

# Risk Report 2012Q3

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**Danmark**

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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:

1. Key Market Indicators
  - ❑ House Prices
  - ❑ Homeowners Equity
  - ❑ Geographical Dispersion
  - ❑ Unemployment and Real Wage Growth
  - ❑ Homeowner Affordability
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2. Key Collateral Indicators
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  - ❑ Market Risk Exposures and Liquidity

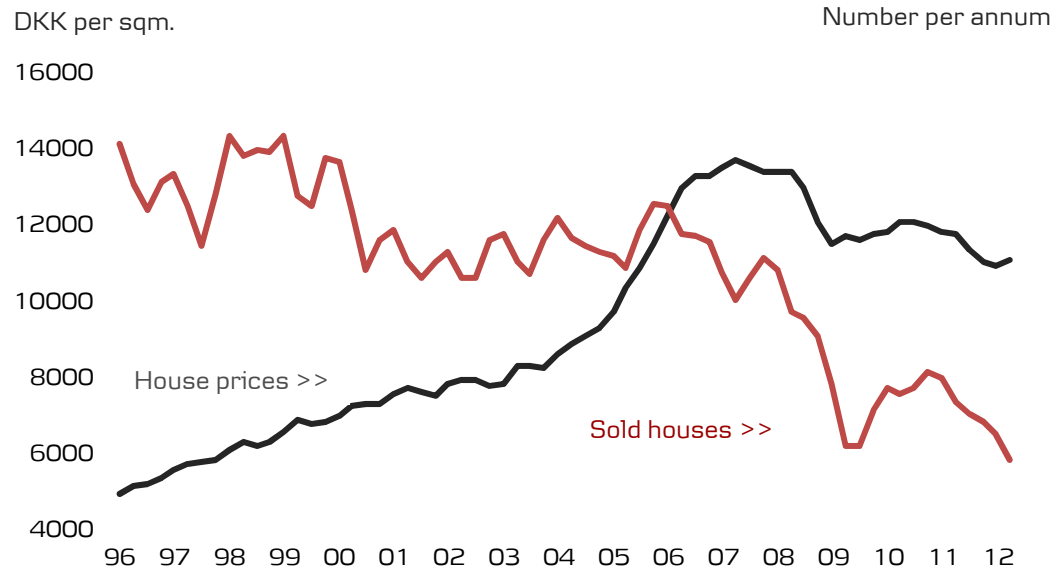
# Key Market Indicators

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General Market Information

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# 1 House Prices and Homeowners Equity

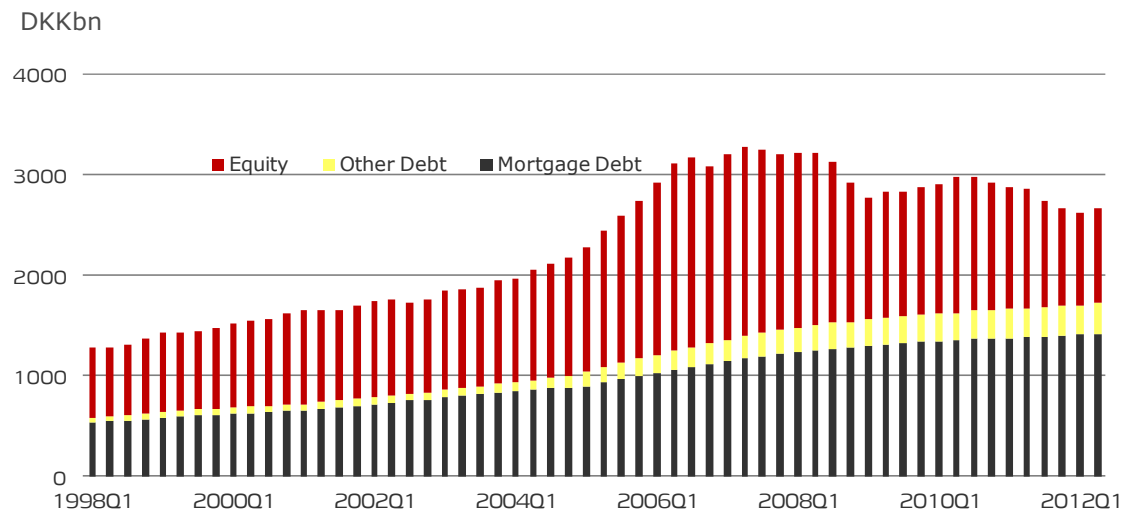


## House Price Trends

- ❑ The fall in house prices since early 2011 seems to have stabilized.
- ❑ House prices are down 19 percent for detached housing from the peak mid 2007
- ❑ Expectations are for house prices to continue the current stabilization – but uncertainty is high

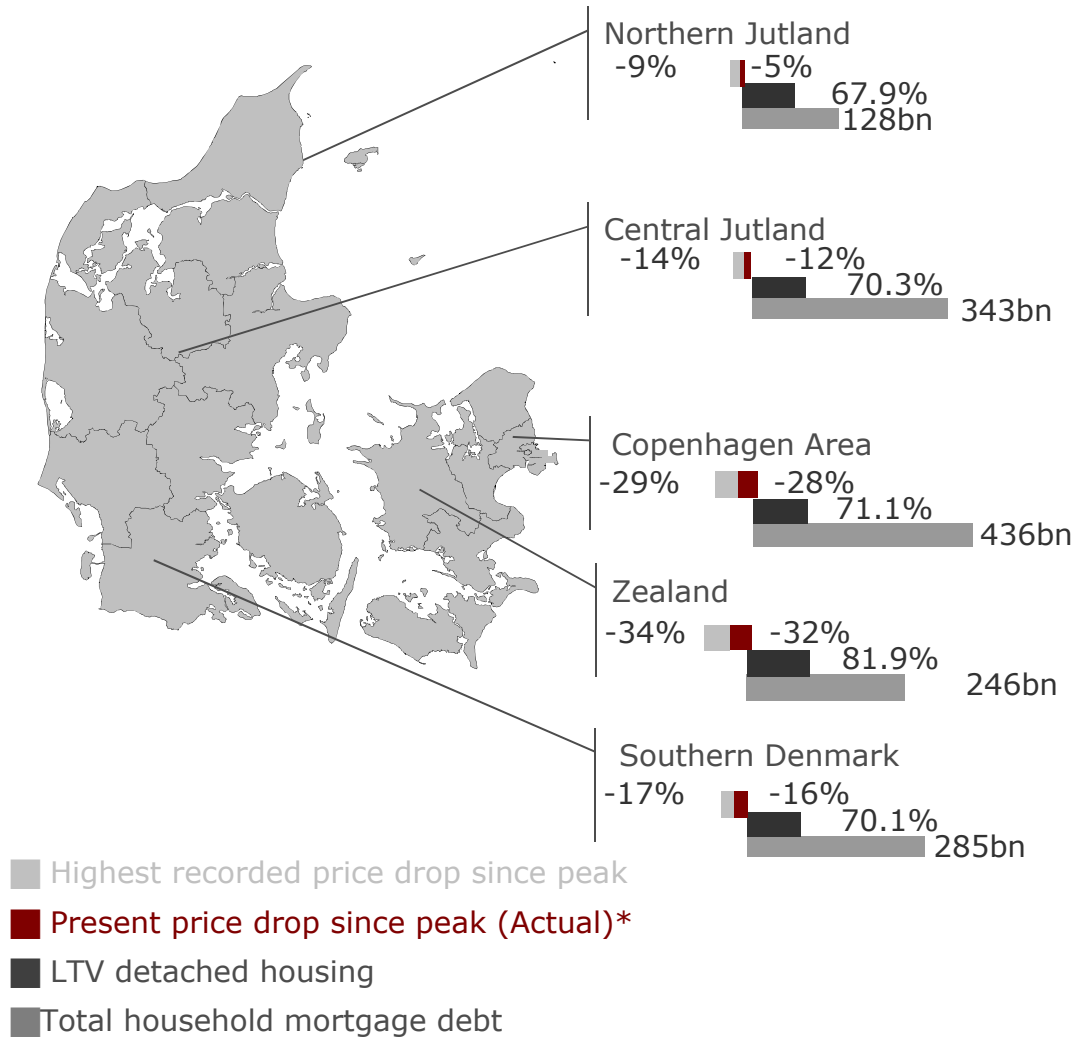
## Homeowners Equity

- ❑ Homeowners' equity peaked 2006Q3 at 1,887bn. Since then equity has dropped by 934bn
- ❑ 53 percent of the drop can be explained by house price deflation – 47 per cent is due to additional lending



# 1 Geographical Dispersion

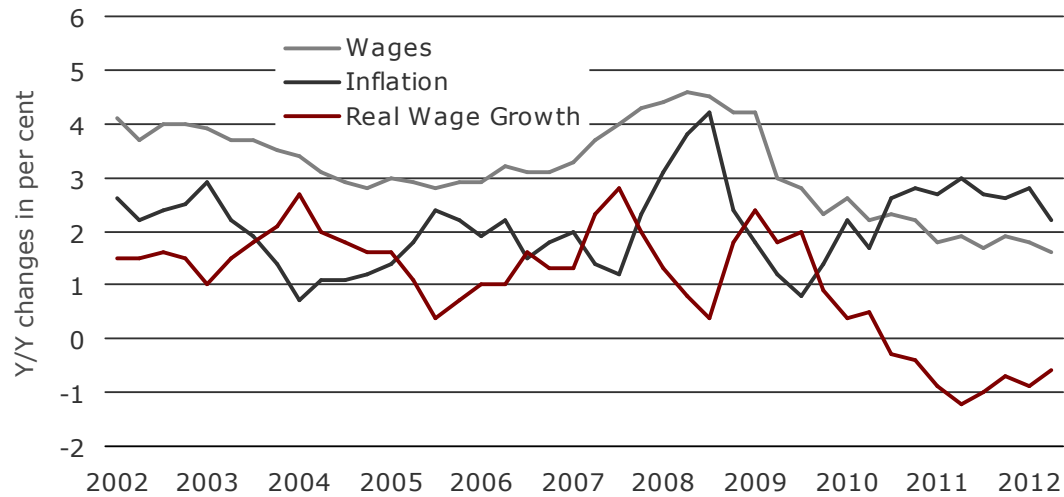
## Private lending in Denmark in total



\* If actual price drop is lower than the highest recorded price drop it means that prices are recovering

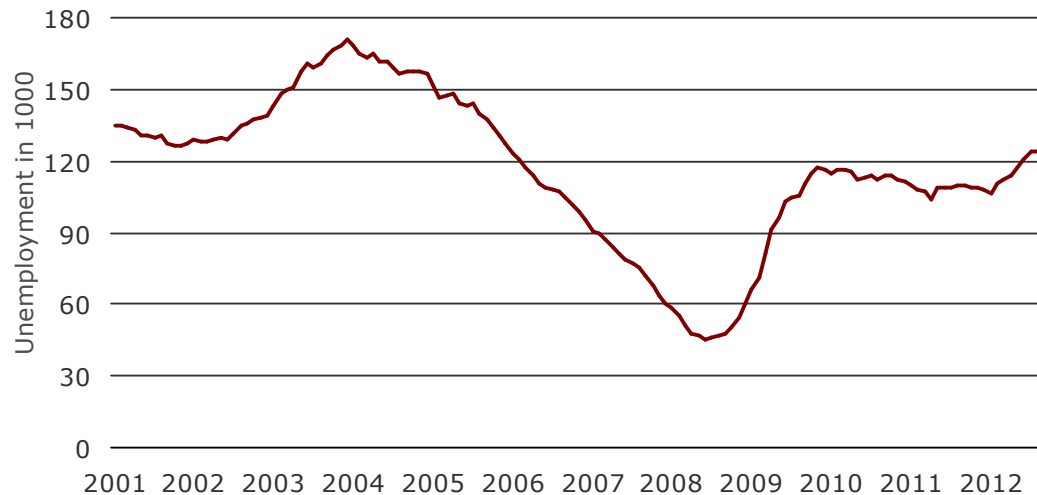
- ❑ House prices are now on a 2005 level
- ❑ The Copenhagen area was the first to suffer from house price deflation, following a decade of soaring house prices. Prices are now 28 per cent down from the peak in mid 2006
- ❑ The recent deflation in the Copenhagen area has reversed the rebound in house prices during 2009 and 2010

# 1 Unemployment and Real Wage Growth



## Real Wage Growth

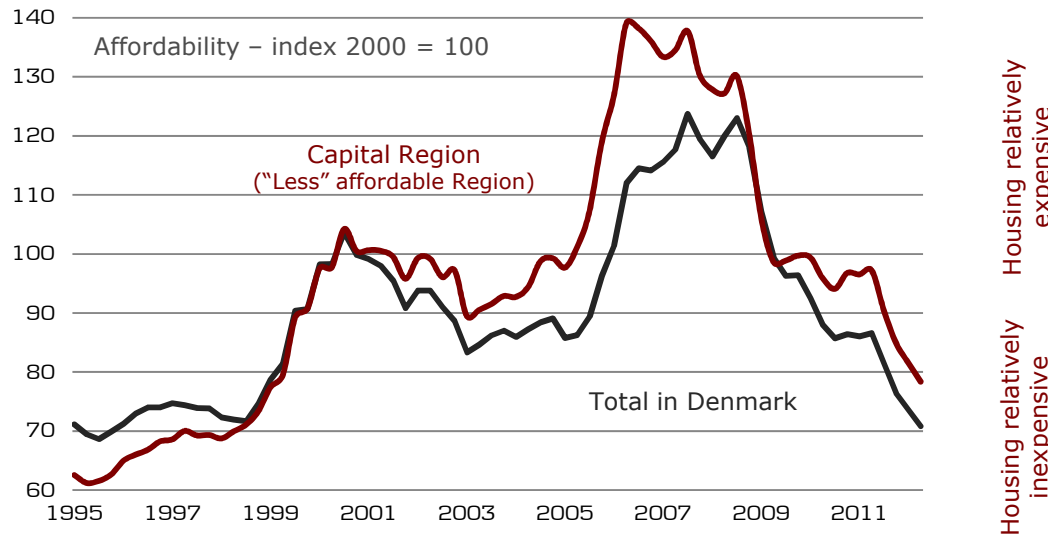
- ❑ Real wage growth is negative in Q2 due to quite high inflation outpacing the growth in nominal wages
- ❑ Wage development is expected to be close to the inflation rate in 2013



## Unemployment

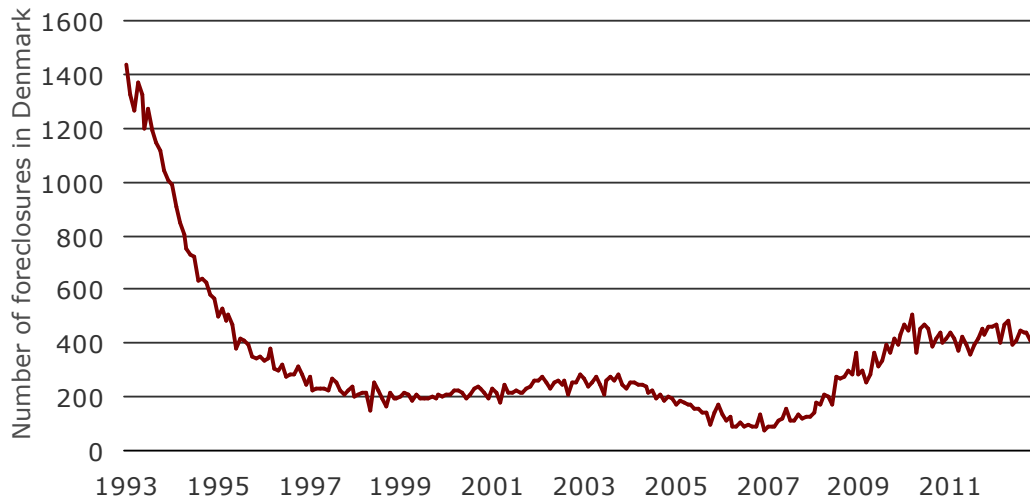
- ❑ Net unemployment stood at 125,059 end Q3 2012 up from a historical low of 44,949 in mid 2008
- ❑ This is equivalent to an unemployment (net) rate of 4.8 per cent. The unemployment rate is expected to rise a bit over the coming quarters

# 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 at the lowest level since end 1990's



## Foreclosures

- ❑ The number of foreclosed properties in Denmark in September 2012 was 409
- ❑ We expect the numbers to stay at the current level throughout the year 2012
- ❑ The duration of a foreclosure is approx. 6 months from missed payments to completion

*Note: Seasonally adjusted, all product categories included*

# 1 Political measures and outlook

| Denmark ■ Euro Zone ■ | 2011 |      | 2012 |      | 2013 |      |
|-----------------------|------|------|------|------|------|------|
| GDP                   | 0.8  | 1.5  | 0.1  | -0.4 | 1.2  | 0.5  |
| Private Consumption   | -0.8 | 0.2  | 0.9  | -0.6 | 1.1  | 0.0  |
| Fixed investments     | 0.2  | 1.6  | 1.5  | -2.9 | 1.2  | 0.2  |
| Export                | 7    | 6.4  | 1.9  | 1.3  | 2.5  | 2.3  |
| Unemployment %        | 6.2  | 10.2 | 6.2  | 11.2 | 6.4  | 11.7 |

Source: Danske Bank, November 2012

## Danish Economy Outlook

- ❑ The growth in the Danish economy is expected to be close to 0 in 2012
- ❑ We have seen a stabilisation of the unemployment rate in 2011/2012. However overall employment is still falling
- ❑ Growth in exports are much lower in 2012 relative to 2011
- ❑ Signs of slower global growth is a concern to the Danish economy which is highly dependent on exports
- ❑ Interest rates are a key element in the household economy. We still expect very low interest rates in the near future



# Key Collateral Indicators

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Realkredit Danmark Specific Information

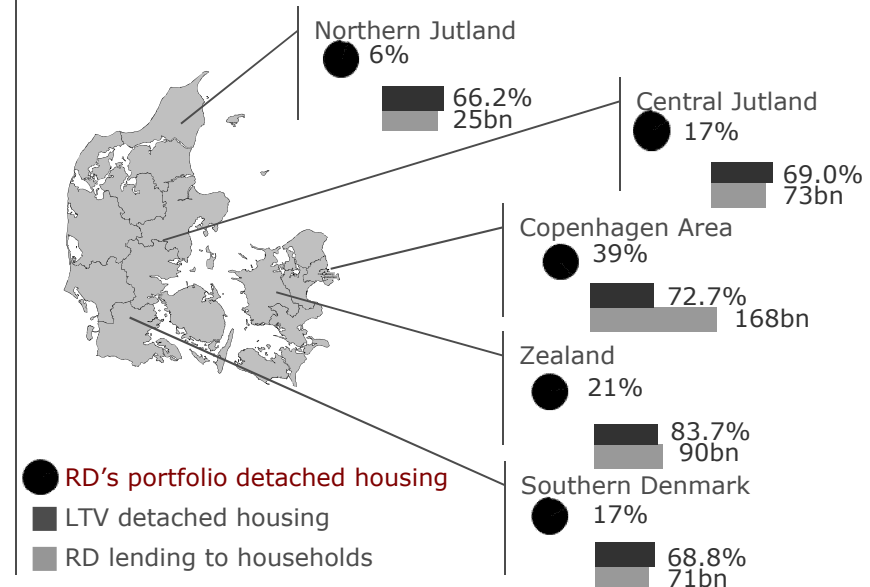
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## 2 Dispersion and Loan to Value Ratios

### 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 a large increase
- ❑ Although the affordability ratio in the capital region is expected to rise it is still below index 100
- ❑ A minor increase in the household mortgage debt was recorded in Q2 2012

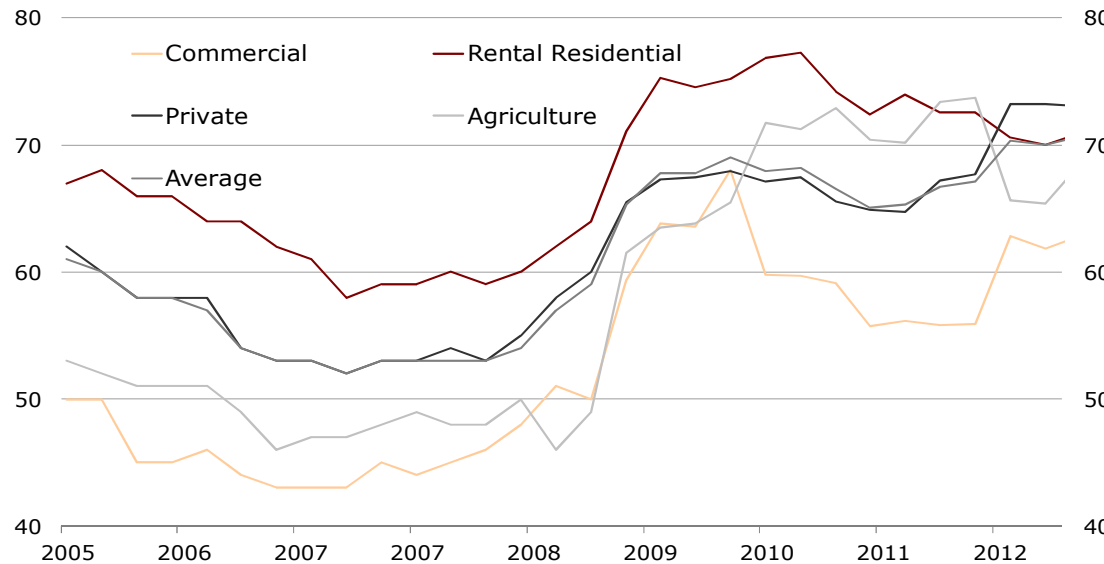
### Geographical Dispersion in Realkredit Danmark



### Loan To Value Ratios

- ❑ Covered bonds are secured by a first claim on the mortgage collateral and the reserves of the issuer
- ❑ LTV 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
- ❑ LTV ratios are monitored on an ongoing basis based on current market values of the property and current prepayment value of the mortgages
- ❑ 33 per cent of mortgage collateral securing covered bonds issued by Realkredit Danmark has a current LTV ratio of 20 per cent or less. More than 60 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 71 per cent in Q3 2012 compared to 67 per cent in Q3 2011
- LTV's for Commercial and Agriculture are based on sparse data.

| DKKbn   | Rating Category (Scaled 1-11) |     |      |       |
|---------|-------------------------------|-----|------|-------|
| LTV     | 1-3                           | 4-7 | 8-11 | Total |
| 0-20 %  | 55                            | 160 | 27   | 243   |
| 20-40 % | 38                            | 136 | 25   | 199   |
| 40-60 % | 26                            | 105 | 21   | 151   |
| 60-80 % | 15                            | 64  | 13   | 93    |
| > 80 %  | 10                            | 28  | 8    | 46    |
| Total   | 144                           | 493 | 94   | 731   |

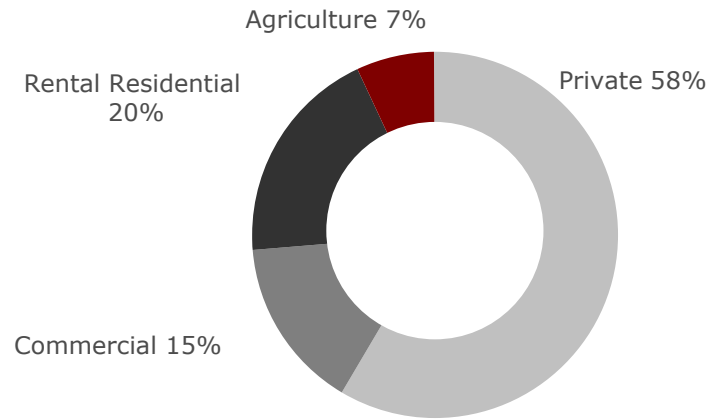
Note: RD total

### Borrower Classifications

- Borrowers' financial strength is classified on a scale from 1 to 11, 1 being the highest score
- Approx. 8bn 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

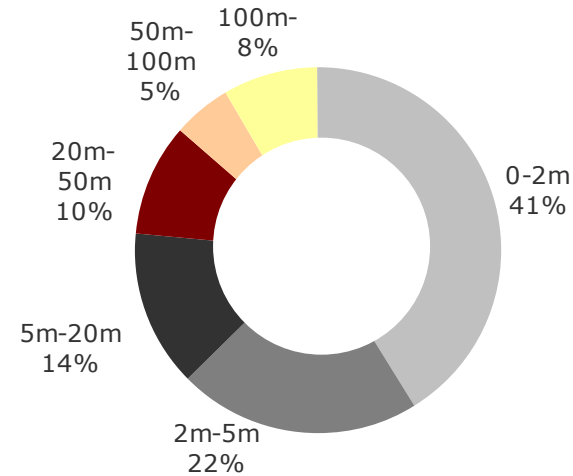
## 2 Collateral Breakdowns – Total portfolio

### Borrower Segmentation



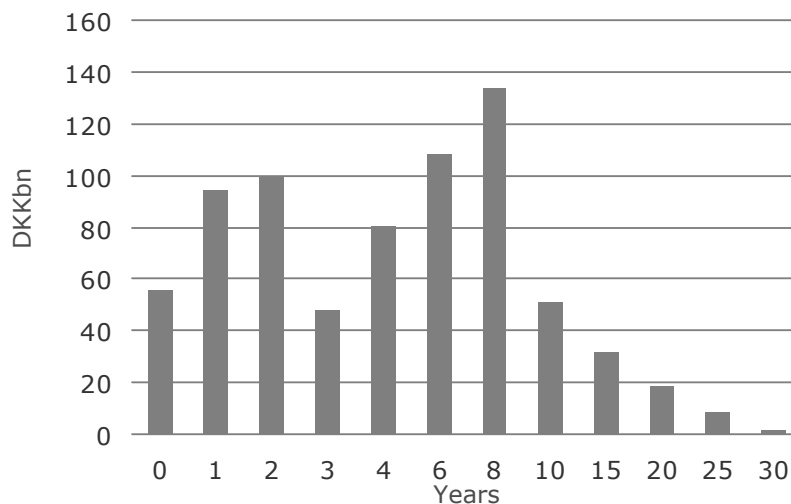
Note: Total lending distributed on segments

### Outstanding Loan Balance



Note: Total lending distributed on outstanding loan balances

### Portfolio Seasoning

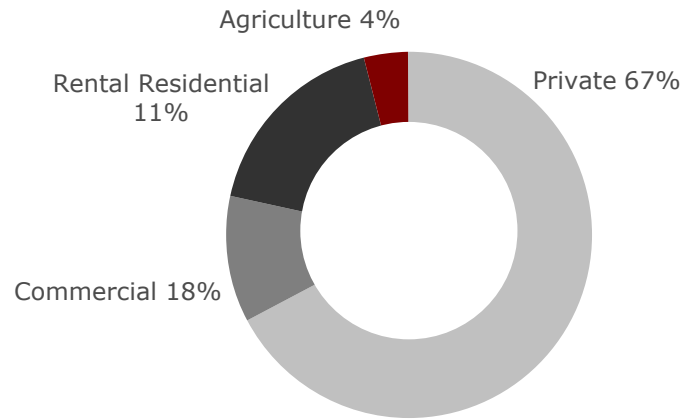


### Outstanding Debt in DKKbn by LTV ratio

| Segment            | 0-20% | 20-40% | 40-60% | 60-80% | >80% | Total DKKbn |
|--------------------|-------|--------|--------|--------|------|-------------|
| Private            | 133   | 117    | 91     | 59     | 26   | 426         |
| Commercial         | 40    | 32     | 24     | 12     | 3    | 111         |
| Agriculture        | 17    | 15     | 10     | 5      | 3    | 51          |
| Rental Residential | 52    | 35     | 26     | 17     | 13   | 143         |
| Weighted dist.     | 33%   | 27%    | 21%    | 13%    | 6%   | 100 %       |
| Total, DKKbn       | 243   | 199    | 151    | 93     | 46   | 731         |

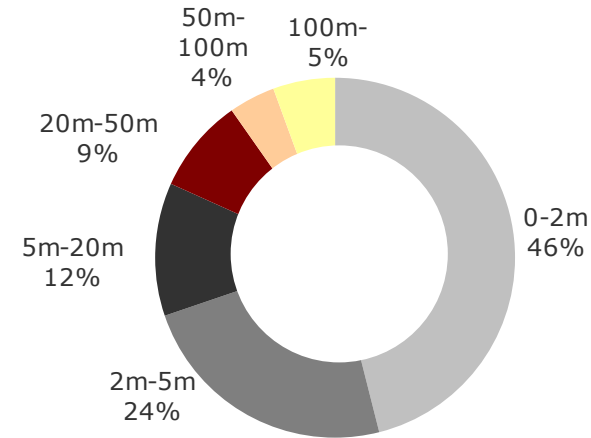
## 2 Collateral Breakdowns – Capital Centre S

### Borrower Segmentation



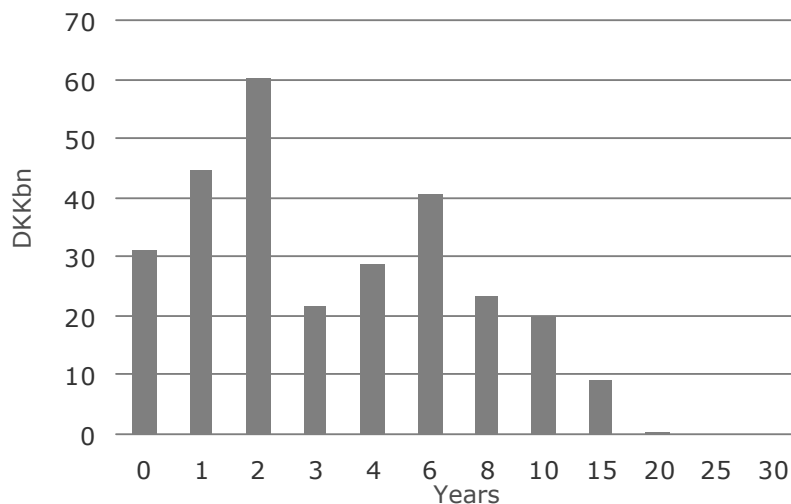
Note: Total lending distributed on segments

### Outstanding Loan Balance



Note: Total lending distributed on outstanding loan balances

### Portfolio Seasoning

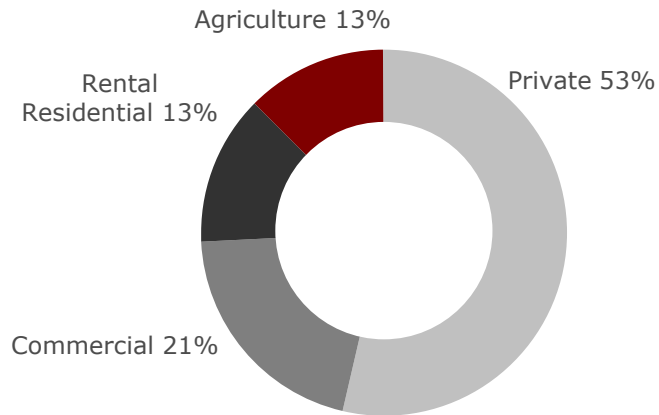


### Outstanding Debt in DKKbn by LTV ratio

| Segment             | 0-20%     | 20-40%    | 40-60%    | 60-80%    | >80%      | Total DKKbn |
|---------------------|-----------|-----------|-----------|-----------|-----------|-------------|
| Private             | 55        | 51        | 41        | 28        | 13        | 188         |
| Commercial          | 9         | 9         | 7         | 4         | 1         | 31          |
| Agriculture         | 4         | 3         | 2         | 1         | 1         | 11          |
| Rental Residential  | 18        | 13        | 9         | 6         | 3         | 50          |
| Weighted dist.      | 31%       | 27%       | 21%       | 14%       | 7%        | 100 %       |
| <b>Total, DKKbn</b> | <b>86</b> | <b>76</b> | <b>60</b> | <b>40</b> | <b>18</b> | <b>280</b>  |

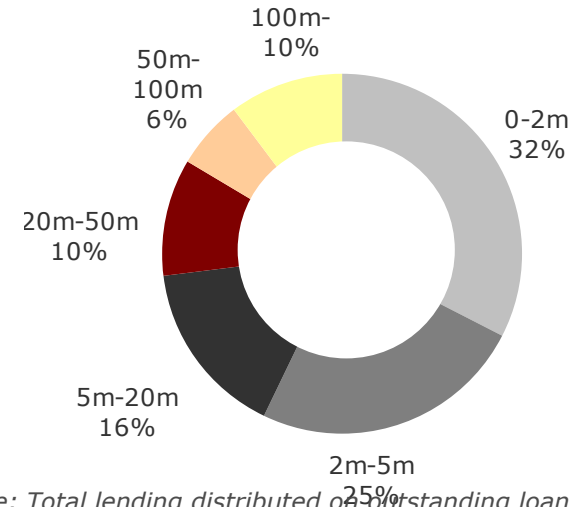
## 2 Collateral Breakdowns – Capital Centre T

### Borrower Segmentation



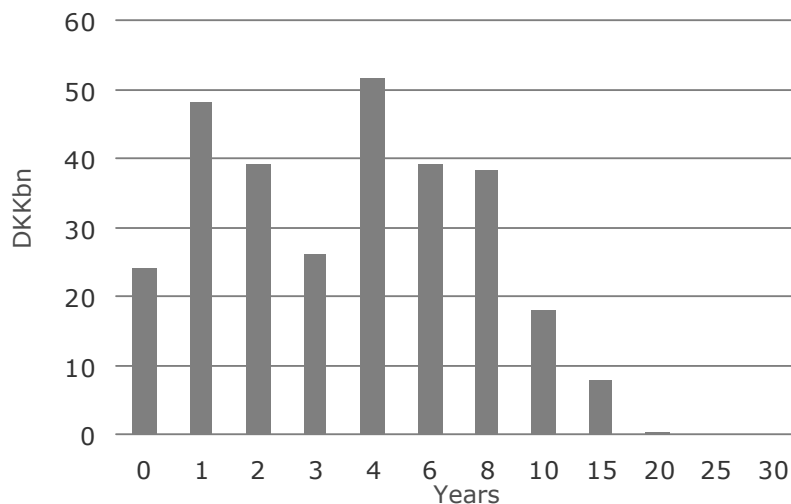
Note: Total lending distributed on segments

### Outstanding Loan Balance



Note: Total lending distributed on outstanding loan balances

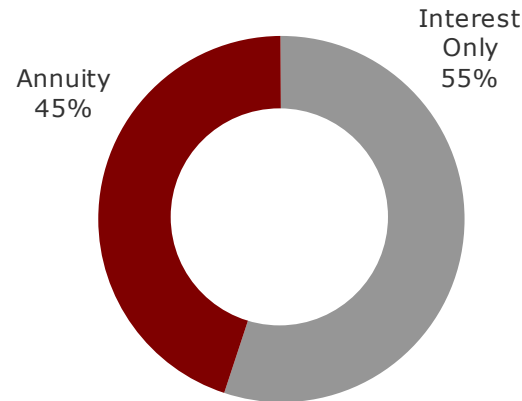
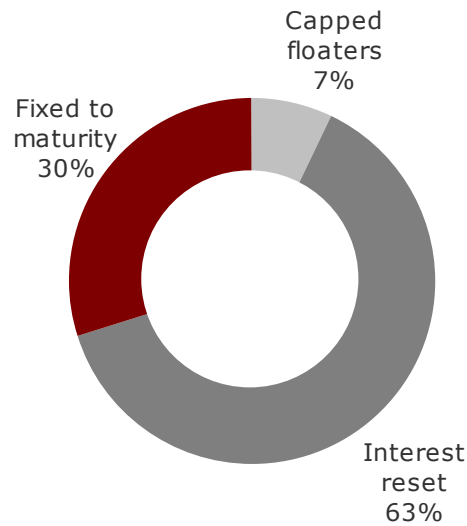
### Portfolio Seasoning



### Outstanding Debt in DKKbn by LTV ratio

| Segment            | 0-20% | 20-40% | 40-60% | 60-80% | >80% | Total DKKbn |
|--------------------|-------|--------|--------|--------|------|-------------|
| Private            | 46    | 42     | 35     | 24     | 10   | 157         |
| Commercial         | 23    | 18     | 13     | 6      | 1    | 61          |
| Agriculture        | 12    | 11     | 8      | 4      | 2    | 36          |
| Rental Residential | 13    | 11     | 8      | 5      | 3    | 39          |
| Weighted dist.     | 32%   | 28%    | 22%    | 13%    | 5%   | 100 %       |
| Total, DKKbn       | 93    | 82     | 64     | 38     | 16   | 293         |

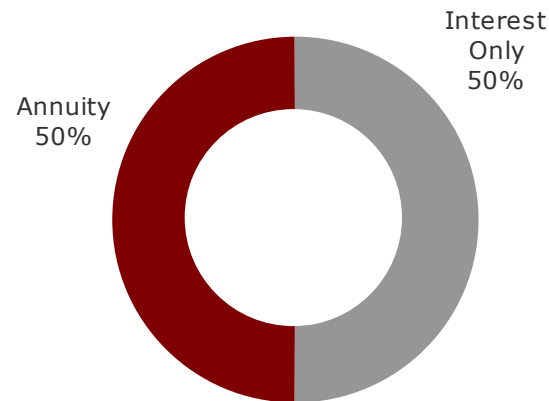
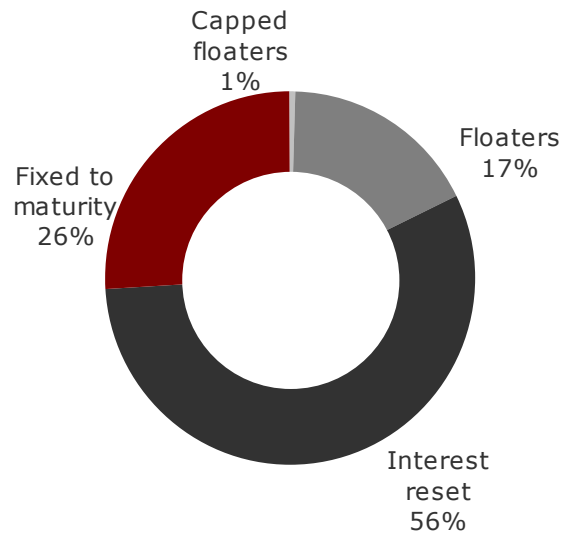
## 2 Borrower Exposure to Interest Rates



Note: Outstanding loan balances

### Private Segment

- Homeowners must be able to service a 30-year fixed rate annuity loan for Realkredit Danmark to underwrite
- For the past decade borrowers have remortgaged from fixed rate into interest reset – now accounting for 63 per cent of the loan book. Expectations are for this trend to reverse from fixed rates reaching an all time low of 3 per cent



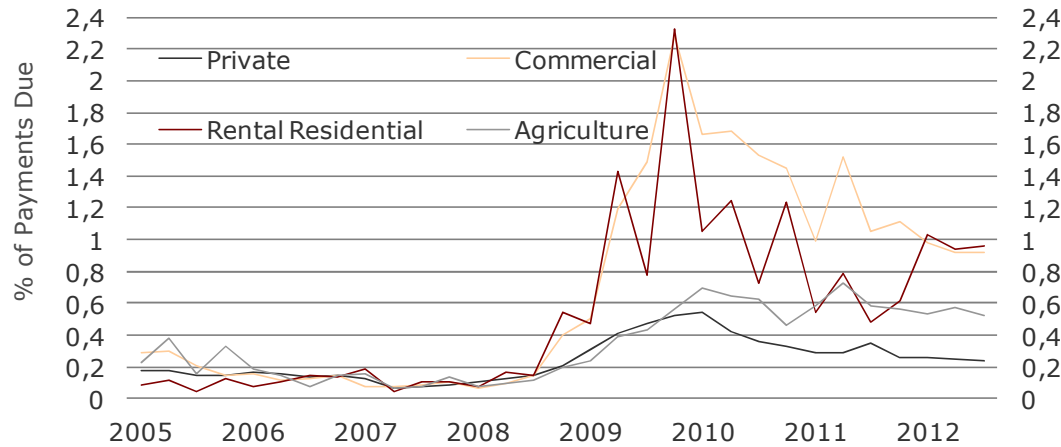
Note: Outstanding loan balances

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

### Corporate Segments

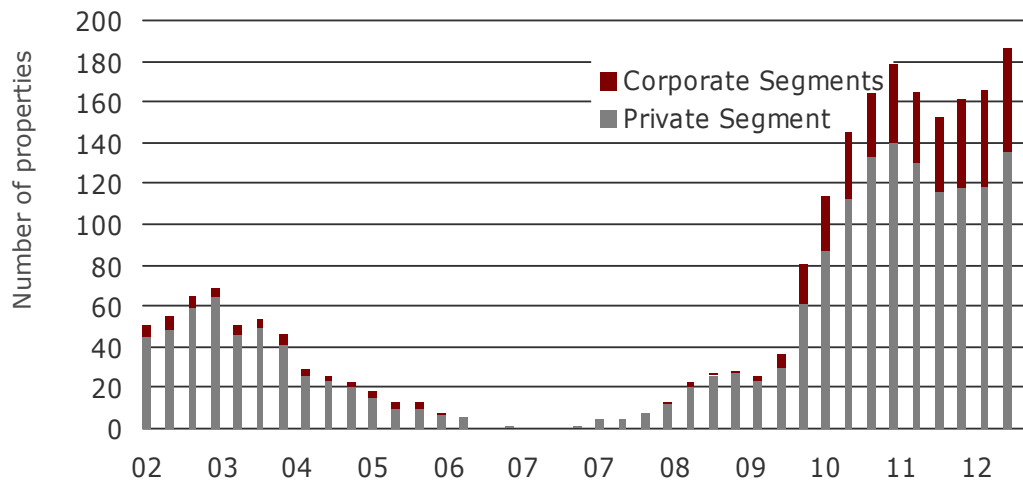
- 26 per cent of all lending in corporate segments is fixed rate to maturity
- More than 70 per cent are either interest reset (typically, rates are reset every year or every third year) or floating rate (base rates are either 6M CIBOR or 3M EURIBOR)
- Bullets and Interest only loans make up 50 per cent of corporate lending

## 2 Arrears and Repossessions



### Arrears (3 months)

- ❑ Arrears are down considerably from Q4 2009 in Commercial and Rental Residential
- ❑ Arrears in the Private segments and Agriculture are stabilising
- ❑ Total arrears stood at 0.53 per cent end Q3 2012

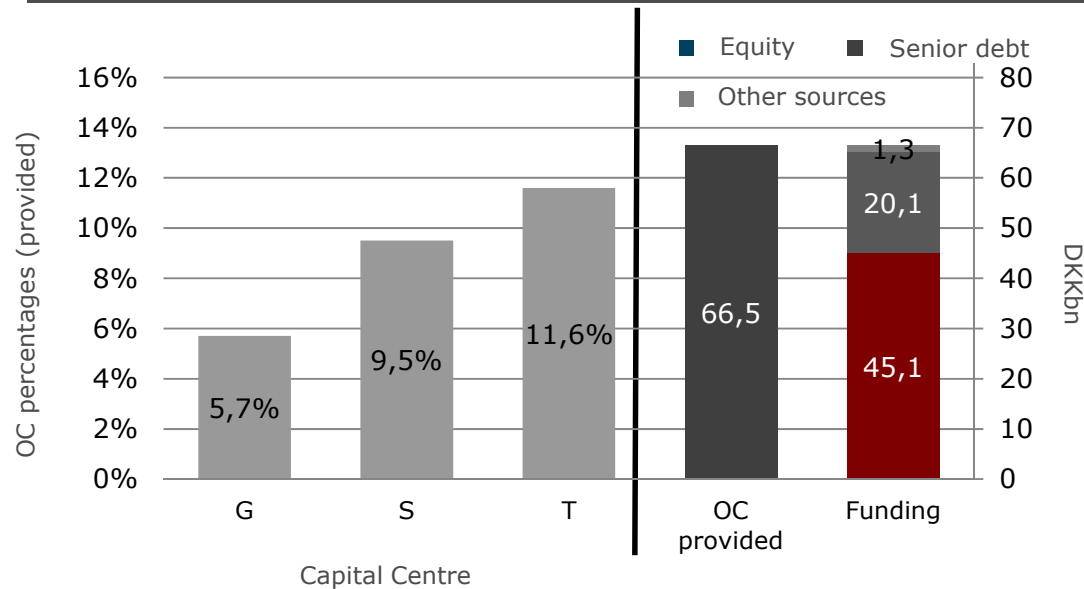


### Repossessions

- ❑ The stock of repossessed properties stood at 157 end Q3 2012- down 29 from Q2 2012
- ❑ This compares to a total stock of mortgages collateral at 520,800

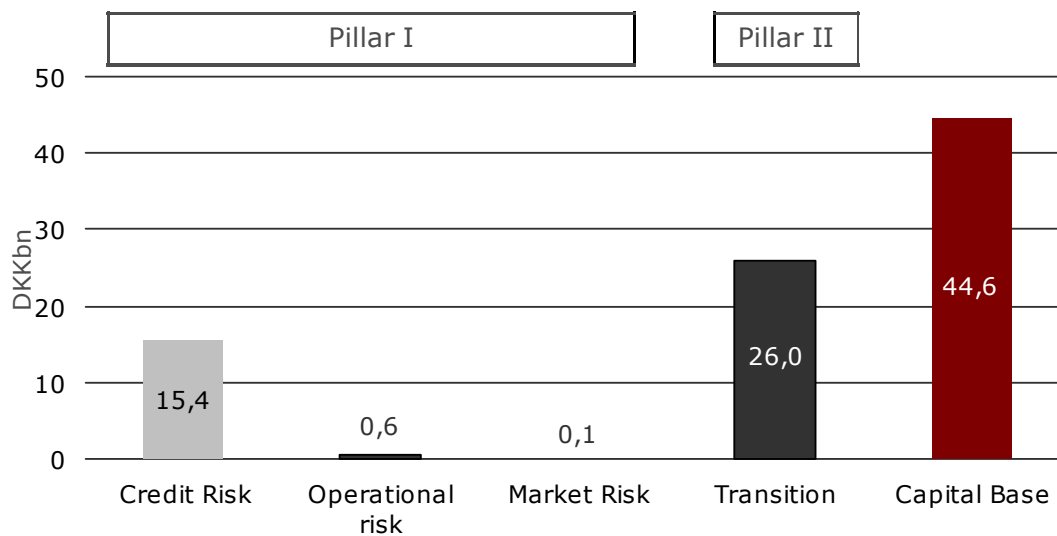


## 2 Over Collateralisation and Capitalisation



### 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



### Capitalisation

- ❑ The solvency ratio stood at 20.8 per cent end Q3 2012 (CRD definition)
- ❑ Realkredit Danmark started issuing senior debt in Q1 2012 to strengthen the capital base

# Supplementary Collateral – Total in S and T



## Buffer in Capital Centre S and T

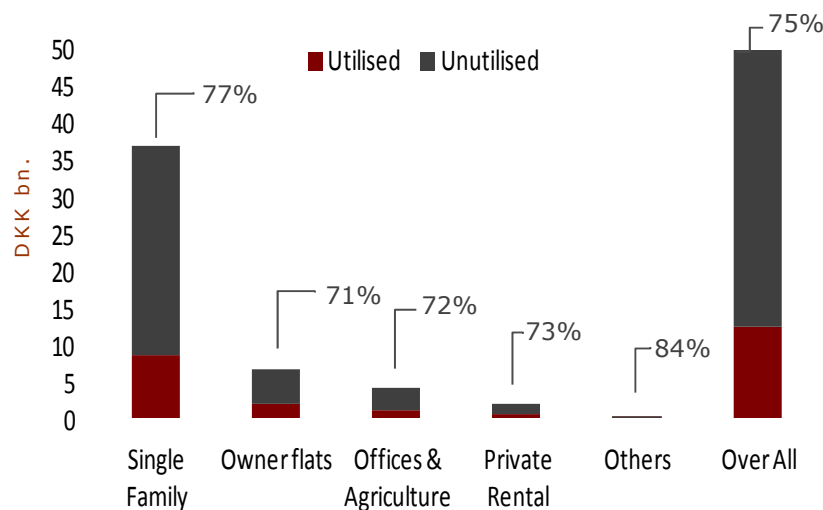
- ❑ For Q3 2012 total OC provided was DKK 59.3bn in Capital Centres S and T of which 20.1bn was Senior debt
- ❑ Supplementary Collateral of DKK 40.8bn are required end Q3 2012 in Capital Centres S and T
- ❑ Loss Guarantees of DKK 12.4bn are utilised
- ❑ Buffer for further growth in need for supplementary Collateral in Capital Centre S and T is DKK 30.9bn
- ❑ If the OC 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 are breached during the term of the loan the mortgage loan will only be eligible with the part that comply with the LTV limits. If eligible collateral is insufficient, Supplementary Collateral must be provided
- ❑ Increased need for Supplementary Collateral is 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

## Utilisation of Loss Guarantee



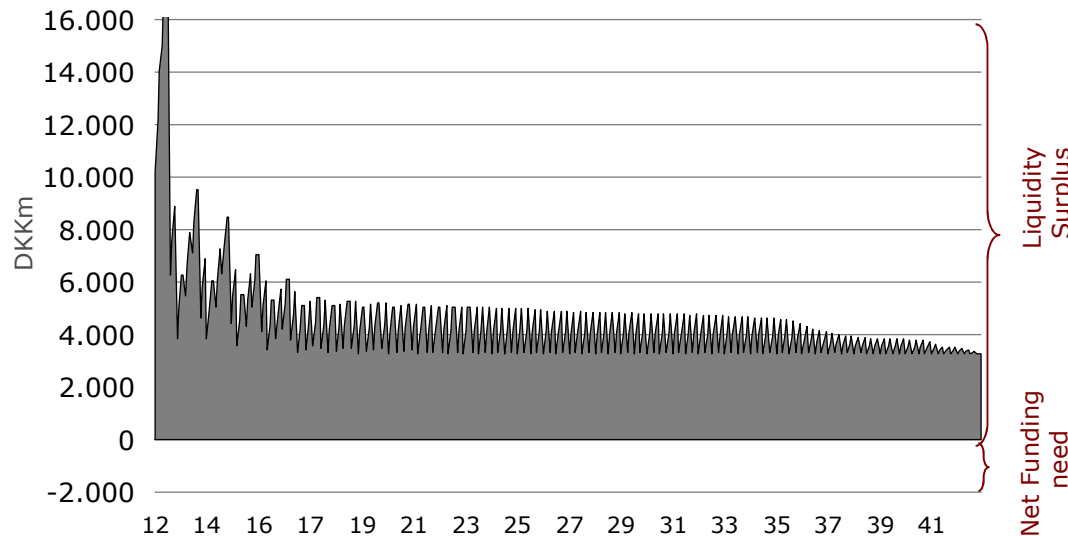
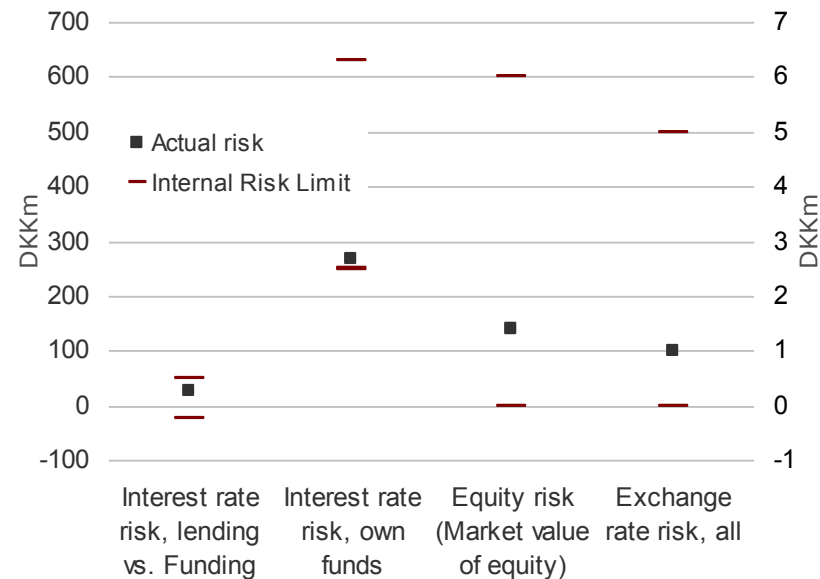
## Loss Guarantees issued by Danske Bank (DKK 50,6 bn)

- RD loan disbursed through Danske 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 Q3 2012 interest rate risk on lending vs. funding stood at DKK 26.2m
- ❑ 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

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