

# Implications of the low interest environment for financial reporting

27 January 2016

Inaugural Lecture  
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- Reflecting interest rate (changes) in financial reporting
- The impact of the low interest environment on financial reporting
- Summary

# Introduction

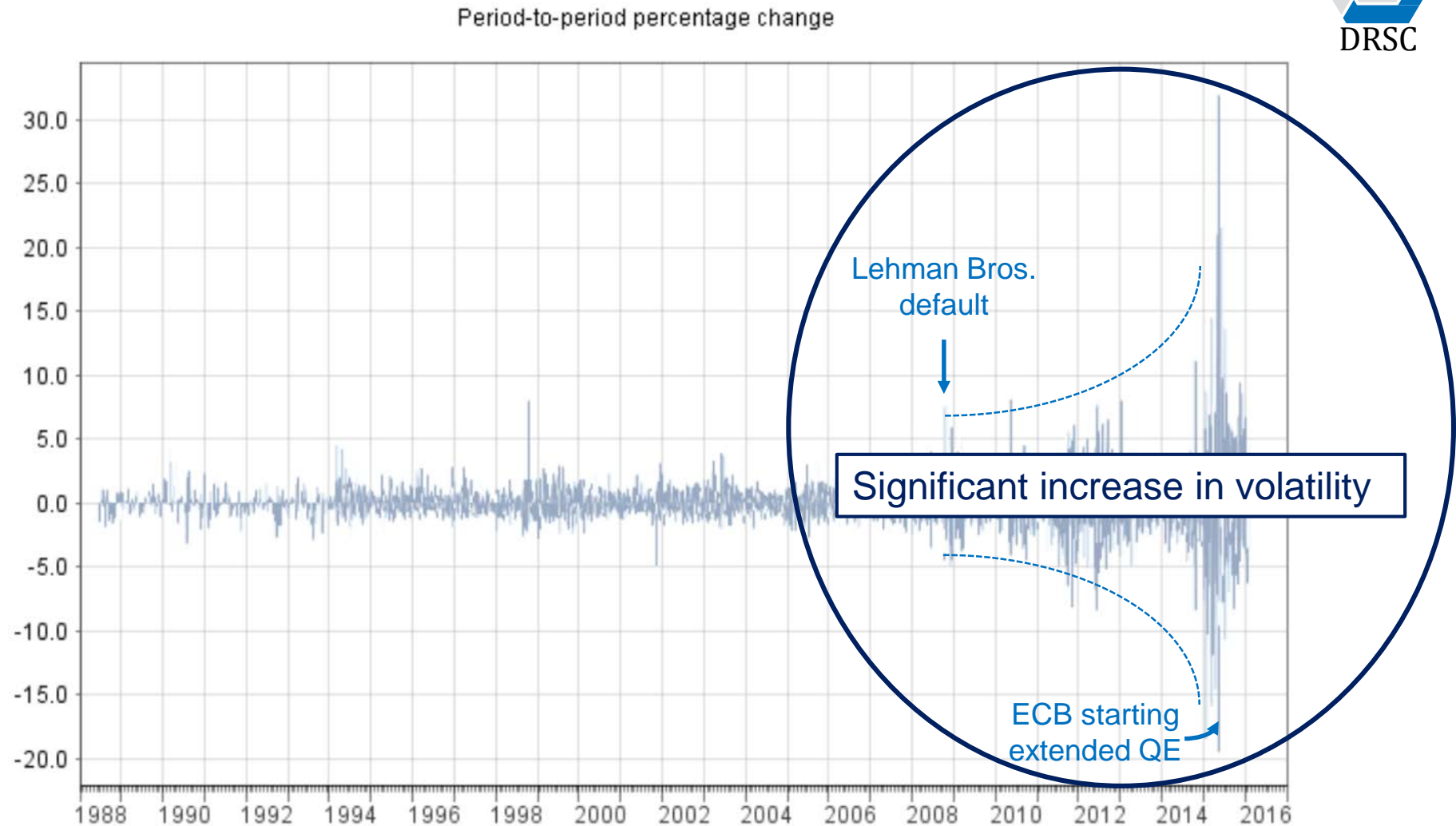
# Yields on listed Federal securities (15-30yr maturity)

Yields on debt securities outstanding issued by residents / Listed Federal securities / Mean residual maturity of more than 15 and up to 30 years / Daily data  
Prozent



Source: Deutsche Bundesbank, Time series BBK01.WT9555

# Percentage changes of yields of listed Federal securities (15-30yr)



Source: Deutsche Bundesbank, Time series BBK01.WT9555

## **Reflecting interest rate (changes) in financial reporting**

# Why do interest rate considerations come into play?

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- Balance sheet shows an entity's claims and obligations as of a certain point in time
- These claims/obligations have to be measured
- Conceptually, measurement should **reflect the timing** of cash in-/outflows
  - **Time value of money concept** – *“Money held today is worth more than same amount of money at a future point in time”*
- Common valuation technique: **present value measurement** (discounting)

$$PV = \sum_{t=1}^T \frac{CF_t}{(1+i)^t}$$

# Balance sheet line items where discounting is applied today



## Assets

### Non-current assets

Intangibles (incl. Goodwill)

Property, Plant & Equipment

Investment Property

Financial assets

- Receivables
- Securities
- Investments in associates

### Current assets

Inventories

Financial assets

- Receivables
- Securities
- Cash & Cash Equivalents

## Liabilities and Equity

### Equity

### Non-current liabilities

Provisions

- Pensions
- Deferred Tax
- Other long-term provisions

Financial liabilities (long-term borrowings and issuances)

### Current liabilities

Financial liabilities (short-term borrowings, issuances and payables)

Current tax payable

Short-term provisions

- Items that are discounted
- Items that are implicitly discounted (reflected through impairment calculations or fair value measurement)
- Items that need not be discounted (due to short-term) but sometimes are

(NB: All indications are for entities applying IFRSs)



# How do we discount amounts in financial reporting?

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- In a nutshell: **completely inconsistently** (except for timing)!
  - Frozen/historic vs. current rate
  - Market vs. entity-specific rate
  - Pre-tax vs. post-tax
  - Real vs. nominal rate
  - Combination of (not/partially/completely) reflecting risk premium, non-performance risk, illiquidity premium etc.
  - (No) inclusion of profit margins
  - (No) inclusion of transaction cost

# Key components of the *time value of money* concept

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- Measurement methodology to be used in valuation:
  - Include *all* factors, 'be complete' (e.g., taxes, inflation, uncertainty, risk, ...)
  - Do not double-count (i.e., reflect factors *either* in cash flows *or* discount rate)
  - Use internally consistent assumptions (e.g., as regards timing)

The international accounting standard-setter, the International Accounting Standards Board (IASB), is currently looking at the inconsistency issue

# The IASB's most recent work plan



Major Projects	Implementation	Research Projects	Completed IFRS	Agenda consultation
<b>The IASB's Research Programme</b>				
The objective of the IASB's research programme is to assess perceived problems or deficiencies in IFRS requirements. <a href="#">Read more.</a>				
<b>Assessment stage</b>		<b>These projects are assessing possible practice issues to understand if there is a financial reporting problem and, if so, how to address it.</b>		
Discount Rates		The IASB has begun reviewing the staff findings from the research and will decide on the next steps following the review.		
Goodwill and Impairment		The IASB has begun discussions. This project was started as a result of the post-implementation review of IFRS 3 <i>Business Combinations</i> .		
Income Taxes		IASB discussions are planned for early 2016.		
Pollutant Pricing Mechanisms		The IASB has begun discussions and the next step is likely to be a DP in 2016.		
Post-employment Benefits (including Pensions)		The IASB has reviewed the staff findings from the research. The next steps are on hold, awaiting feedback on the Agenda Consultation.		
Primary Financial Statements (previously Performance Reporting)		This project is closely linked with the work being undertaken in the Disclosure Initiative. IASB staff will assess the interaction with the Disclosure Initiative projects before proposing a scope for this project. IASB discussions will begin in 2016.		
Provisions, Contingent Liabilities and Contingent Assets		The IASB has reviewed the staff findings from the research. The next steps are on hold, awaiting developments in the <i>Conceptual Framework</i> project.		
Share-based Payment		The IASB has reviewed the staff findings from the research. The next steps are on hold, awaiting feedback on the Agenda Consultation.		
<b>Development stage</b>		<b>The IASB has completed its assessment work and is developing proposals to respond to the problem(s) identified.</b>		
Business Combinations under common control		IASB discussions about the staff findings from the 2015 research are expected to commence early in 2016 and the next step is likely to be a DP later in 2016.		
Disclosure Initiative—Principles of Disclosure (including Standards-level Review of Disclosures)		The IASB has begun discussions and a DP on the Principles of Disclosure is expected to be published in late Q1/early Q2 2016 (see the Major Projects tab).  The Standards-level Review is a component of the Disclosure Initiative—Principles of Disclosure project. The principles identified through that project will be used as the basis for the Standards-level Review.		
Dynamic Risk Management: a Portfolio Revaluation Approach to Macro Hedging		The IASB has begun discussions and the next step is likely to be a DP (see the Major Projects tab).		
Equity Method of Accounting		The IASB will discuss in Q1 2016 how to proceed with the project, in light of feedback on the Agenda Consultation and from the Accounting Standards Advisory Forum (ASAF).  Later research will consider whether there is a need for a fundamental review of the equity method.		
Financial Instruments with Characteristics of Equity		The IASB has begun discussions and the next step is likely to be a DP.		
<b>Inactive projects</b>				
Extractive Activities / Intangible Assets / R&D		The IASB is not currently working on this project.		
Foreign Currency Translation		The IASB has completed its assessment work on this project and has no plans to undertake additional work. It plans to remove this project from the research programme, subject to feedback in the current Agenda Consultation.		
High Inflation		The IASB has completed its assessment work on this project and has no plans to undertake additional work. It plans to remove this project from the research programme, subject to feedback in the current Agenda Consultation.		
The IASB is developing its research capabilities—for further information visit the <a href="#">IFRS Research Centre</a> .				
<a href="#">Print-friendly PDF</a> <a href="#">Work plan guide</a>				

Source: IASB, <http://www.ifrs.org>

# Changes in balance sheet line items could impact performance



Assets	Liabilities and Equity
<b>Non-current assets</b> Intangibles (incl. Goodwill)  Property, Plant & Equipment  Investment Property  Financial assets <ul style="list-style-type: none"> <li>• Receivables</li> <li>• Securities</li> <li>• Investments in associates</li> </ul> <b>Current assets</b> Inventories  Financial assets <ul style="list-style-type: none"> <li>• Receivables</li> <li>• Securities</li> <li>• Cash &amp; Cash Equivalents</li> </ul>	<b>Equity</b>  <b>Non-current liabilities</b> Provisions <ul style="list-style-type: none"> <li>• Pensions</li> <li>• Deferred Tax</li> <li>• <b>Other long-term provisions</b></li> </ul> Financial liabilities (long-term borrowings and issuances)  <b>Current liabilities</b> Financial liabilities (short-term borrowings, issuances and payables)  Current tax payable  Short-term provisions

- Assume a drop in interest rates (as evidenced in the current environment)
- Discounting with a lower interest rate leads to two things:
  1. An **increase of the provision** in the balance sheet
  2. A corresponding **charge in the statement of profit or loss**

Revenue
Cost of sales
Gross profit
Other income
Distribution costs
Administrative expenses
Other expenses
Finance costs
Share of profit of associates <sup>(a)</sup>
<b>Profit before tax</b>
Income tax expense
<b>Profit for the year from continuing operations</b>
Loss for the year from discontinued operations
<b>PROFIT FOR THE YEAR</b>

# Changes in balance sheet line items could impact performance



Assets	Liabilities and Equity
<b>Non-current assets</b> Intangibles (incl. Goodwill)  Property, Plant & Equipment  Investment Property  Financial assets • Receivables • Securities • Investments in associates  <b>Current assets</b> Inventories  Financial assets • Receivables • Securities • Cash & Cash Equivalents	<b>Equity</b>  <b>Non-current liabilities</b> Provisions • <b>Pensions</b> • Deferred Tax • Other long-term provisions  Financial liabilities (long-term borrowings and issuances)  <b>Current liabilities</b> Financial liabilities (short-term borrowings, issuances and payables)  Current tax payable  Short-term provisions

- Assume a drop in interest rates (as evidenced in the current environment)
- Discounting with a lower interest rate leads to two things:
  1. An **increase of the provision** in the balance sheet
  2. A corresponding **charge in the statement of other comprehensive income**

## Other comprehensive income:

### Items that will not be reclassified to profit or loss:

Gains on property revaluation  
 Remeasurements of defined benefit pension plans  
 Share of gain (loss) on property revaluation of associates<sup>(b)</sup>  
 Income tax relating to items that will not be reclassified<sup>(c)</sup>

### Items that may be reclassified subsequently to profit or loss:

Exchange differences on translating foreign operations<sup>(d)</sup>  
 Available-for-sale financial assets<sup>(d)</sup>  
 Cash flow hedges<sup>(d)</sup>  
 Income tax relating to items that may be reclassified<sup>(c)</sup>

Other comprehensive income for the year, net of tax

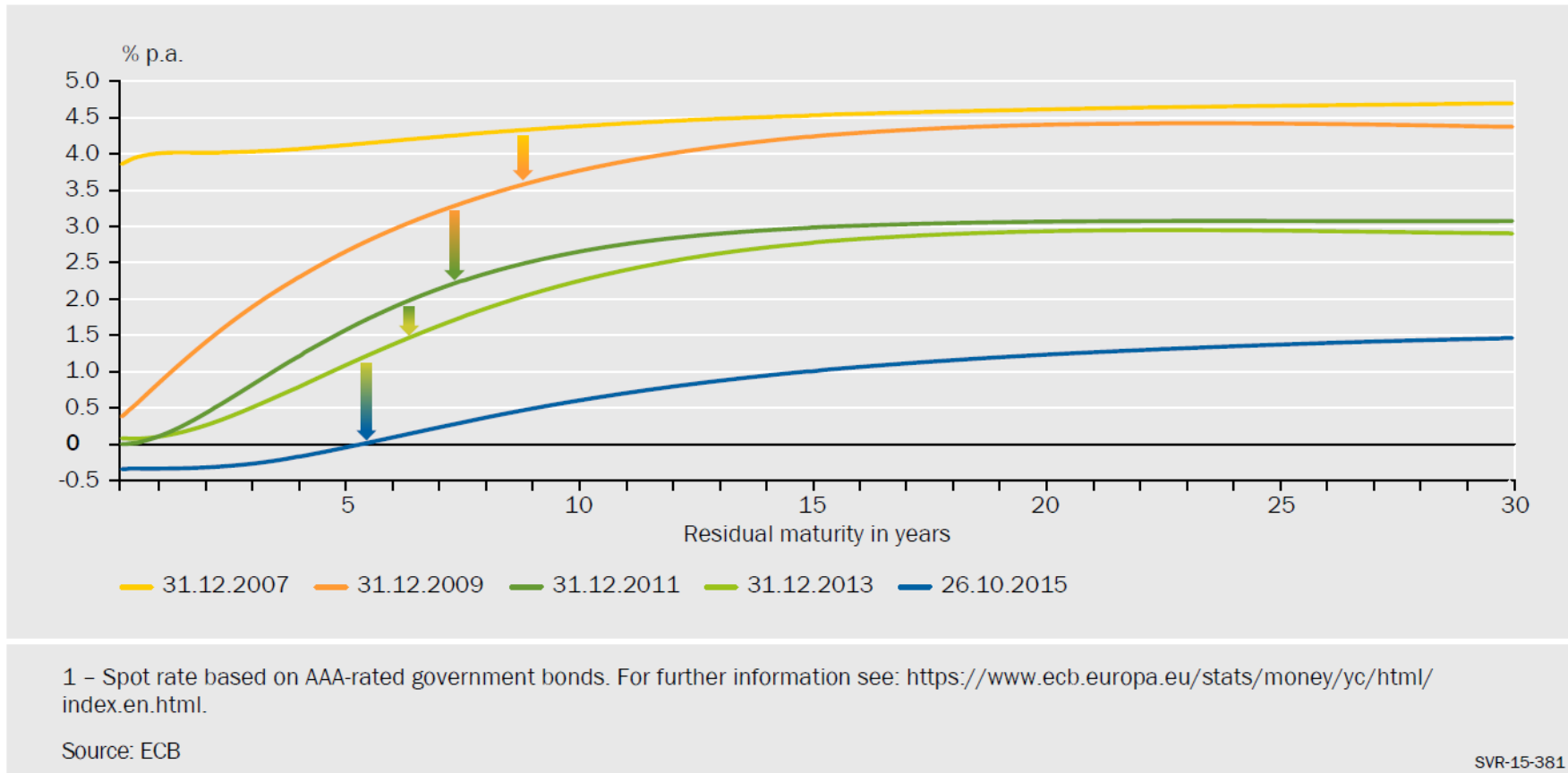
## **The impact of the low interest environment on financial reporting**

# Euro area spot rate yield curve for AAA government bonds over time



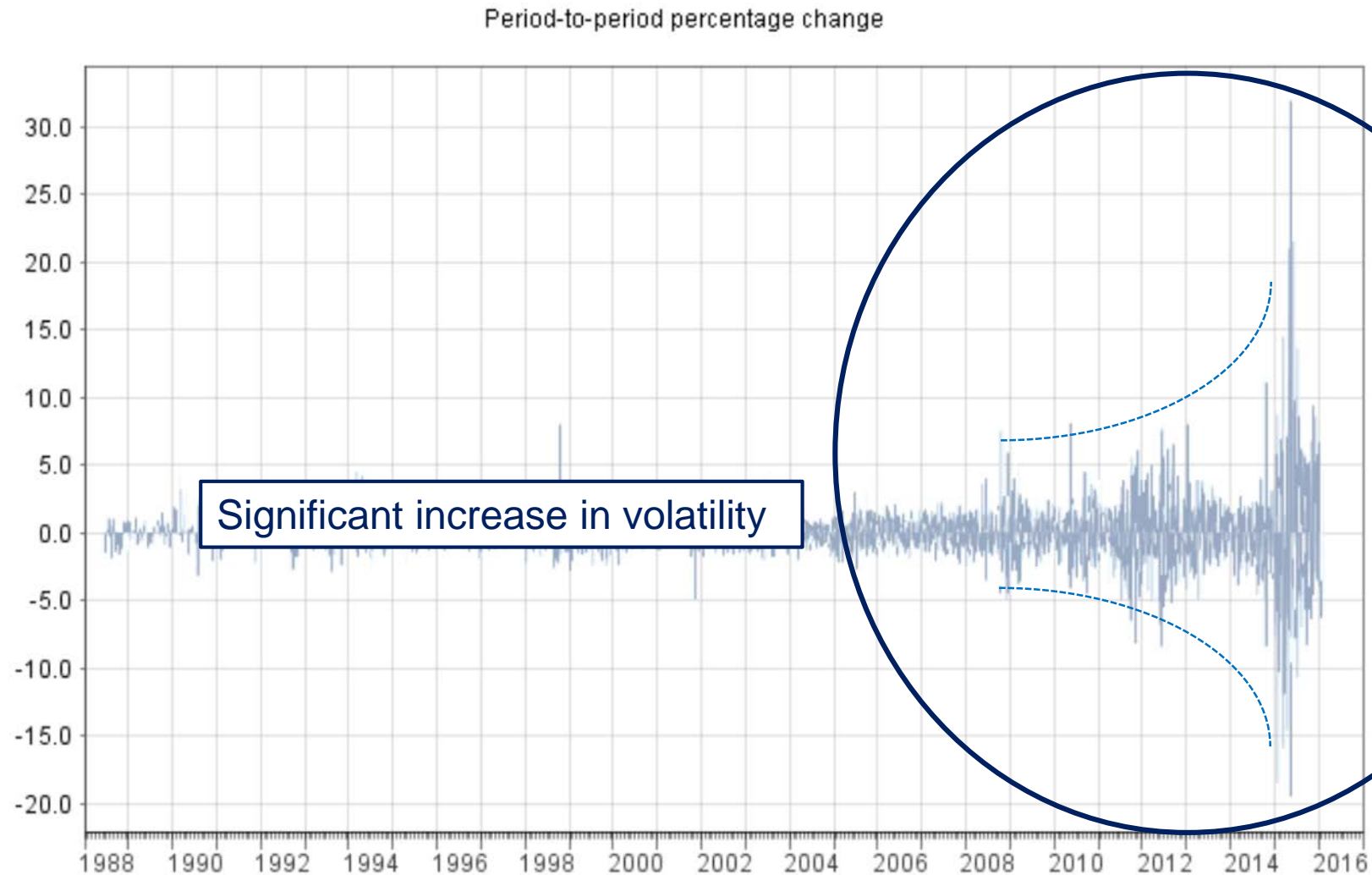
▾ CHART 58

## Euro area yield curve<sup>1</sup>



Source: Annual Economic Report 2015/16 of the German Council of Economic Experts, p. 180 (German original version)

# Recall: The issue is not the absolute rate, it is the volatility



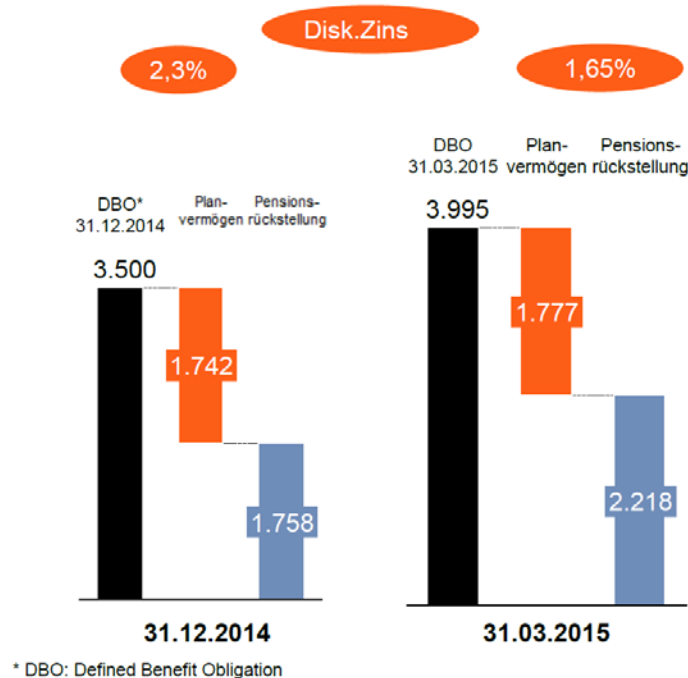
Source: Deutsche Bundesbank, Time series BBK01.WT9555



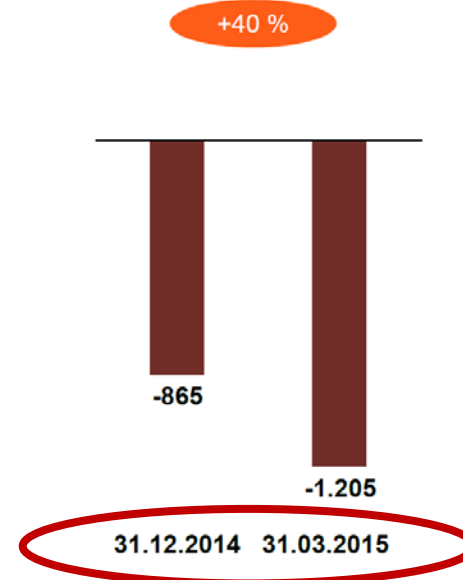
**Absenkung Diskontierungszins von 2,3 % auf 1,65% erhöht Pensionsverpflichtungen um ~500 Mio EUR gegenüber 31.12.2014**

Sonderthema:  
Pensionsrückstellungen

## Pensionsrückstellungen (Mio EUR)



## Effekt Pensionsrückstellungen auf Eigenkapital (Mio EUR)



# In the end, it comes down to the impact on equity and performance!



Assets	Liabilities and Equity	Revenue
<b>Non-current assets</b> Intangibles (incl. Goodwill)  Property, Plant & Equipment  Investment Property  Financial assets <ul style="list-style-type: none"> <li>• Receivables</li> <li>• Securities</li> <li>• Investments in associates</li> </ul>	<div>Equity</div> <b>Non-current liabilities</b> Provisions <ul style="list-style-type: none"> <li>• Pensions</li> <li>• Deferred Tax</li> <li>• Other long-term provisions</li> </ul> Financial liabilities (long-term borrowings and issuances)  <b>Current liabilities</b> Financial liabilities (short-term borrowings, issuances and payables)  Current tax payable  Short-term provisions	Cost of sales  Gross profit Other income Distribution costs Administrative expenses Other expenses Finance costs Share of profit of associates <sup>(a)</sup>  <b>Profit before tax</b> Income tax expense  <b>Profit for the year from continuing operations</b> Loss for the year from discontinued operations  <div>PROFIT FOR THE YEAR</div>

# Changes in balance sheet line items could impact performance



Assets

Non-current assets  
Intangibles (incl. Goodwill)

Property, Plant & Equipment

Liabilities and Equity

Equity

Non-current liabilities  
Provisions

- Assume a drop in interest rates (as evidenced in the current environment)

- Profit or loss for the period is often used by analysts for multiple calculations and ratio analysis
- Whilst the interest effect recorded for an item is “real”, the impact on earnings is a cet. par. effect only, as
  - Discounting does not encompass all factors (remember the “*be complete*”)
  - Not all items are discounted
  - Not all items that are discounted use the same factors in valuation
- However, offsetting effects are taken into account for some items (for others, the cost principle in accounting prohibits recognising any counter-effect, e.g. potential write-ups of goodwill → increased headroom for non-impairments)

Profit for the year from continuing operations  
Loss for the year from discontinued operations

PROFIT FOR THE YEAR

## Summary

1. We are experiencing historically low interest rates
2. It is uncertain how long they will persist
3. Their impact on financial reporting can be narrowed down to two issues:
  - In accounting, we do not take time value of money into consideration for every item; if we do, we do it inconsistently (→ ‘housekeeping’ for my domain, the accountants)
  - The main issue troubling entities as regards financial reporting seems to be the effect arising from rate *changes* rather than their *absolute point values*

This seems to suggest that enhanced communication is necessary to diligently explain the effects (points to consider for audit committees, external auditors [→ Key Audit Matters] and enforcers, but also users of financial information)

# Some research questions

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1. Given the ECB's monetary policy decisions, (how much) have interest rates in the Euro area lost their power as an indicator of risk?
2. Do negative interest rates have an impact on the time value of money concept? If so, what is it?
3. How are capital markets digesting financial information impacted by a low interest environment?
4. If financial reporting was not producing reliable and relevant information, what would need to be changed in order to rectify any information gap?