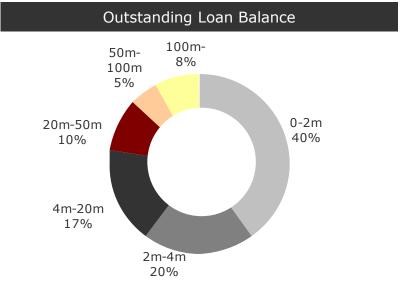
# 2 Collateral Breakdowns - Capital Centre S











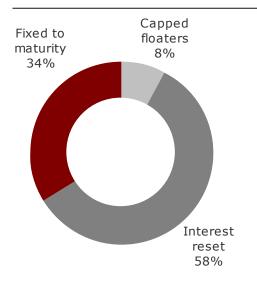
Note: Total lending distributed on outstanding loan balances

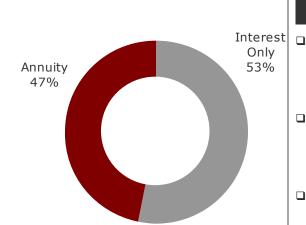
Outstanding Debt in DKKbn by LTV	atio
----------------------------------	------

Segment	0- 20%	20- 40%	40- 60%	60- 80%	> 80%	Total DKKbn
Household	90	81	64	38	9	282
Urban trade	31	25	17	6	1	80
Agriculture	14	13	9	5	3	44
Rental Residential	21	18	14	8	5	66
Weighted dist.	33%	29%	22%	12%	4%	100 %
Total, DKKbn	156	137	104	57	19	472

### **2** Borrower Exposure to Interest Rates



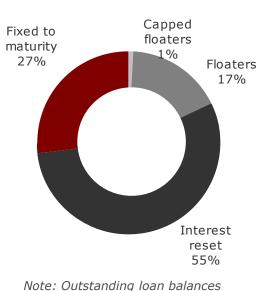


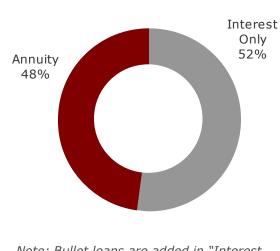


#### Homeowner Segment

- Homeowners must be able to service a 30-year fixed rate annuity loan for Realkredit Danmark to underwrite
- The impact of remortgaging from fixed to floating is mirrored in the chart by interest reset by 58 per cent
- Annuity and interest only loans are almost equally divided in the homeowner segment

Note: Outstanding loan balances





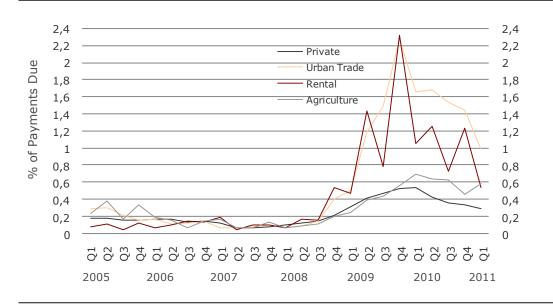
Note: Bullet loans are added in "Interest Only "as of 2009Q4

### Corporate Segments

- 27 per cent of all lending in corporate segments is fixed rate to maturity
- More than 70 per cent are either interest reset (typically, rates are reset every year or every third year) or floating rate (base rates are either 6M CIBOR or 3M EURIBOR)
- Bullets and Interest only loans make up 52 per cent of corporate lending

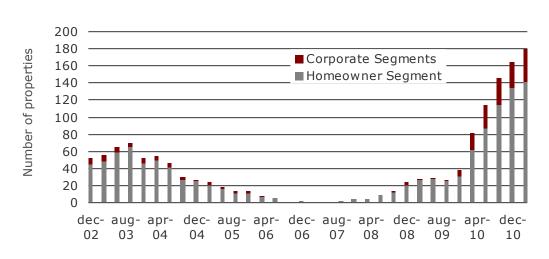
## **2** Arrears and Repossessions





#### Arrears (3 months)

- Arrears are down considerably from Q4 2009 to Q1 2011 in Urban Trade and Rental due to individual programmes introduced to minimize arrears. We expect this trend to continue
- The arrears in the Private segments are also falling, while Agriculture has experienced a small increase the last quarter

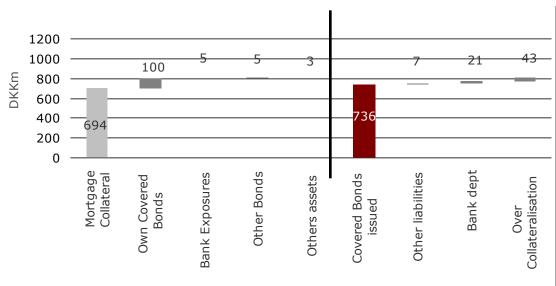


### Repossessions

- The stock of repossessed properties stood at 179 end 2011Q1 up 15 from 2010Q4
- □ This compares to a total stock of mortgages collateral at 406,000

## 2 Over Collateralisation and Capitalisation

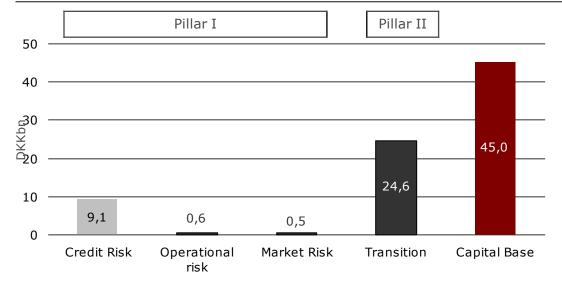




#### Over Collateralisation

- Covered bonds issued by Realkredit Danmark are secured by mortgage collateral and reserves
- Reserves are invested in government exposures, covered bonds and bank exposures
- In case of bankruptcy Over Collateralisation will also be comprised by bondholders preferential claim

#### Note: Nominal values

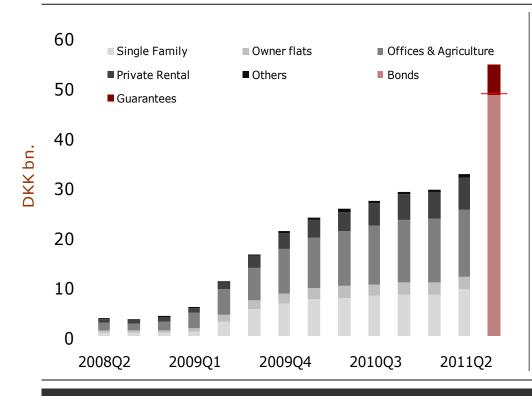


### Capitalisation

- The solvency ratio stood at 35.9 per cent end 2011Q1 (CRD definition)
- Realkredit Danmark has obtained hybrid core capital in volume of DKK 2 bn under the Act of State-Funded Capital Injections
- ☐ If not obtained the solvency ratio stood at 33.9 per cent

## **Supplementary Collateral**





### Buffer in Capital Centre S

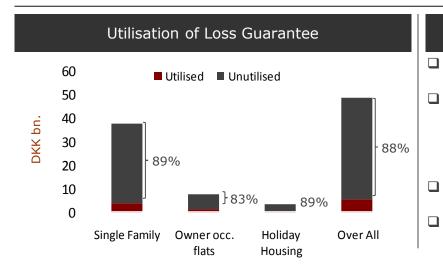
- Total OC of DKK 48.9 bn in Capital Centre S
- Supplementary Collateral of DKK 32.9
  bn are required end Q1 2011 in Capital Centre S
- Loss Guarantees of DKK 6.1 bn are utilised
- Buffer for further growth in need for supplementary Collateral in Capital Centre S is DKK 22.1 bn
- ☐ If the OC in Capital Centre S is insufficient to comply with Supplementary Collateral requirements RD can transfer OC from the General Capital Centre or write Loss Guaranties within the 15 per cent limitation of issued bonds

### Supplementary Collateral requirements

- If LTV limits breached during the term of the loan the mortgage loan will only be eligible with the part that observes the LTV limits. If eligible collateral is insufficient Supplementary Collateral must be provided
- □ Increased need for Supplementary Collateral due to:
  - House price deflation
  - Properties selected for supervision
  - □ Refinancing and remortgaging of loans
  - Increased market value on bonds
- Loss Guaranties and eligible bonds can be used as Supplementary Collateral (bonds which also are used to comply with the solvency requirement) but no other asset types are eligible

### **Guarantees**





# Loss Guarantees issued by Danske Bank (DKK 50 bn)

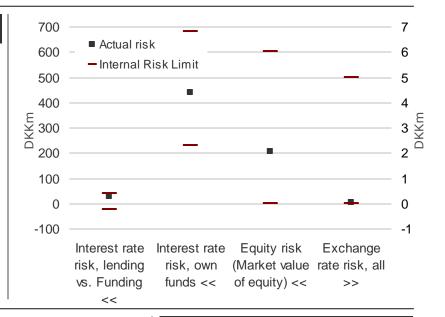
- RD loan disbursed through Danske Bank and former BG Bank has a Loss Guarantee
- Loss Guarantees covers the outmost LTV limited to 20 per cent of the maximum lending corresponding to LTV from 60-80 per cent for Single Family Housing and 40-60 per cent for Corporate and Holiday Housing
- Maturity of 8 years with an amortisation equivalent to the covered loan
- Loss Guarantee covers losses obtained from forced sales including cost

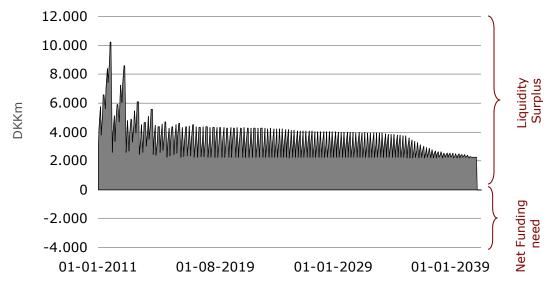
## 2 Market Risk Exposure and Liquidity



### Market Risk Exposures

- Realkredit Danmark operates subject to the specific balance principle
- In adherence with the principle Realkredit Danmark
  - Issues covered bonds on a daily basis to match loan origination
  - □ Employs a pass through structure i.e. bond terms mirror loan terms
- Market risk exposures are, therefore, limited.
  End 2011Q1 interest rate risk on lending vs.
  funding stood at DKK26.5m
- Derivatives are not employed for hedging imbalances on lending and funding





### Liquidity

- ☐ The pass through structure ensures a net inflow of liquidity from lending vs. funding i.e. Realkredit Danmark will not encounter a net funding need
- The liquidity inflow depicted in the chart does not include margin payments

### **Disclaimer**



This publication has been prepared by Realkredit Danmark for information purposes only and should be viewed solely in conjunction with the oral presentation provided by Realkredit Danmark. It is not an offer or solicitation of any offer to purchase or sell any financial instrument. Whilst reasonable care has been taken to ensure that its contents are not untrue or misleading, no representation is made as to its accuracy or completeness and no liability is accepted for any loss arising from reliance on it. Danske Bank, its affiliates or staff, may perform services for, solicit business from, hold long or short positions in, or otherwise be interested in the investments (including derivatives), of any issuer mentioned herein. The Equity and Corporate Bonds analysts are not permitted to invest in securities under coverage in their research sector. This publication is not intended for retail customers in the UK or any person in the US. Realkredit Danmark A/S is a subsidiary company of Danske Bank A/S. Danske Bank A/S is authorised by the Danish Financial Supervisory Authority and subject to limited regulation by the Financial Services Authority (UK). Details on the extent of our regulation by the Financial Services Authority are avail-able from us on request. Copyright (C) Realkredit Danmark A/S. All rights reserved. This publication is protected by copyright and may not be reproduced in whole or in part without permission.