IVC Snippets 2019/01

In focus: IFRS 16

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IVC

Dear Reader,

we are pleased to present the first issue of the IVC Snippets. In the course of our project work we are constantly faced with new challenges and complex professional questions, for which we work out innovative and finely tuned solutions. Against this background we developed the idea to provide extracts of our work to the public.

This insight into the engine room of IVC will offer you valuable assistance and suggestions for your everyday work. We are always happy to receive your feedback and to enter into dialogue with you. If you have any questions, we will be pleased to be at your disposal: agile, individual and personal, with custom made solutions.

In this Snippet IVC analyses the importance of IFRS 16 by reference to 102 HDAX-Companies. The main aspect here is the appropriate determination of the incremental borrowing rate. In the following IVC presents the IVC toolbox as a a practice-oriented solution for the derivation of an incremental borrowing rate.

With best regards from the „Ruhrgebiet"

Lars Franken and Jörn Schulte

IVC Snippets – Executive Summary

Earlier procedure

/ So far companies can classify each of its leases according to the IFRS as either an operating lease or a finance lease, depending on how the risks and rewards are allocated between lessee and lessor (IAS 17.7).

/ From the perspective of the lessee, the operating lease was preferred: the lessee did not recognize a liability on the balance sheet, only a disclosure in the notes was required.

Criticism

/ The presentation as operating lease, linked to the chance of window dressing has been criticised frequently in the past.

/ In this context the opportunity to classify lease contracts as operating or finance lease has been considered as problematic.

/ The IASB intends to impose strict regulations on accounting manipulation.

Improvement

/ In January 2016 the IASB has published the new standard IFRS 16 („Leases"), it has to be applied as of 1st January, 2019.

/ As a result, "nearly" all leases will be recognized on the balance sheet. Exceptions include "short-term-leases" with a term of less than 12 months and "low-value-leases" for which the underlying asset is of low value e.g. tablets, computer and phones. (IFRS 16.5 in combination with IFRS 16 appendix B.8).

/ The lessee recognizes the leased right of use as an asset and a corresponding lease liability on the balance sheet. For the determination of present values adequate interest rates are necessary.

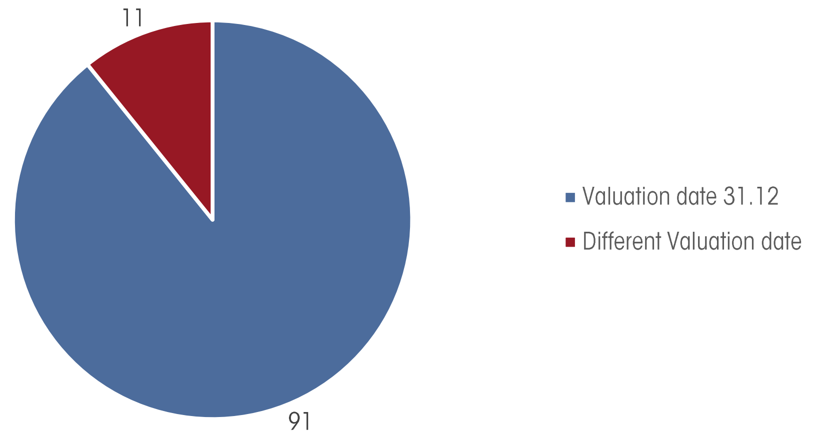
IVC Snippets

/ We conducted research on companies listed on HDAX regarding the importance of IFRS 16. In some cases, IFRS 16 has a significant impact on the balance sheet and the interest rates used are clearly spread. In practice, the derivation of an appropriate interest rate is an essential challenge.

/ In the following, we present our practice-orientated IVC toolbox to derive the appropriate discount rate. As an illustrative example, we present first results for selected countries as of January 1, 2019 and March 31, 2019.

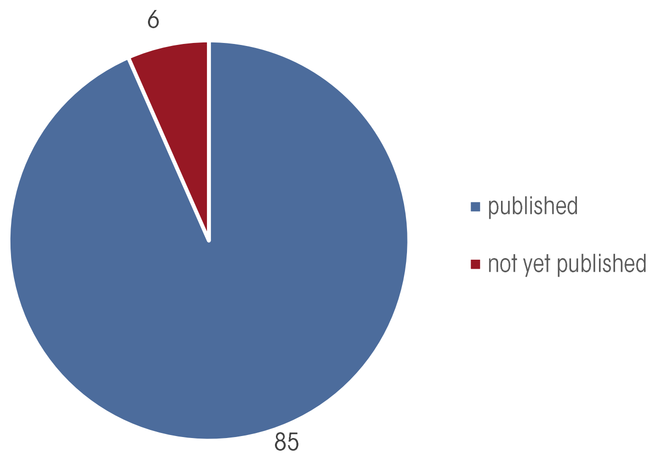
Annual Report Analysis

Valuation Date



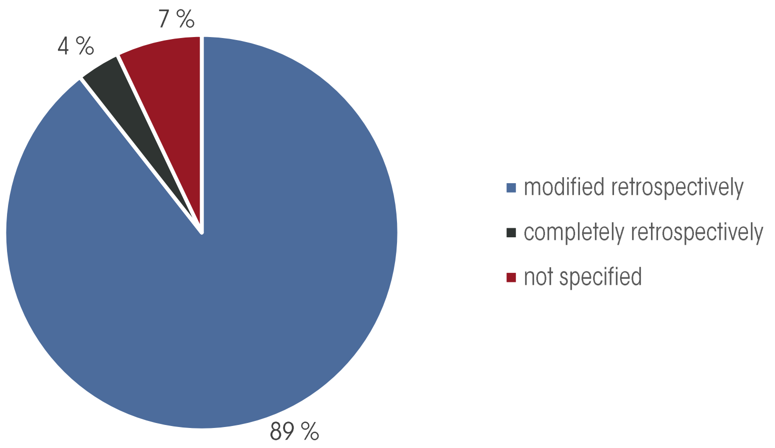
- Our following analysis is based on the company data from HDAX, which consists of all companies of DAX, MDAX and TecDAX.
- By December 31, 2018, there are 102 companies traded in HDAX. Out of these 102 companies, 91 set the end of their fiscal year 2018 on December 31, 2018.

Sample Data



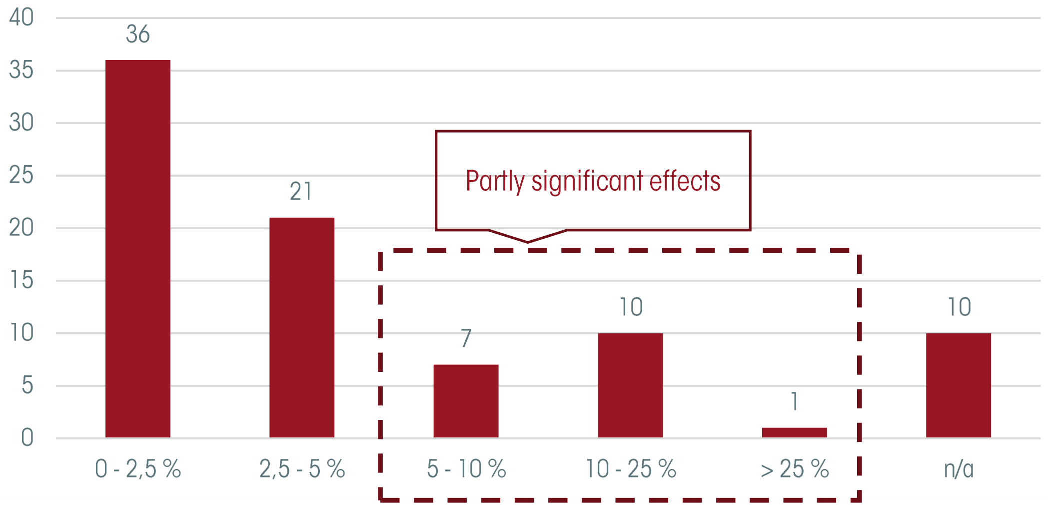
- 85 of those 91 companies have published their annual report for 2018 by March 31, 2019. These companies constitute our data base.
- Nine out of these 85 companies have applied IFRS 16 already in fiscal year 2018, 76 companies will apply IFRS 16 in 2019.
- Our Analysis is focused on:
  - the transition methodology,
  - the effect on the balance sheet as well as
  - the discount rate applied.

Application Method



- A lessee shall apply this standard to its leases either:
  - retrospectively to each prior reporting period in which IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors was applied **(completely retrospectively);** or
  - retrospectively with the cumulative effect of initially applying the Standard recognised at the date of initial application in accordance with paragraphs C7-C13. (IFRS 16. App. C5) (**modified retrospectively**)

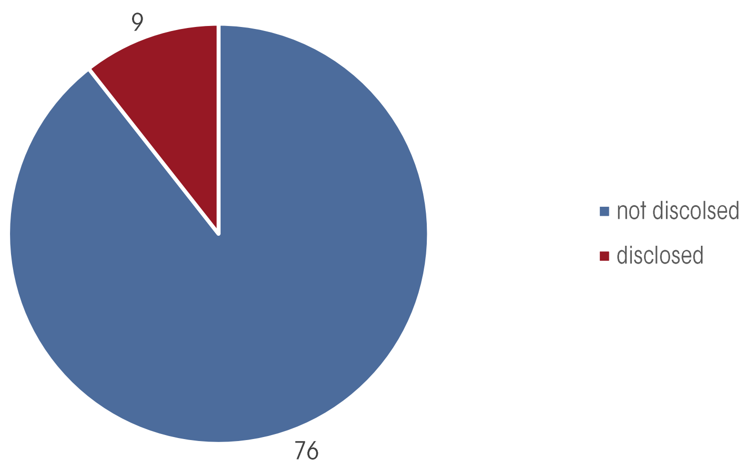
Balance Sheet Expansion



- IFRS 16 effects the balance sheet total of the companies to various extents. While 64 companies expect an increase of the balance sheet total of less than 10 %, the PUMA SE exhibits the maximum increase of more than 60 %.
- For companies which applied the IFRS 16 in 2018, the average balance sheet expansion range is between 0 %-18,4 %.
- In general, companies which operate in consumer segments show a significant increase of the balance sheet total, while companies in capital-intensive / manufacturing industries exhibit a lower increase of the balance sheet total.

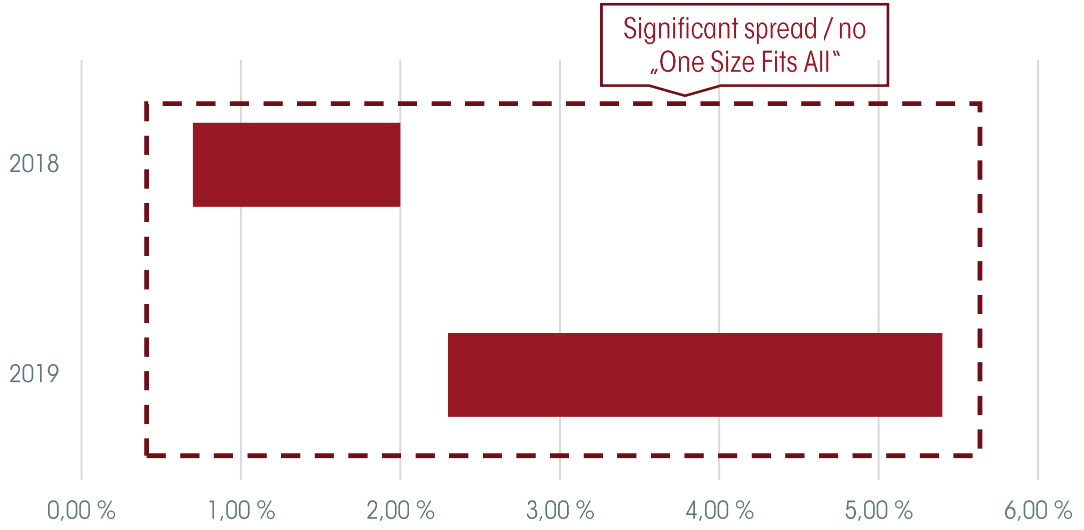
Annual Report Analysis

Applied Discount Rate



- In total, only 9 of the analysed companies mentioned the planned or used discount rate in their annual report.
- Only 5 of those companies which have adopted the new standard in 2018, disclosed their implemented discount rate.

Level of Discount Rate



- The discount rate of companies that have already voluntarily applied the new standard in 2018 varies from 0,70 % to 2,00 %. The future discount rates that will be applied by the respective companies for their leasing liabilities in fiscal year 2019 vary from 2,30 % to 5,40 %.
- The total spread ranges from 0,70 % to 5,40 %, so the lease interest rates have to be determined specifically for the concrete individual case. Therefore, a general rule is not appropriate in the specific case.

Our Methodology Notes

Background

- In order to determine the lease liability, the lease payments shall be discounted by an appropriate discount rate.
- Accordingly, IFRS 16 requires a lessee to discount the lease liability using the interest rate implicit in the lease if it is determinable. If not, the lessee should apply the incremental borrowing rate (IFRS 16.26 in combination with IFRS 16 appendix A).

Relevant standards

- IFRS 16 Appendix A defines the discount rate for lease transactions as follows
  - The interest rate that causes the present value of the lease payment and the unguaranteed residual value to equal the sum of the fair value of the underlying asset and any initial direct cost of the lessor.
- The alternative incremental borrowing rate is the incremental borrowing rate applicable to comparable financing (IFRS 16 Appendix A):
  - Interest rate that a lessee would be required to pay if it were to borrow with comparable certainty, for a comparable term, the funds it would need in a comparable economic environment for an asset with a value comparable to the right of use.

General procedures

- The IASB takes the view that the derivation of the interest rate via the lessee`s incremental borrowing rate should be the general rule, because the lessee does not have all information which is important to determine the interest rate implicit in the lease.
- In the following IVC provides the IVC toolbox as practical solution to derive the incremental borrowing rate as required by IFRS 16.

Derivation of Incremental Borrowing Rate

Definition

Incremental Borrowing Rate $r_{Leasing}$	=	Risk-free rate r_f	+	Risk premium$_{LN}$ r_{LN}	–	Collateralisation r_C

Risk-free rate r_f + [Country specific risk premium r_{CRP} + Inflation adjustment r_{INF}]

Flexible adjustments to the concrete individual case possible (simplified typification and complex analyses possible)

Background / Requirement

Robustness, Plausibility	=	Reflection of currency, time and economic risks	+	[Considered, if the country differs from the risk free rate´s country	+	Considered, if the country differs from the risk free rate´s country]	+	Credit risk adjustment regarding specific business/industry	–	Quality and characteristics of the underlying assets

Application example of the IVC toolbox

In General

- Interest rates are calculated for two maturity ranges:
    - ≤ 5 and
    - > 5 years

Risk premium

- The derived credit spread which represents the credit risk of the company is based on the rating approach.
- Usage of corporate bond yields for company bonds with identical rating classes and given maturities.
- Assumption for the illustrative example: Rating of the sample company is BB and the credit spread is derived from German corporate bonds and considered for all countries to be the same (credit spreads can also be determined country specific)

Risk-free rate

- Country specific risk-free rate is derived by government bond yields.
- For euro area countries, yields on German government bonds are regarded as the risk-free benchmark (no inflation adjustment).
- Possible exceptions: countries such as Italy and Greece are considered to have a higher country risk. In this case, a country risk premium should be applied.

Adjustment for Collateralisation

- In principle, a distinction should be made between mobile (e.g. forklift trucks) and immobile (e.g. office buildings) leases.
- Assumption for the lease of mobile assets: No separate consideration of a collateralisation.
- Assumption for the lease of real estate: the sum of the risk-free rate and credit spread is adjusted by the (negative) spread of collateralised bonds.

The derivation of the collateralisation is transparent and market-based for you and the auditor

Interest rates for selected countries as of January 1, 2019

$r_{Leasing}$	Risk-free rate (r_f) ≤ 5 Y	Risk-free rate (r_f) > 5 Y	+	Risk premium$_{LN}$ (r_{LN}) ≤ 5 Y	Risk premium$_{LN}$ (r_{LN}) > 5 Y	=	Borrowing rate mobile ($r_{Leasing}$) ≤ 5 Y	Borrowing rate mobile ($r_{Leasing}$) > 5 Y	–	Collateralisation r_C ≤ 5 Y	Collateralisation r_C > 5 Y	=	Borrowing rate immobile ($r_{Leasing}$) ≤ 5 Y	Borrowing rate immobile ($r_{Leasing}$) > 5 Y
Euro	-0.47 %	0.16 %		2.22 %	3.55 %		1.75 %	3.71 %		0.48 %	0.73 %		1.27 %	2.98 %
USA	2.84 %	3.01 %		2.22 %	3.55 %		5.06 %	6.56 %		0.48 %	0.73 %		4.58 %	5.83 %
UK	0.86 %	1.26 %		2.22 %	3.55 %		3.08 %	4.81 %		0.48 %	0.73 %		2.60 %	4.08 %
Switzerland	-0.65 %	-0.17 %		2.22 %	3.55 %		1.57 %	3.38 %		0.48 %	0.73 %		1.09 %	2.65 %
Canada	2.21 %	2.33 %		2.22 %	3.55 %		4.43 %	5.88 %		0.48 %	0.73 %		3.95 %	5.15 %
Japan	-0.08 %	0.06 %		2.22 %	3.55 %		2.14 %	3.61 %		0.48 %	0.73 %		1.66 %	2.88 %

The partial neglect of a collateral spread observable in practice therefore leads to inappropriate results.

Interest rates for selected countries as of March 31, 2019

$r_{Leasing}$	Risk-free rate (r_f) ≤ 5 Y	Risk-free rate (r_f) > 5 Y	+	Risk premium$_{LN}$ (r_{LN}) ≤ 5 Y	Risk premium$_{LN}$ (r_{LN}) > 5 Y	=	Borrowing rate mobile ($r_{Leasing}$) ≤ 5 Y	Borrowing rate mobile ($r_{Leasing}$) > 5 Y	–	Collateralisation r_C ≤ 5 Y	Collateralisation r_C > 5 Y	=	Borrowing rate immobile ($r_{Leasing}$) ≤ 5 Y	Borrowing rate immobile ($r_{Leasing}$) > 5 Y
Euro	-0.51 %	-0.06 %		2.29 %	3.71 %		1.78 %	3.65 %		0.53 %	0.82 %		1.25 %	2.83 %
USA	2.51 %	2.61 %		2.29 %	3.71 %		4.80 %	6.32 %		0.53 %	0.82 %		4.27 %	5.50 %
UK	0.80 %	1.08 %		2.29 %	3.71 %		3.09 %	4.79 %		0.53 %	0.82 %		2.56 %	3.97 %
Switzerland	-0.74 %	-0.41 %		2.29 %	3.71 %		1.55 %	3.30 %		0.53 %	0.82 %		1.02 %	2.48 %
Canada	1.77 %	1.85 %		2.29 %	3.71 %		4.06 %	5.56 %		0.53 %	0.82 %		3.53 %	4.74 %
Japan	-0.17 %	-0.11 %		2.29 %	3.71 %		2.12 %	3.60 %		0.53 %	0.82 %		1.59 %	2.78 %

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Imprint and important notes

Publisher

IVC Independent Valuation & Consulting Aktiengesellschaft Wirtschaftsprüfungsgesellschaft
Girardetstr. 2, 45131 Essen

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