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Munich School of Management
Institute for Accounting, Auditing, and Analysis

Empirical goodwill research

Knowledge claims, validity challenges, and implications

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EFRAG TEG WEBCAST MEETING MARCH 2020

2020-03-25



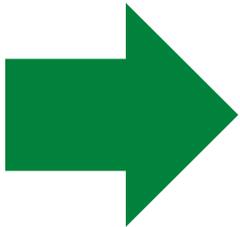
Expectations management

What I intend to convey

- A lot of empirical accounting research (including on goodwill) is potentially **relevant** for policy-makers
- But all of that relevant research is not equally **reliable**
- With that in mind, some **useful insights** for the goodwill debate do emerge
- Others are more **elusive**

What I will **NOT** try to do

- Bore you with regression models, arcane technical jargon and formulas
- Review all – or even most of – the available studies (refer to the paper)
- Make clear and simple recommendations (but I do have opinions, grounded in years of studying the subject)



What I hope you'll take away from this talk and discussion:

Avoiding erroneous conclusions may take time and effort – but it is necessary if „evidence-informed standard setting“ (Teixeira 2014*) is intended. And: There are many researchers willing to help.

* Teixeira, A. (2014). The international accounting standards board and evidence-informed standard-setting. *Accounting in Europe*, 11(1), 5-12.

Interpreting empirical research (1/3)

CNN health Food Fitness Wellness Parenting Vital Signs

The new coronavirus can last on surfaces for up to three days, study says

By **Jacqueline Howard** and Jason Hanna, CNN

🕒 Updated 0051 GMT (0851 HKT) March 19, 2020

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2020 ELECTIONS

CORONAVIRUS



Chloroquine, an old malaria drug, may help treat novel coronavirus, doctors say

Chloroquine, or hydroxychloroquine, has been used to treat malaria since 1944.

By **Dr. Angela N. Baldwin**

19 March 2020, 18:36 • 8 min read



Sources: <https://edition.cnn.com/2020/03/18/health/coronavirus-surfaces-study/index.html>; <https://abcnews.go.com/Health/chloroquine-malaria-drug-treat-coronavirus-doctors/story?id=69664561>

Interpreting empirical research (2/3)

Wait a second...

- What was the outcome of interest, and how was it measured?
 - Virus surviving on a dried-up surface vs in a droplet of serum?
 - Virus concentration (throat vs lungs) vs actual health outcomes (deaths)?
 - ...

- What was the exact experimental design?
 - Laboratory conditions vs (realistic) field conditions?
 - Comparable treatment and control group? Starting conditions?
 - ...

- ...

Interpreting empirical research (3/3)

Goodwill IOA is less useful to investors than amortization, study shows

- If accounting research were headline material (which it is *not*), this is how I imagine a science journalist might have summarized a paper like this one:
 - Hulzen, P. V., Alfonso, L., Georgakopoulos, G., & Sotiropoulos, I. (2011). Amortisation Versus Impairment of Goodwill and Accounting Quality. *International Journal of Economic Sciences & Applied Research*, 4(3).

BUT:

- How is „useful to investors“ („accounting quality“) measured empirically?
 - Is „value relevance“ relevant to standard setters? – Battles have been fought over this...*
- Does the paper provide a fair apples-to-apples comparison?
 - Compares „data from 2001-2004 for the amortisation method and 2005-2010 for the impairment method“ – simplest form of a pre-post test design
- ...

* Barth, M. E., Beaver, W. H., & Landsman, W. R. (2001). The relevance of the value relevance literature for financial accounting standard setting: another view. *Journal of accounting and economics*, 31(1-3), 77-104, versus Holthausen, R. W., & Watts, R. L. (2001). The relevance of the value-relevance literature for financial accounting standard setting. *Journal of Accounting and Economics*, 31(1-3), 3-75.

The study

- Reviews 50+ **empirical goodwill studies** published in high-quality journals
- Categorizes studies by
 - **Topic area:** (1) decision usefulness studies; and (2) reporting choice studies
 - **Knowledge claim:** (1) descriptive; (2) explanatory (causal); and (3) predictive studies
- Identifies a range of **validity challenges** related to theory, variable measurement, and empirical design
- Addresses issues **relevant to standard-setting**
 - initial measurement (e.g., separation of goodwill and identifiable intangibles during PPA)
 - subsequent measurement (e.g., effectiveness of the goodwill impairment test)
 - presentation and disclosure
- Provides
 - Suggestions for **future research** (e.g., greater use of field data, attention to validity issues)
 - Insights that **policy-makers** should consider when using empirical research

The empirical goodwill literature addresses two broad issues

Usefulness and information content of goodwill-related accounting amounts

- Value relevance and debt contracting relevance of goodwill, amortization and impairment
- Information content of goodwill impairment
- Predictive value of goodwill and impairment



Idea

If goodwill accounting standards “work”, goodwill-related accounting amounts should contain useful information for users

Goodwill-related accounting and reporting decisions

- Purchase price allocation and recognition of goodwill
- Determinants of goodwill impairment decisions



Idea

If goodwill accounting standards “work”, these decisions should reflect fundamental firm performance – not management’s incentives

Key insights: (1) Decision-usefulness studies

- Goodwill-related amounts (i.e., goodwill balances and goodwill impairment losses) are generally **value relevant**
 - That is, they correlate in theoretically expected ways with proxies for the economic value of goodwill as well as indicators for firm value and financial performance.
 - This is true both before and after the introduction of impairment-only (IFRS 3, SFAS 142)
- Goodwill impairment announcements seem to have **information content ('news')**
 - That is, significant market reactions in “event studies”
 - However, market often appears to anticipate large parts of the losses
- Goodwill impairment **predicts** (negatively) future operating performance
- Goodwill impairment decisions appear to reflect **economic deterioration**
 - That is, are associated with stock market return and future accounting performance

Key insights: (2) Reporting-choice studies

- Goodwill accounting does provide room for managerial **discretion**.
- Management does use this discretion **opportunistically** (if not *only* opportunistically).
 - Decisions (e.g., PPAs, initial goodwill measurement, and goodwill impairment) are associated with proxies for firm-level and managerial **incentives**.
 - This is also true for **disclosures** on M&A transactions and goodwill impairment testing (which do matter to financial analysts and investors).
- Goodwill impairment decisions and the quality of disclosures are related to the intensity of **monitoring, oversight** and **enforcement**.
 - Hence, problems in current goodwill accounting may, at least partly, be an “**application issue** that would best be addressed by other means, rather than by changing the standard” (Scott 2019*: 3).

* Scott, T. (2019). Better information about business combinations – Goodwill and Impairment: Project up-date. (<https://www.ifrs.org/-/media/project/goodwill-and-impairment/in-brief-goodwill-and-impairment-factsheet.pdf?la=en>)

Summary

- All relevant studies are **not created equal(ly valid)**
- If „**evidence-informed standard setting**“ (Teixeira 2014*) is intended, there is no way around finding and digesting the relevant research
- There is **help** out there – *but*: unlikely that “one” authority will resolve an issue
- Given this disclaimer: **Some reliable insights do seem to emerge** from the empirical research reviewed in Amel-Zadeh, Glaum and Sellhorn (2020)
- Going forward: **Commissioning** specific (original and review) studies
 - Specify outcomes of interest, and how to measure them
 - Ask specifically for validity assessments
 - Ask for economic impact assessment („real effects“)
 - Help with data collection, broker/share contacts and field data; be available for interviews

*Teixeira, A. (2014). The international accounting standards board and evidence-informed standard-setting. *Accounting in Europe*, 11(1), 5-12.

Q&A

- Thank you very much for the opportunity to share and discuss my work!

The paper and other related research

- The full paper details are: **Amel-Zadeh, Amir, Martin Glaum and Thorsten Sellhorn (2020) Empirical goodwill research – Knowledge claims, validity challenges, and implications.**
- The paper is **under revision for resubmission** to *European Accounting Review*, and therefore not yet public.
- If you would like a copy, please contact me: **sellhorn@bwl.lmu.de**
- My other **research work** is found
 - here (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=500949) and
 - here (https://www.rwp.bwl.uni-muenchen.de/personen/professoren/sellhorn/cv_sellhorn_nov_19.pdf)
- Please consider the large-scale German research network “**Accounting for Transparency**”, where 80+ researchers work on projects related to financial reporting and transparency (<https://accounting-for-transparency.de/>)
 - **see next page**



ABOUT

The TRR 266 Accounting for Transparency is a trans-regional Collaborative Research Center funded by the German Research Foundation (Deutsche Forschungsgemeinschaft – DFG). Our team of more than 80 dedicated researchers examines how accounting and taxation affect firm and regulatory transparency and how regulation and transparency impact our economy and society. We intend to help develop effective regulation for firm transparency and a transparent tax system. Naturally, we also ensure transparency of our own research.

UPCOMING EVENT



30 March 2020

10:00-17:00

1.Forum: Forschung im Dialog

Rechnungswesen, Steuern &
Transparenz

Die Veranstaltung wurde abgesagt.

Please do not hesitate to get in touch!



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1. Position

Since 2014, Thorsten has been Director of the Institute for Accounting, Auditing and Analysis at the LMU Munich School of Management. He teaches Financial Accounting, International Accounting, Accounting for M&A Transactions, and Financial Statement Analysis & Valuation in BSc, MSc, MBA, and PhD programs. Thorsten studied and conducted research at the universities of Bochum, Wisconsin-Madison, Arizona-Tucson, at Boston University and at Harvard Business School.

2. Corporate and consulting experience/practical experience

Thorsten has been designing and teaching executive education programs for major international corporations and organizations including Bayer, Volkswagen, Henkel, Deutsche Bank, Sal. Oppenheim, RTL, the German CPA Institute, and the German ministry of Finance for more than 20 years. He has done consulting work for companies like Deutsche Post DHL, Daimler, Volkswagen and Borussia Dortmund. He is member of the EFRAG Academic Panel and has participated in working groups of the German Accounting Standards Committee.

3. Research focus and publications highlights

Thorsten's research interests focus on IFRS, the role of accounting information in capital markets, the economic impact of accounting standards, as well as accounting quality and earnings management. His research is published in leading international journals like *Management Science*, *The Accounting Review*, *European Accounting Review*, *Review of Accounting Studies* and *Abacus*. Thorsten is a co-author of the leading German textbook on international accounting, *Internationale Rechnungslegung*. He currently serves as President of the European Accounting Association.

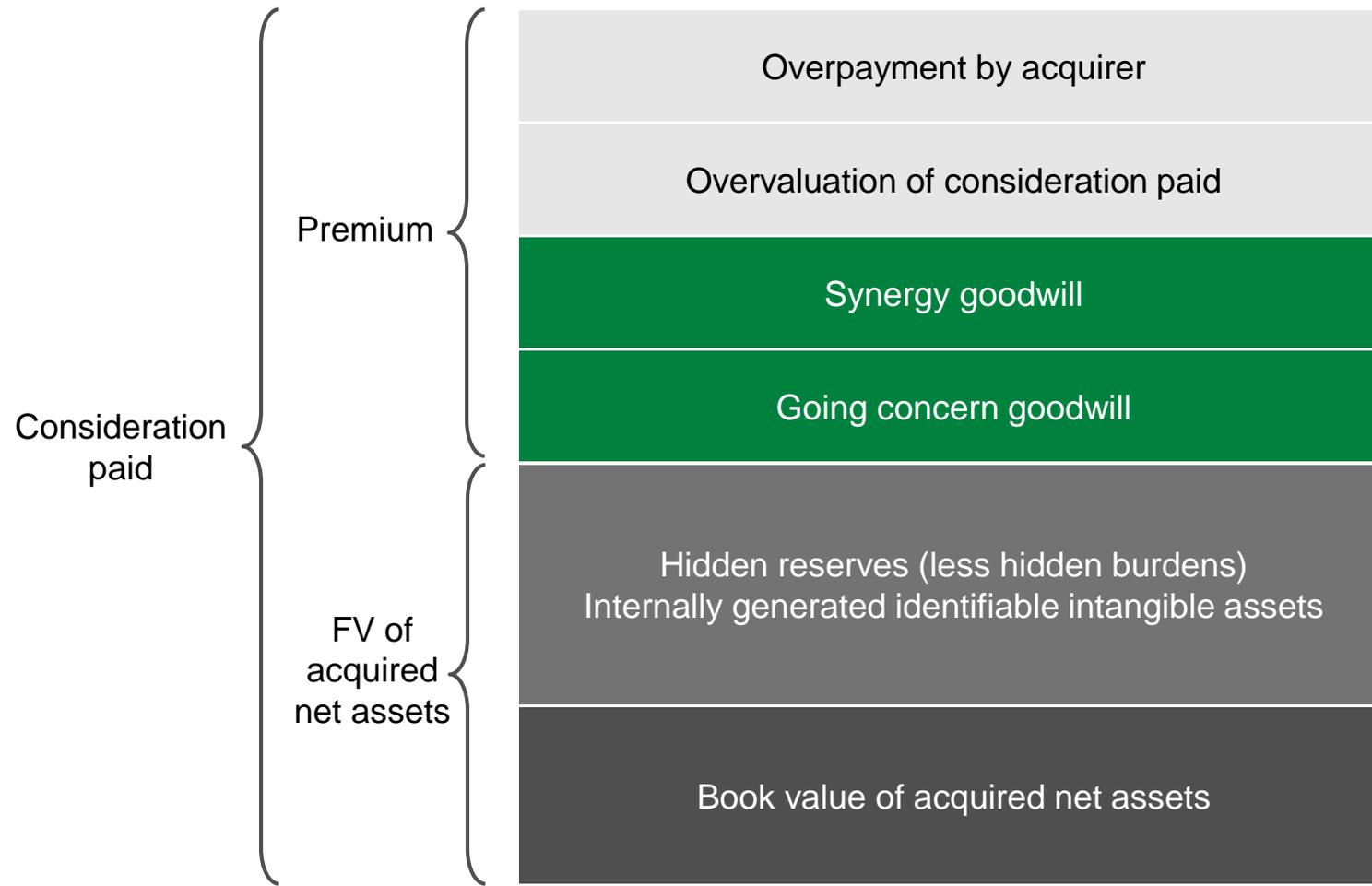
Backup

Inconsistent treatment of positive vs negative purchase price premiums

B's acquisition-date balance sheet (at fair value, including separately identifiable intangible assets)			
Assets	100	Equity	30
		Liabilities	70

	Scenario 1: Positive premium	Scenario 2: Negative premium
Consideration paid	65	25
less FV of acquired net assets	-30	-30
Difference (X)	35	-5
<i>Potential treatments</i> (given double-entry logic)	<ul style="list-style-type: none"> • Asset ↑ • Liability ↓ • Equity ↓ or expense 	<ul style="list-style-type: none"> • Asset ↓ • Liability ↑ • Equity ↑ or income
Treatment under IFRS 3	Goodwill (asset)	Bargain purchase gain (income)

What's in the positive purchase price premium? (According to IFRS 3.BC313)



Current goodwill-related requirements betray IASB's deep skepticism in goodwill as a (non-wasting) asset *(and, perhaps, in preparers' motives)*

- **Ex ante:** Initial measurement requirements minimize goodwill amount
 - Weak recognition criteria for identifiable intangible assets separate from goodwill
 - Fair value as a measurement basis for assets and liabilities acquired

- **Ex post:** Subsequent measurement requirements designed to challenge and eliminate goodwill as soon as possible
 - Annual impairment test
 - Value in use excludes future cash flows expected from future restructurings or improvements/enhancements
 - Value in use requirements restrict growth rate assumptions
 - Impairment of a CGU allocated first to goodwill
 - No reversal of goodwill impairment

Preliminary views from the IASB's September 2019 Project Update

Quelle: <https://www.ifrs.org/-/media/project/goodwill-and-impairment/in-brief-goodwill-and-impairment-factsheet.pdf?la=en>

Area	Preliminary views
Initial measurement	<ul style="list-style-type: none">▪ Not allow more intangible assets to be included in goodwill.
Subsequent measurement	<ul style="list-style-type: none">▪ Not feasible to make goodwill impairment test significantly more effective▪ Amortisation of goodwill would not provide significantly better information▪ Reduce cost and complexity of goodwill impairment test by:<ul style="list-style-type: none">– providing relief from the mandatory annual quantitative impairment test, and– simplifying some of the requirements for estimating value in use
Presentation and disclosure	<ul style="list-style-type: none">▪ Enhance transparency: Require presentation of total equity before goodwill▪ Enhance disclosures to improve the information provided to users about an acquired business and its subsequent performance<ul style="list-style-type: none">– even if that information must be on a combined basis where the acquired business has been integrated into an existing business

Initial measurement: Purchase price allocation

Some evidence that PPA decisions reflect management's incentive to avoid future amortization of finite-lived intangibles

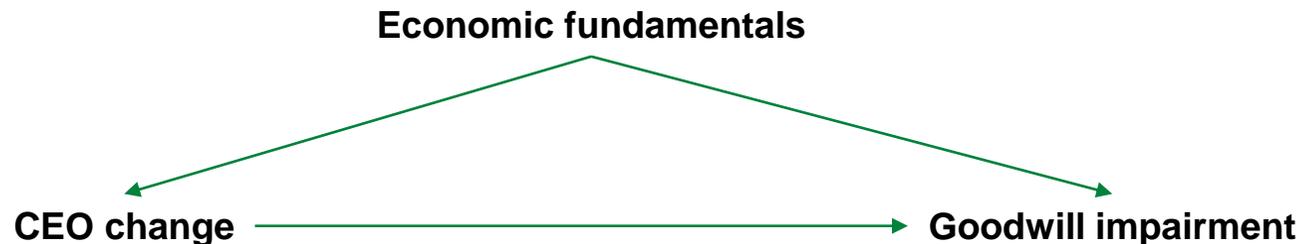
- On average 45-65% of purchase price premiums allocated to goodwill
 - Larger in U.S. than Europe (Ott and Guenther 2010)
 - Large across-industry variation (Glaum and Wyrwa 2011)
 - Higher in the proportion of managers' cash bonuses (Shalev et al. 2011, Detzen and Zülch 2012)
 - Higher where acquirer's stock price drops on deal announcement (Lys et al. 2012); the higher the drop, the higher the goodwill (overpayment?)

- Users perceive premium allocated to identifiable intangibles as value-reducing due to future amortization charges
 - Consistent with management's incentive to lump everything into goodwill and avoid that (Hellman et al. 2016)

Subsequent measurement: Does the impairment test work? (1/2)

Some evidence that goodwill impairment decisions reflect management's incentives (rather than *exclusively* economic fundamentals)

- Early studies (Elliott and Shaw 1988; Zucca and Campbell, 1992; Francis et al. 1996)
 - Transition-period goodwill write-offs partly consistent with incentives to avoid earnings declines and losses (Sellhorn 2004, Beatty and Weber 2006)
 - Several newer studies conform these findings
- **Challenge:** Establishing *causal* evidence of goodwill impairment determinants



Subsequent measurement: Does the impairment test work? (2/2)

Early studies: Some evidence that goodwill impairments contain new information

- Stock price generally drops with news of goodwill write-offs (Wen and Moehrlle 2016)
- But goodwill impairments lag behind economic value deterioration (Hayn and Hughes 2006)

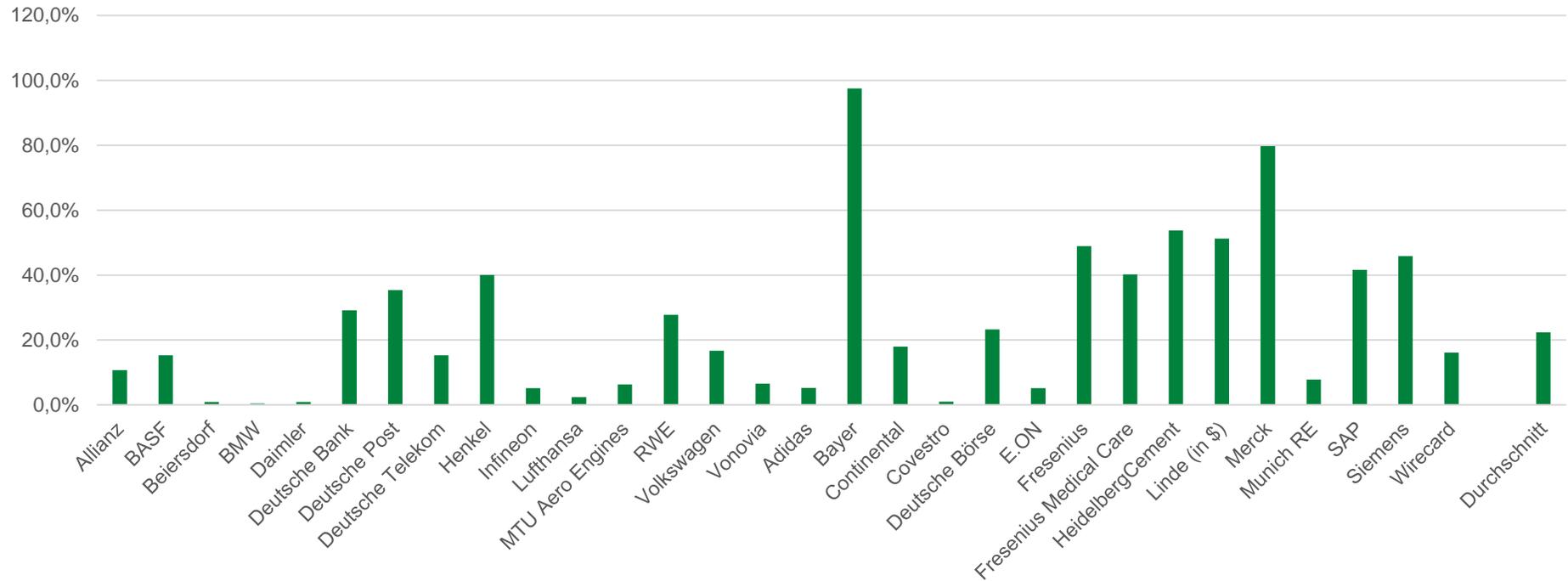
Newer studies: Some evidence that impairment does provide incremental information to the market

- Stock market anticipates impairment, but does not fully price its magnitude (Chen, Kohlbeck, and Warfield 2008; Li, Shroff, Venkataraman, and Zhang 2011; Bens, Heltzer, and Segal 2011)
- But goodwill impairments to some degree predictable (Li and Sloan 2014)

Some evidence that goodwill impairment helps predict future cash flows (Jarva 2009)

Subsequent measurement: Is amortization any better? (1/2)

Goodwill / 10 Jahre / EBIT (2018, in %)

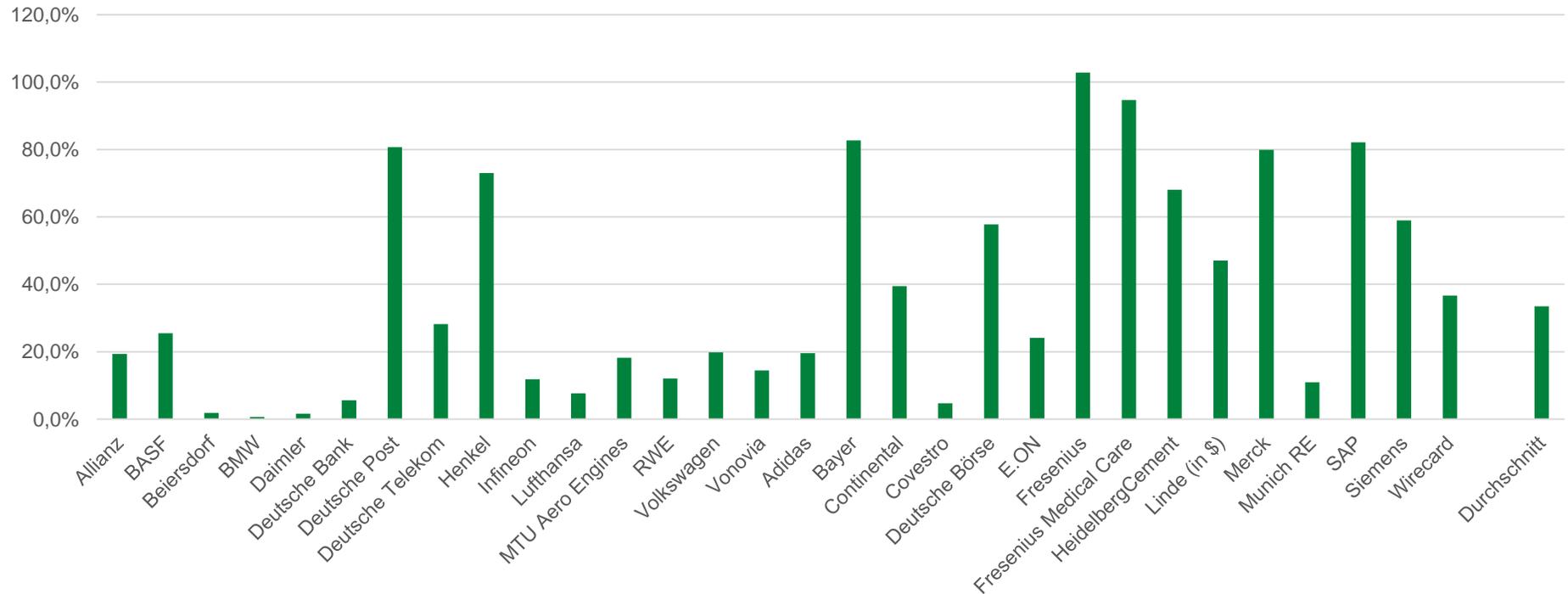


Subsequent measurement: Is amortization any better? (2/2)

- **Some evidence that goodwill is priced as an asset**
 - Positive association between equity market values and reported goodwill assets
 - But lower valuation multiple than for other assets (Choi, Kwon, and Lobo 2000)
 - Markets distinguish to some degree between valuable and worthless goodwill portions (Henning, Lewis, and Shaw 2000)
- **Some evidence that value relevance of goodwill increased following the adoption of IFRS (Aharony et al. 2010)**
- **Some evidence that goodwill amortization understates the goodwill value decline as perceived by the stock market**

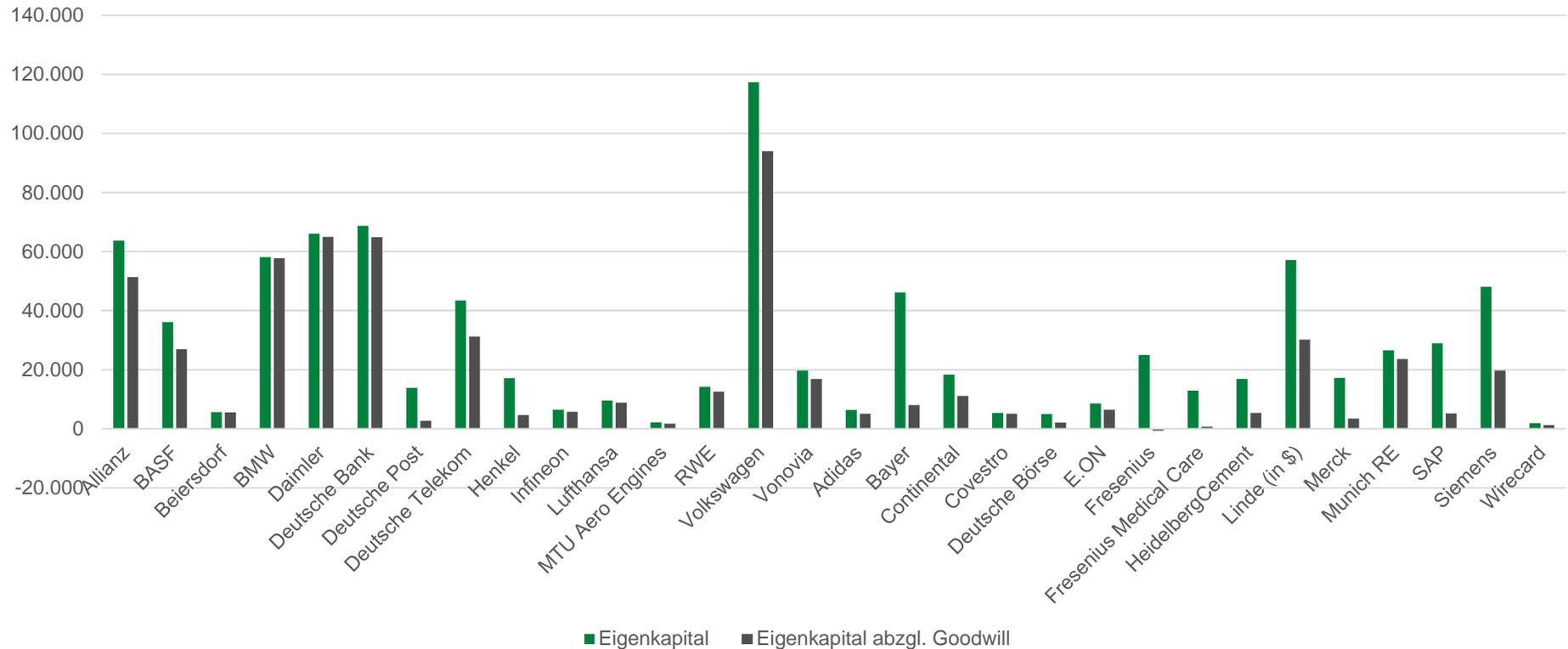
Presentation and disclosure: Equity before goodwill and synergies (1/4)

Goodwill / EK (2018, in %)



Presentation and disclosure: Equity before goodwill and synergies (2/4)

Eigenkapital (2018, in Mio. €)



Presentation and disclosure: Equity before goodwill and synergies (3/4)

- Presenting „equity before goodwill“
 - 50% of DAX 30 firms presented goodwill separately in the balance sheet
 - 50% presented goodwill as part of the intangible assets line item

	Goodwill presented as separate line in balance sheet	Goodwill presented among intangible assets
Number of firms	15	15
Goodwill (mean)	13.166	6.180
Goodwill (median)	11.450	2.842
Goodwill / 10 / EBIT (mean)	38,3%	11,8%
Goodwill / 10 / EBIT (median)	40,2%	10,7%
Goodwill / EK (mean)	60,9%	17,1%
Goodwill / EK (median)	57,7%	14,5%

Presentation and disclosure: Equity before goodwill and synergies (4/4)

Synergy disclosures

- Goodwill is a massive asset for which the asset definition criteria (future economic benefits) are *not assessed, but assumed*

- Keienburg et al. (2019)
 - 1000 largest public-to-public deals 2008-2017
 - About 50% of deals disclose expected synergies
 - Synergy disclosures associated with positive market reactions

- Hillert and Woltschläger
 - 2433 European deals 1990-2017 that have press releases or conference calls
 - Synergy words more frequent for large deals (vs small) and conference calls (vs press releases)