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Valuation of non-cash contributions in the German start-up balance sheet according to the German Commercial Code, Austrian Commercial Code and International Financial Accounting Standards

DISSERTATION THESIS

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DECLARATION

I hereby declare, that I have elaborated this thesis on my own with the help of the supervisor, and I include all the resources used in the final list of references.

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ABSTRACT

The current economic crisis shows that the valuation of assets is an important subject for our global economy because reserves help a company to better withstand a crisis. The valuation of assets should therefore be perfected as soon as a company is established. How non-cash contributions are valued in the start-up balance sheet has long-term consequences for future balance sheets and profit and loss accounts.

There is a loophole in the valuation of non-cash contributions in Germany as the §§ 242 I, 253 I, 255 I HGB (German Commercial Code) are only to be applied by analogy. When comparing this with international standards on the other hand, the valuation of non-cash contributions on company start-up is clearly regulated in other countries; for example in Austria by codification of the fair value in § 202 UGB (Austrian Commercial Code) and in the IFRS reporting system by the principle of fair value. Due to the German loophole, there is an ongoing controversial discussion in academic literature on the valuation of non-cash contributions. This leads to a need to investigate the subject in more detail with the aim of ascertaining whether there should be a uniform perspective and accordingly an ideal valuation.

The dissertation concludes that non-cash contributions should be valued at the attributable market value (fair value). With the introduction of the term, attributable market value in § 255 IV HGB, the German legislator has taken the first step in this direction and should now take the second step and extend the application of this term to non-cash contributions analogous to § 202 UGB. If this recommendation is adopted, this would contribute to the standardization of reporting from a scientific perspective and to the solidity of German companies.

Key words: non-cash contribution, start-up, notional costs of acquisition, historical cost principle, hidden reserves, attributable market value, fair value

ABSTRAKT

Současná hospodářská krize ukazuje, že oceňování aktiv je důležitým tématem pro naši glo-bální ekonomiku, protože rezervy pomáhají podniku lépe odolávat krizi. Proto by mělo být ocenění aktiv dokončeno ihned, jakmile je podnik založen. To, jak jsou oceněny nepeněžní vklady v zahajovací rozvaze má dlouhodobé důsledky pro rozvahy a účty zisků a ztrát v budoucích obdobích.

Při oceňování nepeněžních vkladů existuje v Německu určitá mezera v zákoně, protože §§
242 I, 253 I, 255 I HGB (německý obchodní zákoník) se použijí jen obdobně. Na druhé straně, porovnáme-li tento stav s mezinárodními standardy, oceňování nepeněžních vkladů při založení podniku v jiných zemích zákon jasně upravuje; například v Rakousku kodifikací reálné hodnoty v § 202 UGB (rakouský obchodní zákoník) a v systému IFRS principem reálné hodnoty. Kvůli německé mezeře v zákoně nadále probíhá v akademické literatuře kontroverzní diskuse o oceňování nepeněžních vkladů. Toto vyvolává potřebu podrobněji prozkoumat toto téma s cílem zjistit, zda by měl existovat jednotný pohled, a tedy ideální oceňování.

V závěru disertační práce se uvádí, že nepeněžní vklady by měly být oceňovány odpovídající tržní hodnotou (reálná hodnota). Zavedením tohoto termínu, odpovídající tržní hodnota v § 255 IV HGB, učinil německý zákonodárce první krok tímto směrem a měl by nyní učinit druhý krok a rozšířit použití tohoto termínu na nepeněžní vklady obdobně § 202 UGB. Bude-li toto doporučení přijato, přispěje to k standardizaci výkaznictví z vědeckého pohledu a k solidnosti německých firem.

Klíčová slova: nepeněžní vklad, založení nového podniku, národní pořizovací náklady, princip historické ceny, skryté rezervy, odpovídající tržní cena, reálná hodnota

CONTENTS

LIST OF ABBREVIATIONS

AG	Aktiengesellschaft, also: "Die Aktiengesellschaft" (periodical)
AktG	Aktiengesetz (German Stock Corporation Law)
Art.	article
BB	Betriebsberater (periodical)
Beck Bil-Komm.	Beck'scher Bilanz-Kommentar
Beck HdR	Beck'sches Handbuch der Rechnungslegung
BewG	Bewertungsgesetz (German Valuation Law)
BFH	Bundesfinanzhof (German Federal Finance Court)
BGH	Bundesgerichtshof (German Federal Court of Justice)
BFuP	Betriebswirtschaftliche Forschung und Praxis (periodical)
BGB	Bürgerliches Gesetzbuch (German Civil Code)
BGBl.	Bundesgesetzblatt (German Federal Law Gazette)
BGH	Bundesgerichtshof (German Federal Court of Justice)
BilMoG	Bilanzrechtsmodernisierungsgesetz (German Accounting Law Modernisation Act)
BilReG	Bilanzrechtsreformgesetz (German Accounting Law Reform Act)
BiRiLiG	Bilanzrichtlinien-Gesetz (German Accounting Principles Act)
BStBl.	Bundessteuerblatt (German Federal Tax Gazette)
BT-DrS.	Bundestagsdrucksache (Paper of German Parliament)
ca.	circa
cf.	compare
DB	Der Betrieb (periodical)
DStR	Deutsches Steuerrecht (periodical)
e.g.	for example
EC	European Community
ed., eds	editor(s)
EStG	Einkommensteuergesetz (German Income Tax Law)
EStH	Einkommensteuerhinweise (Income Tax Information)
EStR	Einkommensteuerrichtlinien (Income Tax Regulations)
et al.	and others
EU	European Union

F.	Framework
f.	following page
ff.	following pages
FR	Finanz-Rundschau (periodical)
G	Guideline
GbR	Gesellschaft des bürgerlichen Rechts (German company constituted under civil law)
GmbH	Gesellschaft mit beschränkter Haftung (German limited liability company)
GmbHG	Gesetz betreffend die Gesellschaften mit beschränkter Haftung (German Limited Liability Company Law)
GmbHR	GmbH-Rundschau (periodical)
HC	historical cost(s)
HdB	Handbuch der Bilanzierung
HdJ	Handbuch des Jahresabschlusses in Einzeldarstellungen
HdR	Handbuch der Rechnungslegung
HGB	Handelsgesetzbuch (German Commercial Code)
HWB	Handwörterbuch der Betriebswirtschaft
HWF	Handwörterbuch der Finanzwirtschaft
HWR	Handwörterbuch des Rechnungswesens
i.e.	that is
IAS	International Accounting Standard(s)
IASB	International Accounting Standard Board
IASC	International Accounting Standard Committee
Ibid.	Ibidem (in the same book/chapter/page)
IDW	Institut der Wirtschaftsprüfer in Deutschland e.V.
IFRIC	IFRS Interpretations Committee
IFRS	International Financial Reporting Standards
JbFSt	Jahrbuch der Fachanwälte für Steuerrecht
KapG	Kapitalgesellschaft(en) (German joint-stock company/companies)
KfW	Kreditanstalt für Wiederaufbau
LG	Landgericht (German regional court)
Lifo	last in, first out
NJW	Neue Juristische Wochenschrift (periodical)

No.	number
OHG	Offene Handelsgesellschaft (German general partnership)
p.	page
PersG	Personenhandelsgesellschaft(en) (German business partnership(s))
pp.	pages
PublG	Gesetz über die Rechnungslegung von bestimmten Unternehmen und Konzernen (German Disclosures Act for specific businesses and corporations)
R	Richtlinie (Regulation)
Ref.	Reference
RGBl.	Reichsgesetzblatt ((German historical) Imperial Law Gazette)
SIC	Standing Interpretations Committee
subc.	Sub-clause
UmwG	Umwandlungsgesetz (German Companies Transformation Act)
Vol.	Volume
vs.	versus
WiSt	Wirtschaftswissenschaftliches Studium (periodical)
WP	Wirtschaftsprüfer (German auditor)
WPg	Die Wirtschaftsprüfung (periodical)
ZEW	Zentrum für Europäische Wirtschaftsforschung GmbH
ZfB	Zeitschrift für Betriebswirtschaftschaft (periodical)
ZGR	Zeitschrift für Unternehmens- und Gesellschaftsrecht (periodical)

1 INTRODUCTION

The economic crisis has shown that the valuation of assets is an important subject in our economy because reserves can help companies to better withstand a crisis. It is therefore important that new company start-ups begin optimizing their valuation of assets right from the onset. The company founder has the legal and social obligation to bring asset contributions to the company.[1] If the provision is not a cash benefit and if the company founder is granted newly established company rights in return, these are called non-cash contributions.[2] The valuation of non-cash contributions is carried out at the balance sheet date of the start-up balance sheet and can have long-term consequences for future balance sheets and profit and loss accounts.[3]

"Capital contributions…are to be valued at the value attributed to them at the time of their contribution…".[4] In the Austrian Commercial Code, the value of a non-cash contribution is therefore legally codified in § 202 I UGB. Such a codification or a corresponding codification is however missing in the German Commercial Code, so that it can be said that there is a loophole in German company formation. Due to this loophole, there has been a discussion in German academic literature on the valuation of non-cash contributions on company start-up with many different views. There is therefore a need to investigate this subject further with the scientific interest as to whether there should be a uniform perspective in Germany and accordingly whether an ideal valuation method should be recommended.

To develop the subject and find possible solutions, an investigation will be carried out taking various points of view into consideration; on the one

[1] Cf. Arians, Georg, Sonderbilanzen, 2nd edition, Cologne et al. 1985, p.78.
[2] Cf. Jäger, Werner, Sacheinlagen-Sachübernahmen, in: HWF, published by Hans E. Büschgen, Stuttgart 1976, p.1555.
[3] Non-cash contributions are therefore subject to particular formal regulations which mainly affect recoverability on start-ups of capital companies, cf. Grünberger, David, IFRS 2011 – Ein systematischer Leitfaden, 9th edition, Herne 2011, p.1015.
[4] § 202 para. 1 p.1 UGB.

hand considering German and Austrian law, specifically the German Commercial Code (HGB) and the Austrian Commercial Code (UGB), and on the other hand considering International Financial Reporting Standards (IFRS).

The valuation provisions applying to the annual financial statement are to be applied correspondingly to the start-up balance sheet, because § 242 I HGB and § 193 I UGB for the start-up balance sheet refer to all the valid provisions relating to the annual financial statement, in as far as they relate to the balance sheet.[5] For the valuation of non-cash contributions therefore, §§ 252 - 256, 264 II and 279 - 283 HGB are to be observed.

The historical cost principle codified in § 253 I HGB and § 209 I UGB is the central valuation regulation according to which assets are to be valued at the most as acquisition costs or production costs. The subject of this investigation is non-cash contributions at company start-up which is why acquisition costs are assessed on first, original acquisition (initial measurement). The question of retaining acquisition costs in a second step (subsequent measurement) will only be considered in as far as it is necessary. The term acquisition costs is defined in § 255 I HGB, however, according to the unanimous view of experts, non-cash contributions do not fall under the term acquisition costs within the meaning of § 255 I HGB.[6] The German Company Law (AktG) and German Limited Liability Law (GmbHG), despite detailed start-up regulations, contain no provision concerning which valuation procedure is to be used to assess the value of non-cash contributions.

The framework issued by the IASC in July 1999 and accepted by the IASB presents the concept for setting up and presenting annual financial statements for external users according to IAS/IFRS, in the tradition of com-

[5] Cf. Handelsgesetzbuch of 10 May 1897, RGBl., p.219.
[6] Cf. Wohlgemuth, Michael, Die Anschaffungskosten in der Handels- und Steuerbilanz, Abt.I/9, 2nd edition, in:HdJ, published by Klaus v. Wysocki et al., Cologne 1995, p.53; Schiller, Andreas, Gründungsrechnungslegung (Gründung), Wiesbaden 1990 p.40; Joswig, Michael, Gründungsbilanzierung bei Kapitalgesellschaften nach Handels- und Steuerrecht, Düsseldorf 1995, p.195 in conjunction with 179. Also for Austria Feil, Erich, Handelsgesetzbuch (HGB) Kurzkommentar für die Praxis, Vienna 1997, p. 442.

mon law.[7] It is not an IAS itself and so does not establish any principles for specific issues in the sense of a general norm. The IASB no longer describes its standards as International Accounting Standards (IAS), but as International Financial Reporting Standards (IFRS). It is set out in IAS 1.11 that the International Accounting Standards and the interpretation of the IFRIC and the SIC also fall under the generic term of International Financial Reporting Standards.[8] As a rule therefore, the term IFRS will be used in the following analysis. The international reporting standards of the IFRS do not contain any actual provisions for the valuation of non-cash contributions [9]either in the framework or in the International Accounting Standards and SIC interpretations.

It is still therefore unsettled both according to the HGB and the IFRS as to how non-cash contributions are to be valued in the start-up balance sheet. This problem has led to controversial discussions in academic literature; the points of view range from a basically freely agreed face value of the shares[10] to the market value of the non-cash contributions[11] on the start-up balance sheet day.

A more neutral term for the presentation of the problem of the valuation of non-cash contributions would be "contribution value".[12] This means the amount of money which is to be attributed to the contributed asset at the time of valuation.[13] In the academic literature on this subject, the term notional costs of acquisition is usually the term used. In agreement with

[7] Cf. Born, Karl, Rechnungslegung international, 5th edition, Stuttgart 2007, p.65.
[8] Cf. Commission regulation (EC) no. 1126/2008 of 3 November 2008 adopting certain international accounting standards in accordance with Regulation (EC) no 1606/2002 of the European Parliament and of the Council, Official Journal of the European Union 29.11.2008, L 320/1et seq.
[9] Cf. Born, Karl, l.c., p.72et seq.
[10] Cf. Adler, Hans und Walter Düring und Kurt Schmaltz, Rechnungslegung und Prüfung der Unternehmen (Rechnungslegung), 6th edition, Stuttgart 1995, §255 point no.96.
[11] Cf. Joswig, Michael, l.c., p.197.
[12] Loitelsberger, Erich, Wertkategorien in Handels- und Steuerbilanz, in: HWR, published by Erich Kosiol et al., 2nd edition, Stuttgart 1981, p.1775.
[13] Cf. ibid p.1775.

the view represented by some authors, the term notional costs of acquisition covers the range of possible valuations in this dissertation.[14]

On the problem of admissibility of hidden reserves in the start-up balance sheet, it is mainly the market value of the non-cash contribution and the face value that are discussed in contrast. The problem of hidden reserves only contains a differentiation of these values when the market value exceeds the face value. If the market value does not reach the face value when determining notional costs of acquisition, then the market value may not be exceeded due to the prohibition of issue below par. Subsequently, the market value always exceeds the face value.[15]
The shares can be issued without a premium at the nominal value or with a premium at face value. Relating to the problem primarily to be discussed, namely the question whether the market value or a lower value is to be used in the start-up balance sheet, this differentiation is of subordinate interest. It only gains in importance when the face value is required as an interim result. Therefore only the term face value will be used in the following analysis.[16]

The obligation to set up a start-up balance sheet applies to all registered traders, regardless of legal form. The businessman status results from §§ 1 - 7 HGB or from laws relating to specific legal forms.
Depending on the legal form, there are different start-up and valuation provisions. That is why there is a differentiation between capital companies (KapG), business partnerships (PersG) and sole traders. KapG are divided into AG and GmbH, there is no sub-division of business partnerships. The terms sole proprietorship and business partnership include those non-capital corporations (Nicht-KapG), which are not large corpora-

[14] Cf. Sarx, Manfred, Bilanzierungsfragen im Rahmen einer Gründungsbilanz (Bilanzierung), in: DStR, 24.05.1991, p.695; Olfert, Klaus und Werner Körner und Jochen Langenbeck, Sonderbilanzen, 4th edition, Ludwigshafen 1994, p.114f, Grünberger, David, l.c., p.1019.
[15] The market value also always exceeds the value relating to the historical acquisition costs.
[16] Similarly Adler/Düring/Schmaltz distinguish between the market value on the one hand and the par value or the fixed higher face value on the other hand, cf. Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, l.c., §255 Rn.96f.

tions within the meaning of § 1 PublG (German Publicity and Disclosure Law).[17] Unless otherwise noted, explanations refer to KapG.

In tax law, non-cash contributions are to be valued in accordance with § 6 I no.6 in conjunction with no.5 EStG (German Income Tax Act) with the current value.[18] So the valuation of non-cash contributions is determined, taking the problem of current value interpretation into account. For non-cash contributions in connection with mergers, notional costs of acquisition may result however this leads back to the original problem of notional costs of acquisition according to HGB/UGB and IFRS. There is therefore no need for an independent tax examination.

[17] Cf. Law on reporting of certain companies and groups dated 15 August 1969, BGBl. I, p.1189 and BGBl. I 1970, p..1113, in the version 25 May 2009, BGBl.I, p.1102.
[18] Cf. EStG in the version of the announcement of 8 October 2009, BGBl. I, p. 3366.

2 OBJECTIVES

Based on the analysis of valuation methods of non-cash contributions on company start-up under German rules, Austrian rules and IFRS rules, the aim of the dissertation is to answer the question as to whether there should be a uniform valuation of non-cash contributions on company start-up in Germany and to suggest an ideal valuation method.

The interest in setting this objective stems from the fact that a clear codification is missing in the German Commercial Code. This loophole results from the fact that when valuing non-cash contributions on company start-up, the paragraphs §§ 242 I, 253 I, 255 I HGB are only to be applied by analogy. In contrast, when comparing this reporting point with other reporting systems at an international level, the valuation of non-cash contributions is clearly regulated on company start-up. In the Austrian Commercial Code for example, the value of a non-cash contribution is legally codified in § 202 UGBt; "Capital contributions...are to be valued at the value attributed to them at the time of their contribution, unless a lower value results from the opportunity for use in the company." In the IFRS reporting standard, the valuation of the non-cash contribution on company start-up is clearly derived from the principle of fair value.

The question as to whether there should be a uniform valuation of non-cash contributions on company start-up in Germany and accordingly whether an ideal valuation method should be recommended, is posed because there is no uniform perspective on the valuation of non-cash contributions on company start-up in German academic literature due to the loophole in Germany. With the German Accounting Law Modernisation Act (BilMoG) and its extension of the field of application of the valuation standard, attributable market value (fair value), there has admittedly been a move towards the IFRS, however no regulation has been drawn up regarding the application of the attributable market value to non-cash contributions on company start-up. The German loophole regarding no-

tional acquisition costs therefore continues to exist which is why the views presented in the academic literature are analysed. In fact, there are numerous different views which cover the entire scope of conceivable valuations, namely the

- Market value, specifically
  - basic market value without more detailed specification[19]
  - market value - determined by the procurement market[20]
  - market value - determined by the sales market[21]
  - a combination of market value from the sales and procurement markets[22]
- Face value of the shares[23]
- Value derived from the historical costs of acquisitions of the subscriber[24]
- Interim value[25]

[19] Cf. Kropff, Bruno, Über die "Ausgliederung" (Ausgliederung), in: Festschrift für Ernst Geßler, l.c., p.116; Kuhn, Klaus, Die Sacheinlage bei Kapitalgesellschaften in betriebswirtschaftlicher Sicht, in: ZfB 10 October 1966, p.664; Husemann, Karl-Heinz, l.c., p.106f; Loitelsberger, Erich, l.c., p.1775.

[20] Cf. Schiller, Andreas, Gründung, l.c., p.169; the same, Die Prüfung von Sacheinlagen im Rahmen der aktienrechtlichen Gründungsprüfungen (Prüfung), in: AG, 01.01.1992, p.27. Schiller basically requests the market value determined by the procurement market; only if non-cash contributions are not compatible with the company, should the market value determined by the sales market; Lang, Hans Richard, Sacheinlagen im Recht der GmbH unter Berücksichtigung der Bewertungsproblematik, Diss. Mainz 1971, p.30.

[21] Cf. Saage, Gustav, Zum Umfang der Gründungsprüfung, in: ZGR, 4/1977, p.689; Klein, Werner, l.c., p.78 et seq., Klein basically requests the market value from the sales market, considers interim values as admissable however; Ruchti, Hans, Bewertung von Sacheinlagen, in: HWB, published by Edgar Castan et al., Vol.3, 3rd edition, Stuttgart 1960, p.4746; Thiel, Rudolf, Handelsrechtliche und steuerrechtliche Bewertung von Sacheinlagen bei der Kapitalgesellschaft, in: DB, 16.03.1960, p.302; Mutze, Otto, l.c., p.328.

Cf. Kursawe, Edgar, l.c., p.90 et seq.; Penné, Günter, l.c., p.159 et seq.; Joswig, Michael, l.c., p.197; Festl-Wietek, Wolfgang, l.c., p.2412f

[22] Cf. Kursawe, Edgar, l.c., p.90 et seq.; Penné, Günter, l.c., p.159 et seq.; Joswig, Michael, l.c., p.197; Festl-Wietek, Wolfgang, l.c., p.2412f

[23] Cf. Adler, Hans und Walther Düring und Kurt Schmaltz, Rechnungslegung, l.c., §255 Rn.96; Hast, Karl, Grundsätze ordnungsmäßiger Bilanzierung für Anlagegegenstände, 2nd edition, Leipzig 1935, p.68; Heinen, Edmund, l.c., p.485; Groh, Manfred, l.c., p.528; Angermayer, Birgit, Die Prüfung von Sacheinlagen im neuen Umwandlungsrecht, in: WPg, 15.10.1995, p.681; Bayer, Walter, Stammkapital, Geschäftsanteil, in: GmbH-Gesetz, published by Marcus Lutter amongst others., 17th edition, Cologne 2009, §5 point no.27.

[24] Cf. Festl-Wietek, Wolfgang, l.c., p.2412f; Husemann, Karl-Heinz, l.c., p.106.

[25] Cf. Olfert, Klaus and Werner Körner and Jochen Langenbeck, l.c., p.114; Klein, Werner, l.c., p.80; Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, l.c., §255 point no.97 in conjunction with point no.83.

From the theoretical point of view, the work on ascertaining whether there should be a uniform valuation of non-cash contributions on company start-up and the recommendation of an ideal valuation method contributes to the standardisation of reporting standards of German companies by formulating a legislative proposal.

A practical benefit from this work is that the subscriber has legal certainty regarding the valuation of the non-cash contribution and that he need not spend a lot of time and effort in determining the acquisition costs. There would also be less work involved for analysts of the annual financial statement, for example in the bank rating. Another benefit would be greater international comparability of reporting standards.

3 STRUCTURE

To answer the question as to whether there should be a uniform valuation of non-cash contributions on company start-up in Germany and accordingly whether an ideal valuation should be recommended, the dissertation will be structured as follows.

Firstly, the users and destinations of the reporting standards and start-up balance sheet will be analysed in Chapter 5 and theme-related, basic definitions will be explained. An important point is the subsequent investigation of the term, acquisition costs, and the acquisition costs principle in Germany, Austria and according to the IFRS.

Against the background of the findings obtained up to this point, Chapter 6 will systematically portray the views expressed, especially in current academic literature in Germany and will discuss these in full.

The actual effects of the various scientific perspectives will then be examined in detail using case studies in Chapter 7. The basis of the case studies is a base case which is modified using the various valuations of non-cash contributions on company start-up and which is then assessed using suitable criteria. From the individual assessment of the valuations, an overall consideration of the advantages and disadvantages of the valuations will be carried out in Chapter 8 using the utility analysis model according to Zangemeister.

Finally, the examination summarizes the result of the utility analysis model and answers the question by stating that there should be a uniform valuation of non-cash contributions on start-up in Germany.

4 METHODOLOGY

To achieve the aims of this investigation, the following scientific methods will be used.

To explore the subject including definitions and the investigation of various opinions on the valuation of non-cash contributions, a detailed analysis of the existing academic literature will be carried out. In this connection, an assessment will be made of legal wording, textbooks, specialist essays and dissertations. Firstly the method of description will be adopted to present the initial situation and the definitions. Then a comparative analysis will be undertaken to discuss the various scientific opinions in Germany and in comparison those in Austria and according to the IFRS.
For the sake of completeness, it should be mentioned in this connection that an empirical study is not possible, especially because there is no disclosure requirement for start-up balance sheets and the start-up balance sheet mainly serves the purpose of self-information. Moreover, most start-ups are very small (sidelines with small projects, start-ups without any staff) with low capital requirements and high mortality, which is why even wide-ranging studies do not investigate the valuation of non-cash contributions.[26]

The actual effects of the various scientific views will then be examined by means of case studies.

Finally an analysis method from decision theory will be used, the quantitative non-monetary analysis method of the utility analysis model according to Zangemeister. The utility analysis model is the "analysis of a quantity of complex action alternatives with the purpose of ordering the

[26] Cf. KfW-Gründungsmonitor 2011, Jährliche Analyse von Struktur und Dynamik des Gründungsgeschehens in Deutschland, published by KfW-Bankengruppe, Frankfurt am Main 2011, p.45et seq. as well as Creditreform/KfW/ZEW-Gründungspanel 2011, Startschwierigkeiten und Wachstumschancen junger Unternehmen, published by Verband der Vereine Creditreform e.V., KfW-Bankengruppe, Zentrum für Europäische Wirtschaftsforschung GmbH, Mannheim 2011.

elements of this quantity according to the preferences of the decision maker with respect to a multidimensional target system"[27] and is described in the corresponding chapter in detail.

The utility analysis model according to Zangemeister is used for the overall assessment of the advantages and disadvantages and for the decision on the valuation of non-cash contributions on company start-up. This model firstly helps to generate the answer that there should be a uniform valuation of non-cash contributions at company start-up and secondly systematically derives the ideal valuation method.

[27] Zangemeister, Christof, Nutzwertanalyse in der Systemtechnik, Diss. TU Berlin, 4th edition, Munich 1976, p.45.

5 DEFINITIONS

5.1. Users and functions of reporting

5.1.1 Users and functions of reporting according to the German Commercial Code (HGB)

Both the German Commercial Code (HGB) and the IFRS have common features across the entire accounting system as regards the size of the user group and the corresponding functions which external accounting has to carry out.

Generally formulated, the users of external accounting are those people

- who are positively or negatively influenced by acts of the company management regarding the achievement of their objectives,
- who have a certain interest in what is going on in the company and who want to influence how far the objectives are achieved through suitable actions,
- whose interests are generally regarded as justified with the consequence that their requirements for an annual financial statement are taken into account in the accounting rules.[28]

The interests of the users result from the fact that individuals or groups of people have "claims to contractually established company payments or those dependent on net income for the period and that they therefore wish to gain information from the annual financial statement as to whether and how their claims have been positively or negatively influenced, and whether and how they will probably be influenced in the future"[29]. This mainly includes the current and potential creditors, members of staff, owners, members of the company management and financial administration; furthermore, other social groups also have information interests, although they are unable to enforce direct payment claims against the com-

[28] Cf. Bieg, Hartmut and Christian Hossfeld and Heinz Kussmaul and Gerd Waschbusch, Accounting Handbook in accordance with IFRS, Düsseldorf 2006, p. 8f.
[29] Wöhe, Günter, Bilanzierung und Bilanzpolitik, 9th edition, Munich 1997, p.41.

pany, such as employee and employer federations, courts, authorities, scientific institutions and the competition.[30]

Hence, both the German Commercial Code accounting system and the international accounting system address identical users.
The differences between accounting according to the HGB and IFRS are only evident when tasks are implemented using specific accounting rules because then, on the one hand, the interest conflicts of the heterogeneous user groups can be resolved and on the other hand, the legislator has to decide on a certain selection and setting of priorities from amongst all the theoretically possible tasks.[31]

External accounting mainly has three functions[32] which Bieg presents as follows:[33]

- Income calculation
- Information provision
- Documentation

One single statement cannot satisfy fully at the same time the requirements of all those interested in the company as regards calculation of net income for the period and provision of information as neither the payment calculation interests nor the information interests of all those people or groups of people interested in the statement coincide. Furthermore, payment calculation and information interests can contradict each other in that other figures can result when taking payment calculation interests in the annual financial statement into account than when taking information interests into account. This is why all accounting rule concepts are necessarily a compromise. As deciding to meet certain claims also inevitably

[30] Cf. Bieg, Hartmut and Christian Hossfeld and Heinz Kussmaul and Gerd Waschbusch, as above, p. 9.
[31] Cf. ibid., p.9. The accounting purposes according to HGB and IFRS are presented in detail in: Federmann, Rudolf, Bilanzierung nach Handelsrecht, Steuerrecht und IAS/IFRS, 12th edition, Berlin 2010, p.59-80.
[32] Cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, Jahresabschluss und Jahresabschlussanalyse, 21st edition, Landsberg/Lech 2009, p.16ff.
[33] Cf. Bieg, Hartmut, Die externe Rechnungslegung der Kreditinstitute und Finanzdienstleistungsinstitute, Munich 1999, p.6ff.

requires the rejection of complementary claims, the accounting rules also express the legislator's preferences for certain interests and for favouring certain people or groups of people above others. This necessarily means that the interests of the other interested parties are neglected and this group of people incurs a disadvantage.

The resolution of these interest conflicts is restricted to the calculation of net income and the information function. The legislator must decide accordingly what weighting he gives to the various users. This not only results in a decision as to whether the net income calculation function or the information function should receive a stronger weighting. It also results in a decision as to which interests and which groups of people within both functions should be ascribed more importance. The documentation task is not the subject of this conflict as this is independent of the other accounting objectives and must be carried out across the entire system.

The German legislator has not been able to decide directly between the net income calculation function and the information function. So the accounting rules and principles of proper bookkeeping tend to be more of a compromise between the tasks of net income calculation and information provision.[34] In particular, the static balance-sheet theory according to Rieger and the theory of the dynamic balance sheet according to Schmalenbach form the historical background to this. In the relevant literature, there are various versions as to which of the functions is paramount in German accounting standards. The outcome is that both functions are followed in the HGB accounting guidelines. This necessarily leads to conflicts of interest which according to Bieg can be described as follows.[35]

For example, the principle of prudence in its manifestation as the historical cost principle is not compatible with the principle of the true-and-fair

[34] Cf. Hüttche, Tobias, Rechnungslegung - Bilanzierung und Bewertung nach HGB und IFRS im Einzel- und Konzernabschluss, 3rd edition, Munich 2010, p.28.
[35] Cf. Bieg, Hartmut and Christian Hossfeld and Heinz Kussmaul and Gerd Waschbusch, as above, p.10ff.

view. The historical cost principle requires that assets are not to be reported in the balance sheet at a higher value than the historic procurement and production cost even if the stock exchange or market price is higher. An unrealised profit for example may not be reported in the balance sheet for reasons of prudence and therefore may also not be included in the profit and loss account. Retaining historic procurement costs in subsequent evaluations thus prevents the reporting of a taxable and distributable profit in the annual financial statement unless it has been achieved through a sale. The consequence of this rule which is a result of creditor protection considerations, is that the asset is reported as too low i.e. at a value not representing actual conditions. However this goes against the general standard of the true-and-fair view (§ 264 II HGB), which says that the annual financial statement should present a picture of the assets, financial position and performance of the company which is in accordance with actual conditions; although this rule applies with the limitation that the principles of proper accounting practice are to be observed. So § 264 II HGB represents the highest legal codification of the task of information provision; it is nevertheless accepted that due to the obligations to observe other standards especially the historical cost principle, it is not always possible to present a picture of the assets, financial position and performance corresponding to actual conditions. As a result, we can therefore conclude that the calculation of a distributable and taxable profit takes precedence in German law over presenting a picture of the company's financial situation corresponding to actual conditions even if statements of the facts distorted by the valuation rules are corrected by information in the appendix and management report.

As part of the function of income calculation itself, the HGB stipulates that consideration of the creditors' payment calculation interests, i.e. the limitation on profit distribution rules, takes precedence over the interests of shareholders and others participating in the company's profits, i.e. a guaranteed minimum distribution is allowed for.

On the subject of the conflict of interests regarding information provision, we can conclude the following from the HGB. If you compare the extent of information that a financial statement provides in the appendix according to internationally recognized standards with that of a financial statement prepared under German commercial law, it is clear that the German legislator has so far attached greater importance to the negative interests i.e. the information interests of internal financial statement users aimed at non-publication, than international standard-setters do.

5.1.2 Users and functions of reporting according to the Austrian Commercial Code (UGB)

The Austrian Commercial Code has the same roots as German commercial law. The General German Commercial Code passed in Germany in 1861 was adopted in Austria in 1862 and remained in force until 1938.[36] The General German Commercial Code was replaced by the German Commercial Code (HGB) in the year 1900 which came into force in Austria in 1938 and has been in use since then.[37] Despite various amendments, especially the introduction of a 3rd code in the Austrian Company Code with the Act on Accounting (§§ 189 ff), there is still broad agreement between Austria and Germany on commercial law.[38] Consequently the users and the goals of accounting in Austria are the same as those for Germany.[39]

With the same user group and goals as the HGB, the UGB includes with § 222 II, a rule on the common principle of the true-and-fair view, according to which the annual financial statement is to provide the truest possible picture of the assets, financial and income situation of the company.[40]

Due to the similarity of the users and goals of accounting in Germany and Austria, we will be able to exclusively examine the German commercial rules in the following section; the Austrian rules will only be mentioned in as far as they are relevant.

[36] Cf. Kalss, Susanne and Martin Schauer, Allgemeines Handelsrecht, Vienna 2002, p. 7.
[37] Cf. as above, p. 7f.
[38] Cf. as above, p.8. Similarly: Gräfer, Horst und Claudia Demming, Internationale Rechnungslegung, Stuttgart 1994, p. 572 and Thiel, Konstanze, as above, p. 1f.
[39] Cf. Wagenhofer, Alfred, Internationale Rechnungslegungsstandards, 6th Edition, Munich 2009, p. 126 and 131. Similarly Kalss, Susanne und Martin Schauer, as above, p. 129 and p. 132. Similarly Vodrazka, Karl, in: foreword to Thiele, Konstanze, Stille Reserven in der Rechnungslegung, Wiesbaden 1999, p. V.
[40] Cf. Thiele, Konstanze, as above, p. 70ff.

5.1.3 Users and functions of reporting according to the IFRS

The goal of the annual financial statement is solely to present information on the assets, financial position and performance and changes in the financial position for the users which enable decisions to be made.[41] "The conceptual framework of IASB states that the aim of financial reporting is to provide the information about the financial situation, performance changes in the financial situation of the company, which are useful for the wide range of users, who make the economic decisions".[42] In the conflict between the income calculation function and the information provision function, the decision is therefore clearly and exclusively for information provision.[43] An income calculation function as it appears in the HGB is not especially provided for as it cannot really be developed in practice due to the differences in the legal systems of individual countries and the legal forms available for companies worldwide. With this decision, the IASB avoids all conflicts between both these functions as illustrated for German accounting above.

Accounting principles according to IFRS are mainly aimed at all current and potential users. These are investors, employees, creditors, suppliers and other creditors, customers, governments and their authorities as well as the general public (F.9). The conflict of interests existing between these groups is decided in favour of the investors. F.10 justifies this by saying that investors provide the company with venture capital and that the information from the financial statements relating to their information needs will also correspond with the information needs of most other users. This justification cannot stand up on its own as it skates round the con-

[41] Cf. Bieg, Hartmut and Christian Hossfeld and Heinz Kussmaul and Gerd Waschbusch, as above, p.12f. The users and functions of the accounting principles according to IFRS are also illustrated as follows according to Bieg.

[42] Nerudová, Danuse, The international reporting standards and taxation system: Connection or disconnection?, in: Economics and Management, Kaunas, 2011, p.78.

[43] Cf. Wawrzinek, Wolfgang, Ansatz, Bewertung und Ausweis sowie zugrundeliegende Prinzipien, in: Beck'sches IFRS-Handbuch, published by Werner Bohl et al., 3rd Edition, Munich 2009, p.39f, point no. 9ff. Cf. Buchholz, Rainer, Grundzüge des Jahresabschlusses nach HGB und IFRS, 6th Edition., München 2010, p.237.

flict of interests between individual groups of users which are not to be underestimated. The decision for the user group of investors could be welcomed however if investors could be interpreted as all stakeholders without any influence, that is the external users who can only gain information from the published accounting instruments. This is however not the case as "investors" means only equity providers.[44]

5.1.4 Users and functions of the start-up balance sheet

A businessman must draw up an opening balance sheet when he starts his trading activities.[45] The designation start-up balance sheet has become established in the relevant literature.[46] There is no substantial difference between both terms.[47] The term start-up balance sheet refers to the fact that the balance sheet looks back to the past and documents the establishment of the start-up.[48] The term opening balance sheet refers to the existing balance sheet context and makes clear that the first regular business period has started.[49] It would be appropriate for an examination of non-cash contributions as regards the legal form for a sole proprietor to use the expression business opening balance, for a business partnership (PersG) to use the form company opening balance and for a limited liability company (KapG) to use the term start-up or opening balance sheet.[50] In agreement with the term used in literature on the subject, the term start-up balance sheet will be used in the following discussion.

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[44] Cf. Adler, Hans and Walther Düring and Kurt Schmalz, Konzeptionelle Grundlagen (Grundlagen), in: Rechnungslegung nach Internationalen Standards, edited by Hans-Friedrich Gelhausen et al., Stuttgart 2003, partial delivery 6 December 2007, p.1-106, point no. 39.

[45] Cf. § 242 I 1 German Commercial Code (HGB) dated 10 May 1897, RGBl., p.219, last amended by law dated 04 October 2013, BGBl. I p. 3746 with effect from 10 October 2013, status: 01 January 2014 on the basis of the law dated 28 August 2013, BGBl. I p. 3395.

[46] Modelled after Heinen, the term start-up balance sheet in this work strictly speaking refers to the balance sheet of a new start-up company. Cf. Heinen, Edmund, Handelsbilanzen, 12th Edition, Wiesbaden 1986, p.483ff.

[47] Cf. Joswig, Michael, reference as above, p.2.

[48] Cf. ibid., p.2f.

[49] Cf. ibid., p.3f.

[50] Cf. Förschle, Gerhart and Michael Deubert, Systematik der Sonderbilanzen (Gründungsbilanz), in: Sonderbilanzen, published by Wolfgang Dieter Budde and Gerhart Förschle and Nobert Winkeljohann, 4th Edition, München 2008, p.1, point no.2 in connection with p.9 point no.1, p.76 point no. 1 and p.156 point no. 1.

The significance of the start-up balance sheet is crucially dependent on how its form is designed to meet its purpose so the valuation of the non-cash contributions needs to be adapted to the functions of accounting illustrated above.[51] The main purpose of the start-up balance sheet is the presentation of assets and capital structures at the point in time when the business was established.[52] With the start-up balance sheet, the capital contribution becomes the company's assets.

In the sense of the word opening balance sheet, it is therefore the starting point for the bookkeeping process and the basis of future annual financial statements.[53] In the start-up balance sheet, the valuation of non-cash contributions determines the company's original expense potential.[54] In determining the purpose of the presentation of asset and capital structures, consideration is given to its function as a starting basis for future income calculation. The start-up balance sheet therefore serves the same purpose as the regular balance sheet with the difference that it has a more static orientation.[55]

For sole proprietorships and business partnerships (PersG), it serves to differentiate between the business and private assets of the founder.[56] For limited liability companies (KapG), it can represent the completion of the start-up period in an accounting sense i.e. it is the final balance sheet of the start-up company.[57] The start-up balance sheet presents the assets status at the time of the start of trading activities which is why there is no profit and loss account to be established in connection with this balance sheet.[58]

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[51] Cf. Grünberger, David, as above, p.1012.
[52] Cf. Sarx, Manfred, Bilanzierung, as above, p.692; Arians, Georg, as above, p.404; Grünberger, David, as above, p.1018.
[53] Cf. Arians, Georg, as above, p.89; Förschle, Gerhart and Manfred Kropp, Eröffnungsbilanz des Einzelunternehmers (Eröffnungsbilanz), in: Sonderbilanzen. published by Wolfgang Dieter Budde and Gerhart Förschle and Nobert Winkeljohann, 4th Edition, Munich 2008, p.14, point no.15.
[54] Cf. already Kursawe, Edgar, Die Gründungsbilanz in betriebswirtschaftlich-theoretischer und rechtlicher Sicht. Diss. Munich 1957, p.73; Joswig, Michael, as above, p.123.
[55] Cf. Kursawe, Edgar, as above, p.72ff.
[56] Cf. Förschle, Gerhart and Manfred Kropp (Eröffnungsbilanz), as above, p.14, point number 15 and p.82, point number 28.
[57] Cf. Freericks, Wolfgang, Gründungsbilanz, in: HWR, published by Klaus Chmielewicz et al., 3rd Edition, Stuttgart 1993, p.852.
[58] Cf. Förschle, Gerhart and Manfred Kropp (Eröffnungsbilanz), as above, p.14, point number 16 and p.82, point no. 27ff; different view regarding limited companies (KapG) Schiller, Andreas, Die Gründungsbilanz der Aktiengesellschaft (AG), in: BB, 10 December 1991, p.2405.

Some authors, especially regarding limited liability companies (KapG), are critical and even hostile when it comes to the fulfilment of these purposes by the start-up balance sheet, because the start-up balance sheet as such is not subject to any legal auditing requirement, a profit and loss account is not mandatory and there is no disclosure obligation.[59] This view can be understood from the point of view that there is no need to audit the start-up balance sheet. It cannot be argued against this outcome that, in relation to the balance sheet, there is an indirect check of the start-up balance sheet through the auditing of the first annual financial statement or that the start-up process is subject to auditing in accordance with § 5 IV GmbHG (German law relating to the private limited liability company) and § 33 II to V AktG (German Stock Corporation Law). Based on this result, the start-up balance sheet mainly fulfils the purpose of self-information and indirectly provides information to the creditors.[60]

[59] Cf. Freericks, Wolfgang, as above, p.852; Schiller, Andreas, AG, as above, p.2405; Sarx, Manfred, Bilanzierung, as above, p.692; Joswig, Michael, as above, p.123f .
[60] Cf. Kursawe, Edgar, as above, p.19; Joswig, Michael, as above, p.120f.

5.2 Non-cash contributions

5.2.1 General

Following an investigation by Engelhardt, 2/3 of people starting new businesses provide non-cash contributions.[61]

Due to the personal liability of the founder, there is no legal provision regarding non-cash contributions for non-limited liability companies (Nicht-KapG).[62]

Sole proprietors normally carry out their business without partners[63] and do not set up a partnership agreement.[64] Whether a sole proprietor allocates non-cash contributions to business assets or not, depends on whether he decides to capitalize them in the start-up balance sheet. In such case, only the items that are to be devoted to business assets should be reported.[65]

For business partnerships (PersG), the allocation of non-cash contributions is geared to the partnership assets according to the agreements laid down in the articles of association. The articles of association or partnership agreement is to be set up in accordance with §§ 105, 161 HGB. The justification for the partnership assets basically requires a transfer of ownership to the partnership.[66] The partnership (PersG) therefore has a legal capacity (§ 124 I HGB).

Due to the requirement for completeness, all assets attributable to the business property of the partnership (PersG) and the limited company (KapG) are to be entered in the balance sheet. In Engelhardt's investigation, non-cash contributions were shown to have an average value of EUR 14,000.[67]

The conditions for non-cash contributions for limited liability companies (KapG) are regulated in detail in § 27 AktG (German Corporation Act), §

[61] Cf. Engelhardt, Hendrik, Eine empirische Analyse zur Finanzierungspolitik neu gegründeter Unternehmen, in: Bank- und Finanzwirtschaft Bd. 7, published by Frieder Meyer-Bullerdiek and Markus Spiwoks, Frankfurt am Main 2010, p.135f.
[62] Cf. Jäger, Werner, as above, p.1556.
[63] Cf. Eisele, Wolfgang and Alois P. Knobloch, Technik des betrieblichen Rechnungswesens, 8th Edition, Munich 2011, p.1023.
[64] Cf. Kursawe, Edgar, as above, p.74.
[65] Cf. Förschle, Gerhart and Manfred Kropp (Eröffnungsbilanz), as above, p.14, point no. 6 in connection with p.30 point no.65.
[66] Cf. ibid., point no. 91ff.
[67] Cf. Engelhardt, Hendrik, as above, p.136.

5 IV GmbHG (German law on limited liability companies).[68] The subject of the non-cash contribution can be various services according to contractual or legal provisions.[69] Items that can be classified as non-cash contributions are in particular assets, aggregated assets, absolute rights, relative rights and receivables of the founder against third parties.[70] Obligations to perform services are not considered non-cash contributions.[71] We cannot address the valuation of individual non-cash contributions in this study.[72]

5.2.2 Valuation in Articles of Association

Within the context of non-cash contributions, the founder is granted company shares in return. The articles must state the obligation in accordance with §§ 23 II no.2, 27 I 1 AktG or articles of association in accordance with §§ 3 I no.4, 5 IV 1 GmbHG. This establishes the face value of the share in the company.[73]

If start-up expenses are to be borne by the company, these are also to be recorded in the articles of association according to the sort of expenses and the expected amount (§ 26 II AktG).[74] The HGB makes it clear in § 248 I HGB that expenses for the start-up of a company may not be capitalised. In addition to costs incurred for notary public, court fees and audit of the start-up, this also includes expenses for valuation reports for non-cash contributions. Eisele believes that capitalisation is allowed at the most as incidental acquisition expenses and so accepts that expenses incurred before the start-up balance sheet date would lead to a loss being

[68] Cf. on this i.e. regarding the public limited company (AG): Schiller, Andreas, Gründung, as above, p.118ff and regarding private limited liability company (GmbH): Sudhoff, Heinrich and Martin Sudhoff, Die Sacheinlage bei Gründung einer GmbH, in: NJW, 27.01.1982, p.130ff.

[69] Cf. Arians, Georg, as above, p.78. The term non-cash contribution will now be used independent of legal form; same view Förschle, Gerhart and Manfred Kropp (Eröffnungsbilanz), as above, p.171 point no.43, Zur realen Kapitalaufbringung bei Kapitalgesellschaften cf. p.202, point no.128; different view. Schulze zur Wiesche, Dieter, Sacheinlagen in Kapitalgesellschaften, insbesondere GmbH, in: GmbHR, 15.01.1988, p.32.

[70] Cf. Grünberger, David, as above, p.1019.

[71] Cf. German Federal Court of Justice judgement dated 1 February 2010, II ZR 173/08.

[72] A definition of the valuation of individual non-cash contributions can be found in Joswig, Michael, as above, p.201ff and at Klein, Werner, Die betriebswirtschaftliche Beurteilung eines neuerrichteten oder umgestalteten Unternehmens im Rahmen der Gründungsprüfung, Düsseldorf 1972, p.83ff.

[73] As partnerships (PersG) draw up articles of association, the face value is considered as a valuation. Sole proprietors do not draw up articles of association so that this valuation is not relevant for them.

[74] In line with § 26 II AktG, this applies to the articles of association.

reported in the start-up balance sheet.[75] It is clear from the legal wording in § 248 I HGB in connection with § 242 I HGB, that this view can be agreed with.[76] An argument against capitalisation is that the expenses do not represent expenses of the company's business operation; they are rather expenses of the founder for the acquisition of company shares.[77] If the expenses for a valuation and other start-up expenses are to be borne by the company however, this is to be laid down in the articles of association[78] and a premium is to be agreed on the issue of the shares at a corresponding level.

The setting of the face value geared to company statutory agreements represents an internal valuation of the non-cash contributions. This internal valuation serves the principle of real capital contribution of the amount advanced i.e. the non-cash contribution as surrogate for the cash contribution normally envisaged must guarantee the equivalent amount to generate liability capital through cash contributions.[79] Similarly to establishing a company through cash contributions, limited liability companies (KapG) must observe the ban on issues below par.[80] In the German Stock Corporation Act, this is explicitly regulated in §§ 9 I, 36a II 3 AktG, in the law governing limited liability companies, the principle of real capital contribution is to be derived from §§ 5 III 3, 9 I, 9c 2 GmbHG and from case law.[81] The institute for differential liability[82] is also composed from the principle of real capital contribution. According to § 9 I GmbHG, the founder is liable for the difference between the lower value of non-cash contributions at the time of entry in the Commercial Register and the amount of the capital taken over for it. The differential liability also ap-

[75] Cf. Eisele, Wolfgang and Alois P. Knobloch, as above, p.1031f with further references.
[76] Cf. Freericks, Wolfgang, as above, p.856; cf. Wöhe, Günter and Jürgen Bilstein and Dietmar Ernst and Joachim Häcker, Grundzüge der Unternehmensfinanzierung, 10th edition, Munich 2009, p.81; cf. Grünberger, David, as above, p.1033 with further references.
[77] Cf. Förschle, Gerhart and Manfred Kropp (Eröffnungsbilanz), as above, p.210, point no.145; Olfert, Klaus and Werner Körner and Jochen Langenbeck, as above, p.107.
[78] Unless noted otherwise, the term statutes includes the expression Articles of Association.
[79] Cf. Penné, Günter, Die Prüfung der Sacheinlagen nach Aktienrecht, Birkach et al. 1984, p.159ff.; Joswig, Michael, as above, p.46.
[80] Cf. Joswig, Michael, as above, p.55ff.
[81] Cf. ibid., p.56f.
[82] Cf. ibid., p.55ff.

plies to the public limited company (AG).[83] The ban on issues below par should work against an overvaluation of non-cash contributions. So the founder can therefore be issued with company shares at a maximum of the fair value of the non-cash contributions. The principle of real capital contribution has the effect of the value of non-cash contributions at least corresponding to the amount advanced (face value).[84] As the company statutory provisions only aim for at least the capital set down in the articles of association to be reached, an under-valuation can be regarded as permissible under company law. An additional function of setting the face value is the quotation of shareholdings.[85] By contrast, it is not the aim of internal valuation to fix the absolute value of the capital contribution.[86] The view that the value in the start-up balance sheet corresponds to the face value is to be regarded as the prevailing view in literature on the subject. The face value is also normally used to value non-cash contributions in practice. This result is however in no way compulsory; the face value does not have to be identical with the value in the start-up balance sheet.[87]

5.2.3 Valuation in the start-up balance sheet

The valuation in the start-up balance sheet must be geared to the valuation provisions under commercial law.[88] As non-cash contributions are an independent purchase act, the valuation in the start-up balance sheet can be determined independently of the historical acquisition costs or manufacturing costs[89] of the subscriber[90]. Due to the non-existing link to historical acquisition costs, it is possible to select an inappropriately higher or lower balance sheet value - compared to values applying in usual business operations. The principle of determining the non-cash contribution value

[83] Cf. Federal Court of Justice ruling dated 13 April 1992, II ZR 277/90, in: DStR, 30 October 1992, p.1552ff.
[84] Cf. Joswig, Michael, as above, p.59.
[85] Cf. Ellrott, Helmut and Hans-Jochen Gutike, Anschaffungs- und Herstellungskosten, in: Beck Bil.-Komm., 3rd edition, Munich 1995, §255 point no.147.
[86] Cf. Winter, Heinz, Stammkapital, Stammeinlage, in: comments on GmbHG, published by Franz Scholz, 8th edition, Cologne 1993, §5 point no.89 with further references
[87] Cf. Joswig, Michael, as above, p.112; regarding GmbH Sudhoff, Heinrich and Martin Sudhoff, as above, p.130.
[88] Cf. Eisele, Wolfgang and Alois P. Knobloch, as above, p.1019.
[89] In the interests of brevity, the term manufacturing costs will not be mentioned further. There is no limitation on content, however.
[90] Sarx, Manfred, Bilanzierung, as above, p.694; not the case with the sole proprietor

as separate from historical acquisition costs is determined downwards through the face value because a commercially legal valuation below the face value is not possible due to the ban on issues below par.[91] The upper limit of the acquisition costs in the start-up balance sheet is determined by the fair market value.[92] The permissibility of a valuation below the fair market value and thus the formation of hidden reserves amounting to the difference between the fair market value and the face value is regulated inconsistently in the HGB[93] and not regulated at all in the IFRS.

5.2.4 Necessity for operations

Non-cash contributions must satisfy the principle of real capital contributions in accordance with § 9 I AktG and § 19 GmbHG. As corporate law does not call for finality of non-cash contributions to the company, we have to distinguish between assets that are necessary for operations and assets not necessary for operation.[94] In the case of assets necessary for operations, non-cash contributions can predate the investments that are necessary in the case of a start-up based on cash.[95] An asset not necessary for operations is only an appropriate surrogate for a cash contribution on the other hand when it is sold by the company and when a corresponding sales price has been achieved. [96]

5.2.5 Relevant date

The fixing of the date for the valuation of the non-cash contributions is not conclusively regulated by law and there are controversial discussions

[91] For an enterpreneurial company ("Unternehmergesellschaft" - limited liability), non-cash contributions are not possible, cf. §5a II p.2 GmbHG.
[92] Cf. Schulze zur Wiesche, Dieter, as above, p.33; Freericks, Wolfgang, as above, p.856; Sarx, Manfred, Bilanzierung, as above, p.694; also in the case of partnerships (PersG), the market value represents the upper limit, cf. Förschle, Gerhart and Karl Hoffmann, comments on §247, in: Beck Bil-Komm., 7th edition, as above, §247 point no. 191. Another view: in the case of Frey's investment theory-related valuation, internal business suitability values can arise above the fair market value, cf. Frey, Herbert, Die Bewertung von Sacheinlagen und Sachübernahmen, Diss. Cologne 1968, p.70ff and 227f. If the documents submitted at the register court responsible for the start-up audit raise doubts concerning an overvaluation of the non-cash contribution significantly above the fair market value, this necessarily leads to a mandatory refusal of the commercial register entry, cf. LG Freiburg, decision dated 20.2.2009, 12 T 1/09 rkr., in: DB of 28.8.2009, p.1871f.
[93] Cf. Schiller, Andreas, Gründung, as above, p.133.
[94] Cf. ibid., p.160ff.
[95] Cf. Joswig, Michael, as above p.46.
[96] Cf. ibid., p.47.

concerning this in the relevant literature.[97] Furthermore the contractual claim to performance of non-cash contributions is sufficient according to § 36a II AktG; the in rem execution is to be carried out within five years of the entry in the Commercial Register.[98] In the case of the private limited liability company GmbH however, non-cash contributions are to be executed before registering for a Commercial Register entry according to § 7 III GmbHG.

The view of some authors that the day of entry in the Commercial Register is the relevant date for valuation,[99] can be understood due to the principle of real capital contribution. As the subscriber has had to bear value reductions up to this point in time, this date guarantees a complete raising of the liability capital agreed in the articles of association and reported in the start-up balance sheet.[100] The day of entry in the Commercial Register is considered the latest time for the beginning of the commercial activity due to the legal fiction for capital companies (KapG) and thus according to § 242 I 1 (HGB) as the relevant date for the start-up balance sheet. The entry in the Commercial Register represents the relevant start-up balance sheet date because capital companies (KapG) only come into being as legal entities through the constitutive effect of the Commercial Register entry.[101] The question can be raised as to whether an earlier point in time can be chosen. The "Vorgründungsgesellschaft"[102] (pre-start-up company) is a non-trading partnership (GbR) for lack of business character. If the pre-start-up company takes up business operations, a general partnership (OHG) comes into being subject to §§ 105 ff (HGB) and the relevant start-up balance sheet date is determined by the date of the non-capital

[97] The date relevant for valuing the non-cash contribution is discussed by Schiller in more detail, cf. Schiller, Andreas, Gründung, as above p.142ff.
[98] There will be no further discussions of the problems of outstanding non-cash contributions, a presentation can be found at Penné, cf. Penné, Günter, as above, p.190ff. On the problem of subsequent events that come to light regarding the valuation, cf. Joswig, Michael, as above, p.132ff.
[99] Cf. Penné, Günter, as above, p.190ff; Schiller, Andreas, Gründung, as above, p.152 and p.201.
[100] Cf. Schiller, Andreas, Gründung, as above, p.151f.
[101] Cf. Freericks, Wolfgang, as above, p.853; other view: Generell für Tag der Handelsregistereintragung Arians, Georg, as above, p.90.
[102] The "Vorgründungsgesellschaft" (pre-start-up company) is a preparative association of individuals at the pre-start-up phase. The pre-start-up phase includes the period from the decision of the founders to set up a capital company to the day of the notarially attested authentication of the articles of association or the partnership agreement.

company (Nicht-KapG).[103] Even when the "Vorgesellschaft" (pre-start-up company)[104] takes up business activities, the date for the start-up balance sheet is determined by principles applying to non-capital companies.[105]
For non-capital companies (Nicht-KapG), the relevant start-up balance sheet date can be regarded as the occurrence of the first business transaction.[106] The first business transaction represents the actual start of business operations in the sense of a documentation of the opening of the business to the outside world and can therefore be regarded as the start-up balance sheet date [107]in contrast to other dates regarded as decisive in the relevant literature.[108]

Now that we have determined the decisive lower limit and the decisive upper limit of the non-cash contribution value and the valuation date has been fixed, the valuation concept of the non-cash contribution needs to be examined.

[103] Cf. Freericks, Wolfgang, as above, p.853; same view Ellrich, Marian, Pflicht zur Aufstellung, in: HdR, Bd.Ia, published by Karlheinz Küting et al, 4th edition, Stuttgart 1995, §242 point no.8; other view: Sarx is generally for the date of establishment cf. Sarx, Manfred, Bilanzierung, as above, p.692; Schiller asks for an obligation for a start-up balance sheet of the pre-share company and additionally on the day of entry in the Commercial Register, cf. Schiller, Andreas, AG, as above, p.2404.
[104] The "Vorgesellschaft" (pre-company) is a legal community in the period from the conclusion of the partnership agreement to the entry in the Commercial Register. It is already subject to the law of capital companies (KapG) and can receive non-cash contributions.
[105] Cf. Ellrich, Marian, as above, point no.8.
[106] Cf. ibid., point no.7.
[107] Cf. Ellrich, Marian, as above, point no.7.
[108] A discussion of other dates can be found in Ellrich, Marian, as above, point no.7.

5.3 Costs of acquisition and historical cost principle according to the German Commercial Code (HGB)

5.3.1 Presentation of the main features with monetary consideration

5.3.1.1 Character of acquisition costs

The German Commercial Code (HGB) contains a legal definition of acquisition costs in § 255 I HGB and a defininition is found in the Austrian Commercial Code (UBG) in § 203 II UGB.

The term acquisition costs conflicts with the cash-based character of the balance sheet and is to be allocated to internal cost and performance accounting. The term used in § 255 I HGB "acquisition costs" is a terminological inaccuracy which, however, does not influence the purely cash-based character of this valuation reporting measure.[109] The specification of the term acquisition costs by the term "expenses" is not consistent with the business expenditure term; the term "expenses" in the sense of cash outlay can be understood as a periodic expenditure affecting income.[110]

According to the general view in the relevant literature and case law, the valuation using acquisition costs should be characterized by the objective of treating the procurement process as basically [111]having no effect on income.[112] The principle of neutrality of effect on income of the procurement process means neutrality when reporting net assets so that a pure restructuring of assets is aimed at.[113]

In contrast to the definition of acquisition costs and the acquisition cost principle, the principle of neutrality of effect on income has not been

[109] Cf. Ordelheide, Dieter, Anschaffungskosten (Anschaffungskosten), Abt. B162, in: Beck HdR, published by Edgar Castan et al., 9th instalment, Munich 1996, point no.36.
[110] Cf. Wohlgemuth, Michael, as above, point no.6 and point no.8. Similarly Feil, Erich, as above, p. 445.
[111] Cf. Ellrott, Helmut and Peter Brendt, Bewertungsmaßstäbe, in: Beck Bil.-Komm., 7th edition, Munich 2010, §255 point no.20; Baetge, Jörg and Hans-Jürgen Kirsch and Stefan Thiele, Bilanzen (Bilanzen), 9th edition, Düsseldorf 2007, p.194ff; Ordelheide, Dieter, Anschaffungskosten, as above, point no.10 “should be achieved”; BT-DrS. 10/317, p.88 "as far as possible with no effect on income".
[112] Cf. Wohlgemuth, Michael, as above, point no.3; Ordelheide, Dieter, Anschaffungskosten, as above, point no.10; Baetge, Jörg and Hans-Jürgen Kirsch and Stefan Thiele, Bilanzen, as above, p.194; Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.5.
[113] Cf. Ordelheide, Dieter, Anschaffungskosten, as above, point no.10; Moxter, Adolf, Bilanzrechtsprechung (Rechtsprechung), 6th edition, Tübingen 2007, p.183; Knop, Wolfgang and Karlheinz Küting, Anschaffungskosten, in: HdR, Bd.Ia, published by Karlheinz Küting and others, 4th edition, Stuttgart 1995, §255 point no.3.

codified - it is rather an "organizational concept that has been thought into individual provisions following specialist discussions".[114]

Neutrality of effect on income is achieved through the principle of the relevance of service rendered in return.[115] The asset received is given a value which corresponds exactly to the sum of the acquisition-related net asset decreases.[116] In this way, the acquisition costs of the asset received are determined by the service rendered in return.[117] The service rendered in return is what the purchaser must surrender to obtain the asset.[118]

The application assumption of the principle of neutrality of effect on income is obvious in that there is comparability between the service obtained and the service rendered in return.[119] This comparability is normally given by the cash-based character of the acquisition costs. If it is restricted by the lack of an invoice price for example and if no express provisions exist, the person compiling the balance sheet must follow the maxim of neutrality of effect on income.[120]

The productive value is to be taken into account when considering acquisition costs because the principle of neutrality of effect on income and the cash-based character of acquisition costs can lead to the capital-value-oriented interpretation of acquisition cost valuation being regarded as compliant.[121]

The principle of neutrality of effect on income of the procurement process in connection with the principle of relevance of the service rendered in return achieves a technically definite limitation of the valuation concept acquisition costs, in contrast to the option of the valuation standard, pro-

[114] Ordelheide, Dieter, Anschaffungskosten, as above, point no.194.
[115] Cf. ibid., point no 10; Wohlgemuth, Michael, as above, point no.2; Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above point no.5; Ellrott, Helmut and Peter Brendt, as above point no.20.
[116] Cf. Ordelheide, Dieter, Anschaffungskosten, as above, point no.10.
[117] Cf. Ellrott, Helmut and Peter Brendt, as above, point on.20.
[118] Cf. Wohlgemuth, Michael, as above, point no.2; Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.5.
[119] Cf. Ordelheide, Dieter, Anschaffungskosten, as above, point no.194.
[120] Cf. Knop, Wolfgang and Karlheinz Küting, as above, point no.21f.
[121] Cf. Ordelheide, Dieter, Kaufmännischer Periodengewinn als ökonomischer Gewinn (Periodengewinn), in: Unternehmenserfolg Festschrift zum 60.Geburtstag by Walther Busse v. Colbe, published by Michel Domsch et al., Wiesbaden 1988, p.280f;

duction costs.[122] As there is no definition of the term procurement process, material problems can arise however.[123]

5.3.1.2 Acquisition process

The valuation standard acquisition costs is based on an acquisition process; there can be no acquisition costs without this process.[124] From a business point of view, it can be divided into two phases, namely the purchasing process and the process of transferring it into a condition ready for business operations.

In the formulation of § 255 I 1 HGB "to purchase an asset"[125] it is expressed that only the expenses that are required to purchase the item in the final sense can be allocated to acquisition costs.[126] From this final view, it can be deduced that the purchasing transaction begins as soon as expenses occur that relate to the purchase of the business property as an asset.[127] This corresponds with the definition of the purchase process in case law:

"Purchasing means...the transfer of an object from a third-party power of disposition to one's own economic power of disposition ...The economic power of disposition is normally achieved 'through the fact that possession, risk, use and charges are transferred to the purchaser'".[128]

The definition of the procurement process in case law indicates that the transfer of assets into a person's own economic power of disposition is crucial for the purchase of an asset.[129] The type of service rendered in return is not crucial for a purchasing process [130]which is why a non-monetary service rendered in return can also constitute a purchasing process.[131]

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[122] Cf. Wohlgemuth, Michael, as above, point no.3.
[123] Cf. ibid., point no.3.
[124] Cf. Ellrott, Helmut and Peter Brendt, as above point. 2.
[125] § 255 I 1 HGB, as above.
[126] Cf. Knop, Wolfgang and Karlheinz Küting, as above, point no.12.
[127] Cf. Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.9.
[128] BFH jdugement dated 15 December 1992, IX R 323/87, BStBl. II 1993, p.489.
[129] Cf. Ellrott, Helmut and Peter Brendt, as above, point no.21 in connection with point no.43.
[130] Cf. Brönner, Herbert and Peter Bareis, Die Bilanz nach Handels- und Steuerrecht, 9th edition, Stuttgart 1991, p.223.
[131] Cf. Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.7.

The costs for transferring the asset into a condition ready for operation are the second component of the acquisition process. The acquisition process is only complete when the purchased asset has achieved readiness for operation in the company.

5.3.1.3 Meaning of acquisition costs

5.3.1.3.1 Applicability and main basis

If an asset is obtained from outside the company, it is valued at its acquisition cost. This applies to all companies, regardless of legal form, that have to apply the provisions of § 238 I HGB and applies to both items in fixed and current assets.

Acquisition costs and production costs can be seen as the key valuation standards and form the first value with which an asset is capitalized.[132] Non-capitalized expenses constitute expenditure. The level of capitalization influences the level of write-offs for depreciable assets. According to the principle of neutrality of effect on income, any value-decreasing correction of acquisition costs only occurs in a second and subsequent valuation step.[133]

5.3.1.3.2 Historical cost principle

The historical cost principle first says that an asset is initially to be recorded at its acquisition cost.[134] This is supposed to ensure the income neutrality of the purchasing process whose significance is highlighted by Leffson:

"Income neutrality is achieved by capitalizing the acquisition costs. The basic principle of capitalization and therefore the balance sheet itself is based on the income neutrality of expenses that only become expenditure in later periods".[135]

[132] Cf. Ellrott, Helmut and Peter Brendt, as above, point 1.
[133] Cf. Baetge, Jörg, Bilanzen, as above, p.194.
[134] Cf. Leffson, Ulrich, Die Grundsätze ordnungsmäßiger Buchführung (GoB), 7th edition, Düsseldorf 1987, p.252.
[135] Ibid., p.251.

Secondly the historical cost principle determines that acquisition costs form the absolute upper limit of the value which on no account may be exceeded. It therefore has the effect of being a principle of highest value.[136] By fixing the absolute upper limit of the value, the historical cost principle determines the principle of nominal capital preservation. [137] This concept is based on the view of preserving the original equity and not the purchasing power of the equity.[138]

The view is unanimous that the historical cost principle substantiates the realisation principle.[139] A closer definition of the realisation principle is beyond the limits of this study; by allocating the historical cost principle to the realisation principle however, the intention is to make clear that the valuation to acquisition costs is not the only conceivable way of complying with the realisation principle.

Regarding the realisation principle, it is the aim of the historical cost principle to avoid disclosure of unrealised value increases of an asset via historical acquisition costs and their distribution. [140] This is termed the earnings neutrality of the procurement process.[141] Compliance with earnings neutrality can also be achieved without the historical cost principle however.[142] If tangible assets were valued via historic acquisition costs, e.g. with higher replacement prices, the value increase resulting from the difference between acquisition costs and replacement prices could be placed with no effect on income in a non-distributable asset preservation reserve.[143] Art. 33 I of the 4th EC Directive permits reserves for asset preservation and allows member states a national right to vote on this. The German legislator decided on the transformation in accordance with

[136] Cf. Leffson, Ulrich and Andreas Schmid, Die Erfassungs- und Bewertungsprinzipien des Handelsrechts (Prinzipien), Abt. I/7, 2nd edition, in: HdJ, as above, point no.112.
[137] Cf. Kosiol, Erich, Pagatorische Bilanztheorie, in:HWR, Vol.3, 2nd edition, published by Erich Kosiol et al., p.237.
[138] Cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, as above, p.1.230.
[139] Cf. e.g. Leffson, Ulrich, GoB, as above, p.252ff; Moxter, Adolf, Bilanzauffassungen (Bilanzauffassungen), in: HWB, Vol.1, published by Waldemar Wittmann and others, 5th edition, Stuttgart 1993, p.506.
[140] Cf. Leffson, Ulrich, GAAP, as above, p.252ff.
[141] Cf. Baetge, Jörg, Bilanzen, as above, p.194.
[142] Cf. Ordelheide, Dieter, Anschaffungskosten, as above, point no.13.
[143] Cf. ibid., point no.13.

the BiRiLiG (German Accounting Directives Act) not to take up the right to vote.[144] The valuation concept of the HGB is therefore based on the historical cost principle in connection with nominal capital preservation. The voting right allowed by Art. 33 I of the 4th EC Directive is supposed to instigate a critical appraisal of the historical cost principle.

The critical appraisal of the historical cost principle shall be effected according to the views of Wöhe and Karrenbauer.[145]
The aim of Art. 33 I of the 4th EC Directive is greater asset preservation of companies. An objection to the historical cost principle is that it can lead to a decrease in company assets because when prices increase due to inflation, the historical cost principle leads to an annual surplus which may contain fictitious profits. If these fictitious profits were distributed too, company assets would be reduced.
From the point of view of achieving a better insight into the company's assets, financial position and performance, there is support for Art. 33 I and therefore not for the historical cost principle, as in times of inflation, the historical cost principle can lead to false information concerning the current value of assets. Although the annual financial statement is technically in order, materially "the information to be gained from it does not correspond with actual company conditions".[146]
Despite these critical objections, the historical cost principle is still tenable due to objectification requirements. The historical cost principle firstly conforms with cash-based accounting because it is normally based on realised cash-based payments; secondly it allows a lower margin of discretion as there is no need to estimate indices to record the change in purchasing power and there is no need to estimate replacement costs, and thirdly it secures the accounting and documentation function of the balance sheet.

[144] Cf. BT-DrS 10/317, p.87.
[145] Cf. Wöhe, Günter, Bilanzierung und Bilanzpolitik, as above, p.350f and 368ff; Karrenbauer, Michael, Wertansätze der Vermögensgegenstände und Schulden, in: HdR, as above, § 253 point no.8.
[146] Wöhe, Günter, as above, p.368.

This shows quite clearly that the calculation of a distributable and taxable profit takes priority in the HGB above the presentation of a picture of the financial position corresponding to actual conditions.

It also needs to be claimed for the historical cost principle that the interest of asset preservation can also be complied with through accounting policy measures. Steps in this direction are the LIFO process, the profit distribution policy granted to the management board (§ 58 II AktG) and the chance to use valuation options so that through the formation of hidden reserves, earnings initially do not appear in the profits for the period.

5.3.2 Application of the valuation concept acquisition costs on formation of a company on the basis of non-cash contributions

5.3.2.1 Analogy of company formation on the basis of non-cash contributions to exchange theory

5.3.2.1.1 Appropriateness of the analogy and its meaning

As an exchange of[147] non-cash contributions for corporate rights could be assumed, an analogy of granting shareholdings when a company is formed by non-cash contributions would seem to be similar to an exchange deal.[148] There are controversial discussions concerning this analogy in the relevant literature. As a consequence, there would not only be acquisition costs on the part of the shareholder but also on the part of the company itself.[149] Döllerer explains as follows:

"What could be more appropriate than adopting a sort of 'exchange' of non-cash contributions for corporate rights with the consequence that the company records ...the received values (=non-cash contribution, author's remark) ..at acquisition cost, i.e. the market value of the values surren-

[147] Under accounting law, an exchange exists when the expenses for a purchase are not in the form of a payment claim against a third party or means of payment but in the surrender of another assessable asset. Cf. Ellrott, Helmut and Peter Brendt, as above, point no.130.
[148] Cf. Groh, Manfred, Anschaffungskosten aus Sacheinlagen, in: FR, 23.09.1990, p.528.
[149] Cf. Mutze, Otto, Zur Bewertung von Sacheinlagen, in: AG, 11/1970, p.324.

dered (= principle of the relevance of the service rendered in return, author's remark)".[150]

From the material point of view, the acquisition costs would have to be determined by the following exchange principles in the start-up balance sheet which have developed in literature as the fundamentally possible valuations of obtained assets due to a lack of legal provisions.[151]

1. Book value of asset surrendered (continuance of book values)
   The obtained item is recorded at the value at which the surrendered item would have last been reported in the balance sheet.[152]
2. Fair market value of asset surrendered or obtained (profit realisation)
   The asset obtained is valued at the fair market value of the asset surrendered,[153] however no more than the fair market value of the obtained asset.[154]
3. Option of a value between book value continuance method and profit realisation (treatment with no effect on income)
   The acquisition costs of the asset obtained are calculated by taking the value resulting from the book value continuance method and adding it to the income tax charge released by the exchange.[155]

5.3.2.1.2 On the problem of applicability

There is agreement in the relevant literature that in the case of a company formed by non-cash contributions, there is no act similar to an exchange

[150] Döllerer, Georg, Zur Problematik der Anschaffungs- und Herstellungskosten (Problematik), in: JbFSt 1976/77, p.205, highlighting by author
[151] Cf. Ellrott, Helmut and Peter Brendt, as above, point no.131; Knop, Wolfgang and Karlheinz Küting, as above, point no.116.
[152] Cf. Crezelius, Georg, Bilanzrecht, Cologne 1988, p.61f; Lüders, Jürgen, Der Zeitpunkt der Gewinnrealisierung im Handels- und Steuerbilanzrecht, in: Rechtsordnung und Steuerwesen Vol.6, published by Brigitte Knobbe-Keuk, Cologne 1987, p.127ff.
[153] Cf. Wohlgemuth, Michael, as above, point no.58; Husemann, Karl-Heinz, Grundsätze ordnungsmäßiger Bilanzierung für Anlagegegenstände, 2nd edition, Düsseldorf 1976, p.103; Knop, Wolfgang and Karlheinz Küting, as above, point no. 117f.
[154] cf. Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.91.
[155] Cf. ibid., §255 point no.92f.

as far as the company is concerned.[156] Accordingly when a company is formed by non-cash contributions, neither acquisition costs nor exchange principles are to be used as far as the company is concerned. Nevertheless, the prevailing opinion is that exchange principles under commercial law apply in cases of companies formed by non-cash contributions.[157]
The main argument for the applicability of exchange theory is that the granting of corporate rights economically corresponds to an exchange.[158]

In contrast there is the argument that

- it is not an economic exchange as there is no movement of goods in the economic sense,[159]
- the use of exchange principles is considered unnecessary as the value of the non-cash contribution is already established in the articles of association,[160]
- there is no mutual contract in the legal sense. The exchange of services relationship governed by the law of obligations which is necessary for an exchange should be rejected for companies formed by non-cash contributions as the non-cash contribution, as part of the formation, actually brings the company and shareholdings into being in the first place.[161]

As none of the arguments are valid for a clear applicability of the analogy,[162] the analogy could only be followed to a limited extent.[163] The ap-

[156] Cf. e.g. Döllerer, Georg, Problematik, as above, p.205f; Wiesner, Georgia, Die Bilanzierung beim Aktientausch, Bamberg 1995, p.104 and p.4 Fn.3; Groh, Manfred, as above, p.528.
[157] Cf. e.g. Ellrott, Helmut and Peter Brendt, as above, point no.146; Wiesner, Georgia, as above, p.98ff; Förster, Ursula, Höhe der Anschaffungskosten bei Anwachsung, in: DB, 31.01.1997, p.242; other view Mutze, Otto, as above, p.325f.
[158] Cf. Wassermeyer, Franz, Tausch and Einlage von Anteilen an Kapitalgesellschaften über die Grenze, in: DB, 27.04.1990, p.855ff.
[159] Cf. Meyer-Arndt, Lüder, Gewinnrealisierung bei der Übertragung einer Beteiligung vom Organträger auf das Organ, in: BB, 10.04.1968, p.410f.
[160] Cf. Knobbe-Keuk, Brigitte, Bilanz- und Unternehmenssteuerrecht, 9th edition, Cologne 1993, p.211f.
[161] Cf. Joswig, Michael, as above, p.179.
[162] Cf. Ellrott, Helmut and Hans-Jochen Gutike, as above, point no.147.
[163] same view Wiesner, Georgia, as above, p.4 Fn.3, Groh, Manfred, as above, p.528, Schulze zur Wiesche, Dieter, as above, p.33; Döllerer, Georg, Problematik, as above, p.205f; Ellrott, Helmut und

plicability of exchange theory appears unsatisfactory however as it transforms the existing divergent views on exchange transactions with respect to the assessment of the procurement process and the valuation, solely to the problem of companies formed by non-cash contributions.[164]

5.3.2.2 Presentation of various interpretations of notional costs of acquisition

5.3.2.2.1 Problem definition

An acquisition process on the part of the company is only applicable if the company has obtained the asset. This condition has been met for companies formed by non-cash contributions i.e. the asset transfer has taken place; there is an independent purchase process.[165] Consequently the valuation can take place detached from the historical acquisition costs of the subscriber.[166]

The principle of neutrality of effect on income has been highlighted as the central idea of valuation for acquisition costs. Its assumption for use exists in the comparability between the obtained service and service rendered in return. The service rendered in return exists in the case of exchange in a basically assessable object, the relation of values forms the subject of discussion. When a company is formed with non-cash contributions, shares are issued. It is arguable whether the shares surrendered are of value. Husemann explains correctly: "In contrast to the exchange, there is also often a lack (in the case of non-cash contributions, author's remark) of an assessable service rendered in return on the basis of which the acquisition costs could be determined".[167]

If intrinsic value is advocated, the company has expenses which are non-cash-related, and we can talk about acquisition costs generally. If acquisition costs are generally advocated, which simply lack a cash-related char-

Hans-Jochen Gutike, as above, point no.148 Ellrott/Gutike only follow the exchange theory "despite misgivings".

[164] similarly Ellrott, Helmut and Hans-Jochen Gutike, as above, point no.147.

[165] Cf. Jäger, Werner, as above, p.1557.

[166] Cf. Sarx, Manfred, Bilanzierung, as above, p.694.

[167] Husemann, Karl-Heinz, as above, p.105.

acter, the comparability between service and service rendered in return is merely limited. Nevertheless, the person compiling the balance sheet should follow the maxims of the neutrality of effect of income of the procurement process and therefore the principle of relevance of the service rendered in return.

If the outcome is that there is no purchasing process or that the shares are not of value, then acquisition costs are not really applicable. If an acquisition process is rejected, the valuation standard acquisition costs is eliminated as the acquisition costs must be based on an acquisition process.
In the absence of any intrinsic value of the shares, the principle of relevance of the service rendered in return fails as this is based on the fact that the obtained asset is recorded at the value which corresponds exactly to the sum of the acquisition-related net asset decreases. Linked to this is the failure of the assumption of use of the principle of neutrality of effect on income which exists in the comparability between the service obtained and the service rendered in return. If the shares are considered of no value, the principle of neutrality of effect on income would correspond to the non-capitalization of the non-cash contributions. This view is to be emphatically contradicted because firstly a company formed by non-cash contributions would not be possible as the non-cash contribution would not be suitable as a cash contribution and secondly it is opposed to the principle of completeness codified in § 246 I HGB which requires the capitalization of all assets. Thirdly, this view is to be rejected as the insight into the asset situation of the company is impaired. These arguments make the exception of the principle of neutrality of effect on income, in line with the discussed exception in cases of property acquired free of charge,[168] appear reasonable.
The various ways of interpreting notional acquisition costs will be presented and values to be deduced from them will be shown. Further examination of the values i.e. the determination of the valuation of notional ac-

[168] Cf. Wohlgemuth, Michael, as above, point no.64.

quisition costs which is to be regarded as the decisive one, will take place in the eighth chapter.

5.3.2.2.2 Existence of basic acquisition costs generally

If, like Lutter, you perceive the non-cash contribution as a datio in solutum [169], allowed as an exception by law on the primarily owed payment,[170] then there is a company expense regarding the non-cash contribution when relinquishing this monetary claim.[171] The non-cash contribution has an intrinsic value amounting to the relinquishment of the cash contribution, and basic acquisition costs generally arise for the company. When basic acquisition costs exist, the principle of relevance of the service rendered should be applied and acquisition costs arise amounting to this relinquishment. As only the cash-based character of the acquisition costs is missing, they can be designated as notional acquisition costs.

Adler/Düring/Schmaltz see in non-cash contributions an acquisition process and designate it as an "acquisition-like process".[172] As the valuation benchmark acquisition costs is based on an acquisition process, the term "acquisition-like process" could be indicative of being based on the valuation benchmark acquisition costs. Therefore, basic acquisition costs would generally arise for the company. Their valuation would have to follow the principle of relevance of service rendered in return, i.e. according to the value of the shares. Adler/Düring/Schmaltz are of the opinion that the value of non-cash contributions is derived from the agreements in the articles of association.[173] As there are "no actual expenses"[174], the cash-related benchmark of the acquisition price is to be replaced by notional acquisition costs.[175] The term "no actual expenses" points to the existence

[169] Leistung an Erfüllungs Statt (§364 BGB).
[170] Cf. Lutter, Marcus, Rechtsverhältnisse der Gesellschaft und der Gesellschafter (AG), in: Kölner Kommentar zum AktG, Vol.1, 2nd instalment, published by Wolfgang Zöller, Cologne et al. 1970, § 54 point no.5.
[171] Cf. Groh, Manfred, as above, p.528.
[172] Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255, point no.82 in connection with point no.7 and point no.96f.
[173] Cf. ibid., §255 point no.96.
[174] Ibid., §255 point no.82; as well as Förschle, Gerhart and Rainer Usinger, Jahresabschluss, in: Beck Bil-Komm., 7th edition, Munich 2010, § 248 point no.39f.
[175] Cf. Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.82.

of general expenses. Therefore the service rendered in return in the form of the issue of corporate rights has intrinsic value. Through the existence of an "acquisition-like" process and the intrinsic value of the service rendered in return, acquisition costs generally arise. As a result of this interpretation, the face value is to be used as the notional acquisition cost of the non-cash contribution.[176] Adler/Düring/Schmaltz however provide an option of using the fair market value, as long as there are no agreements in the articles of association to the contrary.[177]

5.3.2.2.3 Non-existence of basic acquisition costs

Barz and Winter each developed the view that no acquisition process exists as the company's claim for non-cash contributions results directly from the articles of association.[178] As there is no transfer of assets, a purchasing process is to be rejected. However, as the term acquisition costs requires a purchasing process, the term acquisition costs is generally to be rejected.[179] To reach a valuation benchmark, the argument is used that the value of a non-cash contribution is determined by the face value laid down in the articles of association. Barz explains on this point that "in the case of non-cash contributions, in place of acquisition costs, the nominal value or higher face value of the shares is used." [180] As a valuation benchmark for non-cash contributions, the face value is used exclusively.[181]

Some authors reject the intrinsic value of the shares surrendered. This is why the value of the non-cash contribution determines the company shares to be granted for it and not the other way round.[182] Ballerstedt explains

[176] Cf. ibid., §255 point no.96.
[177] Cf. ibid., point no.97.
[178] Cf. Barz, Carl Hans, Gründung der Gesellschaft, in: Aktiengesetz, edited by Carl Hans Barz et al., 3rd edition, Berlin 1973, §27 point no.24a-24d; Winter, Heinz, as above, §5 point no.56f.
[179] Cf. Barz, Carl Hans, as above, §27 point no.24b and 24d; Winter Heinz, as above, §5 point no.57.
[180] Barz, Carl Hans, as above, §27 point no.24d, underlining by author
[181] Cf. ibid., §27 point no.24b; Winter, Heinz, as above, §5 point no.56; The law modernising the law relating to private limited liability companies (GmbH) and to combat malpractices, has according to Winter changed the law on raising capital in many places, but the basic direction remains unchanged, in particular the issue below par is still inadmissible, cf. Veil, Rüdiger, Stammkapital, Geschäftsanteil, in: commentary on law relating to private limited liability company (GmbHG), published by Franz Scholz, 10th edition, Cologne 2010, p.3274.
[182] Cf. Döllerer, Georg, Problematik, as above, p.205f; Ballerstedt, Kurt, Zur Bewertung von Vermögenszugängen aufgrund kapitalgesellschaftsrechtlicher Vorgänge, in: Festschrift für Ernst Geßler,

that the economic thinking of acquisition costs - offsetting the expenses of the company in the valuation of the non-cash contribution and distributing it over its useful life, fails when it comes to forming a company by non-cash contributions.[183] The company can therefore not really talk of acquisition costs; the face value of the shares lacks the "value-determining power"[184] to fix the value of the non-cash contribution.[185] This value-determining power lies exclusively in the non-cash contribution.[186] As there is a lack of a value-determining power, the possibility of gearing the value of notional acquisition costs to the face value is generally eliminated. The lack of the value-determining power of the face value "cannot be replaced by falling back on internal agreements on value comparisons".[187] For this reason, basically the fair market value results as a valuation of notional acquisition costs.[188]

Based on similar considerations such as the lack of value-determining power, it is not only the fair market value that is called for. Against acquisition costs existing at all, it can be mentioned that the company does not incur any expenses in granting shareholdings.[189] These missing expenses not only lack a cash-based character but they are not expenses at all. To determine the value therefore, it is not the service rendered in return that needs to be considered but there has to be recourse to the obtained service (= non-cash contribution). The term notional acquisition costs makes this circumstance clear: "It is to be noted that the amount applying to notional acquisition costs of the non-cash contribution is the amount recorded for the assets contributed".[190]

published by Kurt Ballerstedt et al., Munich 1971, p.74; Joswig, Michael, as above, p.179; Penné, Günter, as above, p.117.
[183] Cf. Ballerstedt, Kurt, as above, p.74.
[184] Döllerer, Georg, Problematik, as above, p.205.
[185] Cf. ibid., p.205f; same view Förschle, Gerhart and Manfred Kropp (Eröffnungsbilanz), as above, p.223ff, point no181f.
[186] Cf. Döllerer, Georg, Problematik, as above, p.205.
[187] Ballerstedt, Kurt, as above, p.74; same view Döllerer, Georg, Problematik, as above, p.205f and 212; Joswig, Michael, as above p.179.
[188] Cf. Ballerstedt, Kurt, as above, p.73ff; Joswig, Michael, as above, p. 179 in connection with p.195f.
[189] Cf. Förschle, Gerhart and Manfred Kropp (Eröffnungsbilanz), as above, p.223ff, point no.181f; Döllerer, Georg, Problematik, as above, p.205f; Schulze zur Wiesche, Dieter, as above, p.33.
[190] Olfert, Klaus and Werner Körner and Jochen Langenbeck, as above, p.115, underlining by author

The determination of notional acquisition costs from the value of assets contributed does not exclude an orientation towards the face value however,[191] as a connection can exist between both values: For "the *value of the shares*" is defined at the time of the contribution only by the market values of the assets obtained".[192]
So taking into account the upper and lower limits of the non-cash contributions resulting from the valuation principles, the following valuations can arise in the start-up balance sheet:

- Fair market value - determined by the sales or purchasing market
- Face value
- Value derived from historical acquisition costs of subscriber
- Interim values

If acquisition costs are rejected, the question arises concerning the validity of the historical cost principle. The prevailing opinion is that the historical cost principle is to be applied.[193] The minority viewpoint is presented in the following section.

Due to the lack of an acquisition process and general non-existence of acquisition costs, the rejection of the historical cost principle cannot be ruled out.[194] Schulze zur Wiesche explains:

"On the part of the limited liability company (GmbH), there is no acquisition transaction because the GmbH did not incur any expenses in the purchase. There is an asset increase by a shareholder, the issue of a shareholding is not an expenditure of the company".[195]

[191] Cf. Husemann, Karl-Heinz, as above, p.107.
[192] Förschle, Gerhart and Manfred Kropp (Eröffnungsbilanz), as above, p.226, point no.191, italics in original.
[193] Cf. e.g. Eisele, Wolfgang, Gründung (Gründung), in: HWB, as above, p.1556; Freericks, Wolfgang, as above. p.856.
[194] Cf. Schulze zur Wiesche, Dieter, as above, p.33; same view Döllerer, Georg, Einlagen bei Kapitalgesellschaften nach Handelsrecht und Steuerrecht (Einlagen), in: BB, 10 October 1986, p.1859; Festl-Wietek, Wolfgang, Bewertung von Sacheinlagen, Umwandlungen und Verschmelzungen bei Gesellschaften mit beschränkter Haftung, in: BB, 10 December 1993, p.2412.
[195] Schulze zur Wiesche, Dieter, as above, p.33.

As Schulze zur Wiesche uses the term acquisition costs in his further explanations,[196] this interpretation should also be subsumed under the term notional acquisition costs. To reach a valuation benchmark for non-cash contributions, principles for the valuation of non-cash contributions must be used as the valuation concept acquisition costs is rejected.[197]
From falling back on the principles of valuation of non-cash contributions to determine possible valuations of notional acquisition costs, the same approaches mentioned above [198] result.[199] There is therefore no need to discuss the applicability of the historical cost principle.

5.3.2.2.4 Non-stock corporations

The above options also relate to business partnerships (PersG) as they possess the independent legal capacity to make acquisition transactions.
There can be no sales and acquisition transactions for sole proprietorship as there are not two legal entities.[200] The notional acquisition costs are therefore measured according to the value of the non-cash contributions obtained[201]. As the principles of valuation of non-cash contributions are to be used for sole proprietorships,[202] possible valuations are the fair market value, a reference to the historical acquisition costs or interim values.

5.3.2.2.5 Interim findings and statement

The general existence of acquisition costs is to be rejected for two reasons:

Firstly the designation "acquisition costs in <u>acquisition-like</u> processes"[203] indicates that it does not clearly constitute an acquisition process. Even if it were to be concluded that acquisition costs basically exist, the face value would have to be stipulated for reasons of consistency. Conceding

[196] Cf. ibid., p.34; also Döllerer, Georg, Einlagen, as above, p.1860.
[197] Cf. Döllerer, Georg, Einlagen, as above, p.1859 "as it is a contribution, §253...is replaced by principles that apply to the valuation of contributions"; same view Schulze zur Wiesche, Dieter, as above, p.33f.
[198] Cf. Chapter 3.2.2.2.3.3.1.
[199] Cf. Festl-Wietek, Wolfgang, as above, p.2412f.
[200] Cf. Groh, Manfred, as above, p.528.
[201] Cf. Husemann, Karl-Heinz, as above, p.106.
[202] Cf. ibid., p.106.
[203] Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, p.360, underlining by author

an option to use fair market value for the non-cash contributions is therefore not reconcilable due to the principle of relevance of the service rendered in return to be applied when acquisition costs basically exist.

Secondly the sentence from the report of the parliamentary legal committee "From the company's viewpoint, the value of acquisition costs corresponds to the figure assigned to the objects at the time of the contribution",[204] leads to the conclusion that there are basically no acquisition costs due to equating acquisition costs with the value of the non-cash contribution.
From the formulation "the figure assigned to the objects at the time of contribution" it is not clear what valuation is definitive.[205] On the one hand, the face value can be stipulated from this formulation,[206] on the other hand, the fair market value of non-cash contributions[207] can be deduced as the definitive valuation of notional acquisition costs.

[204] BT-DrS 10/4268, p.101.
[205] same views regarding Stock Corporation Act (AktG): Klein, Werner, as above, p. 78; also Penné, Günter, as above, p.4f.
[206] Cf. Groh, Manfred, as above, p.528.
[207] Cf. Schulze zur Wiesche, as above, p.34.

5.4 Costs of acquisition and historical cost principle according to IFRS

5.4.1 Costs of acquisition as a unit of value of the framework

In the Framework, in F.100(a) – F.100(d), historical costs, current cost, realisable value/settlement value and present value are defined as general units of value. Currently, according to Ballwieser, discussions are taking place regarding a standard valuation in which fair value is being proposed for the initial valuation.[208]

The historical costs show that expenditure of a cash-based character was incurred for the acquisition of the asset. The historical costs therefore correspond to the acquisition costs according to the HGB.[209]

5.4.2 Precise definition of acquisition costs in the individual standards

The composition of acquisition costs of certain balance sheet items is more precisely defined in the individual standards.[210] On the one hand, it is determined by the type of asset (Stock IAS 2, Property, plant and equipment IAS 16, Intangible Assets IAS 38, Financial Instruments IAS 39, Investment Property IAS 40, Agriculture IAS 41) and on the other hand according to the type of external acquisition.[211] There is no IAS for non-cash contributions on company start-up.[212]

Acquisition costs are determined according to the type of asset and its acquisition according to the financial (cash-based) means expended or the attributable market value (fair value).[213] This casuistic treatment contradicts the IFRS objective of accounting standards based on principles.[214]

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[208] Cf. Ballwieser, Wolfgang, IFRS-Rechnungslegung, 2nd edition, Munich 2009, p.79, point no.173.
[209] Cf. Achleitner, Ann-Kristin and Giogio Behr and Dirk Schäfer, Internationale Rechnungslegung, 4th edition, Munich 2009, p.65.
[210] Cf. Kümpel, Thomas, Die Anschaffungs- und Herstellungskosten als ursprüngliche Bewertungsmaßstäbe für Vermögenswerte nach IAS, in: bilanz & buchhaltung 2002, p.130.
[211] Cf. Bieg, Hartmut and Christian Hossfeld and Heinz Kussmaul and Gerd Waschbusch, as above, p.98.
[212] Cf. Wohlgemuth, Micheal and Jens Radde, Anschaffungskosten, in Beck HdR, published by Hans-Joachim Böcking and others, Loseblatt, 31. instalment, p.38ff, point no139ff, Munich June 2011.
[213] Cf. Achleitner, Ann-Kristin and Giogio Behr and Dirk Schäfer, as above, p.65.
[214] Cf. Lüdenbach, Norbert, Eigenkapital, Eigenkapitalspiegel, in: IFRS commentary, p.855-905, published by Norbert Lüdenbach and Wolf-Dieter Hoffmann, 8th edition, Freiburg 2010, p.893f, point no.64ff.

If stock, property, plant and equipment, intangible assets and investment property are acquired by purchase, then the purchase price is the starting point for the calculation of acquisition costs, cf. IAS 2.9f for stock, IAS 16.15 for property, plant and equipment assets, IAS 38.25ff for intangible assets, IAS 40.20ff for investment property.[215] If an unusually long period for payment is allowed for property, plant and equipment and intangible assets, then the purchase price is to be discounted accordingly and the discount amount to be distributed over the period of the credit as a financing expense or is to be capitalized in agreement with IAS 23 Borrowing Costs (IAS 16.23, IAS 38.32).[216] If the payment of investment property is paid for on credit, this is to be recorded with the present value, and the difference between this amount and the total amount actually to be paid over the payment period is to be recorded as an interest expense (IAS 40.24).[217] For financial instruments and biological assets, entry valuation is carried out using the fair value (IAS 39.43).[218]

In addition to the purchase price, incidental expenses relating to acquisition costs also belong to acquisition costs. This includes import duties and non-refundable taxes as well as all directly attributable costs that accrue to transfer the asset into a condition ready for operation (such as costs for site preparation and transport, transfer and assembly costs): acquisition price reductions such as rebates, bonuses and discounts are to be deducted, in the case of biological assets, also the estimated sales costs.

In contrast to the legal definition of acquisition costs in the HGB, in the case of stock and property, plant and equipment, non-production related overhead costs are to be included in acquisition costs. The requirement according to IAS 16.16 (b) and IAS 2.10 is that it can be attributed di-

[215] Cf. Commission regulation (EC) no. 1126/2008, as above, L320/23ff.
[216] Cf. ibid., L320/75 and L320/256.
[217] Cf. Ibid., L320/325.
[218] Cf. Ibid., L320/280.

rectly to the acquisition of the asset, its transfer to a condition ready for operation or its transfer to the place of use.[219]

According to IAS 16.12.-16.14, subsequent acquisition costs raise the book value of the asset if expenses are incurred in connection with the asset which will probably lead to an additional economic benefit for the company. For these subsequent acquisition costs, the same definition and recognition criteria apply as for the original asset itself. All other expenses which do not meet these criteria (such as repair and maintenance expenses), are to be recorded in the profit and loss account as expenditure.[220]

Interest on borrowed capital accruing on financing the asset must not be capitalized according to the Benchmark method (IAS 23.7f).[221] In the case of a payment period exceeding the usual payment terms, they arise according to IAS 16.16 as the difference between the total amount of all payments and the purchase price. In the alternative method permitted according to IAS 23.11f, interest on borrowed capital in the context of acquisition costs is to be capitalized by qualifying assets as long as they can be directly allocated to their acquisition and if it is probable that future economic benefit can accrue to the company and the costs can be reliably calculated.[222] Such qualifying assets are assets whose transfer to a useable or saleable condition requires a fairly long period of time. If these requirements are not met, e.g. if the assets are already in a useable or saleable condition at the time of acquisition, the capitalization ban for interest on borrowed capital remains in place.[223]

5.4.3 Principle of neutrality of effect on profits and capital maintenance concepts

[219] Cf. Heno, Rudolf, Jahresabschluss nach Handelsrecht, Steuerrecht und internationalen Standards (IAS/IFRS), 6th edition, Heidelberg 2010, p.137.
[220] Cf. Bieg, Hartmut and Christian Hossfeld and Heinz Kussmaul and Gerd Waschbusch, as above, p. 99.
[221] Cf. Commission regulation (EC) No. 1126/2008, as above, L320/142.
[222] Cf. ibid., L320/143.
[223] Cf. Heno, Rudolf, as above, p.138.

A principle of neutrality of effect on profits is given just as little codification in the IFRS as the historical cost principle. By valuing at historic costs, the procurement process is treated as having no effect on profits. The neutrality of effect on profits is achieved through the principle of relevance of the service rendered in return, i.e. the asset is recorded with the value that exactly corresponds to the sum of changes in acquisition-related net assets.

In the valuation concept acquisition costs according to the HGB, it was established that a function of the historical cost principle is the achievement of neutrality of effect on income of the procurement process. Even though the historical cost principle is not codified in the valuation concept acquisition costs according to IFRS, it is still also based on the principle of neutrality of effect on income of the procurement process.[224]

An additional function of the historical cost principle according to the HGB is in its effect as maximum value principle in which the principle of nominal capital maintenance was established by the fixing of the absolute maximum value limit.

The IASB does not currently intend to lay down a capital maintenance concept with the exception of accounting standards in companies in countries with high inflation.[225] In F.104, two different concepts are quoted:

- the financial capital maintenance concept: the profit corresponds to the increase in either the nominal or the real monetary capital of the period,
- the performance-related capital maintenance concept: the profit corresponds to the concept referred to in German literature on

[224] Cf. Hoffmann Wolf-Dieter, Anschaffungs- und Herstellungskosten, Neubewertung, in: IFRS-Kommentar, p.323-367, published by Norbert Lüdenbach and Wolf-Dieter Hoffmann, 8th edition, Freiburg 2010, p.325, point no.5.
[225] Cf. Born, Karl, as above, p.68.

the subject as maintenance of assets ("Substanzerhaltung"); any fictitious profits from price increases are to be deducted.[226]

If the acquisition costs are substantiated with the fair value in individual standards, then this is based on the real or performance-related capital maintenance concept. Consequently a historical cost principle functioning as a maximum value principle does not make sense and is not necessary.

5.4.4 Fair-value valuation in exchange transactions

5.4.4.1 Exchange transaction

When property, plant and equipment or intangible assets are acquired through a free exchange or an exchange that is partly free and partly against payment, the assets obtained are to be capitalized according to IAS 16.24 and IAS 38.45 at the fair value unless the exchange transaction lacks commercial substance or a reliable determination of fair value is neither possible for the rendered asset nor the obtained asset.[227] The difference between the acquisition costs of the obtained asset and the book value of the discarded asset is to be recorded as having an effect on income in the profit and loss account. According to IAS 16.25 and IAS 38.46, the existence of commercial substance requires that:

- the configuration of the cash flow of the asset obtained as regards risk, time or amount differs from the configuration of the cash flow of the surrendered asset, or

- that the entity-specific value of the part of the company affected by the transaction following the exchange process changes, and

- one of both of the previous differences relating to the fair value of the exchanged assets is significant.[228]

[226] Cf. Bieg, Hartmut and Christian Hossfeld and Heinz Kussmaul and Gerd Waschbusch, as above, p.72.
[227] Cf. Commission regulation (EC) No. 1126/2008, as above, L320/75 and L320/258; Born, Karl, as above, p.131.
[228] Cf. Commission regulation (EC) No. 1126/2008, as above, L320/75 and L320/258; Bieg, Hartmut and Christian Hossfeld and Heinz Kussmaul and Gerd Waschbusch, as above, p.101.

If there are no comparable market transactions for the determination of fair value, the fair value can still be reliably determined if the range of estimates of fair value shows no significant fluctuations or the probability of the relevant estimates occurring can be reliably ascertained and can be taken into account in determining the fair value. If the fair values of both exchanged assets can be reliably determined, the obtained asset is to be recorded as the fair value of the asset rendered in return. However, if the fair value of the asset obtained can be more clearly determined then according to IAS 16.26 its objectification is definitive and takes precedence.[229]

Finally if the received asset could not be valued at fair value, it is recorded with the book value of the asset rendered in return without any effect on income.[230]

5.4.4.2 Fair Value

Individual standards do not allow for application of assessment measures contained in the Framework such as the attributable market value (fair value).

The fair value is to be regarded as a valuation measure whose aim is to picture the assets of the reporting company in the balance sheet in line with the market.[231] The use of this valuation measure is a product of the "true-and-fair-view" concept that primarily serves the provision of information which is based on an accounting standard concept oriented to international requirements in contrast to the cautious reporting approach geared to creditor protection to be found in the HGB. Correspondingly, the fair value is not only to be taken as a correction value, but also more

[229] Cf. Commission regulation (EC) No. 1126/2008, as above, L320/75f; Bieg, Hartmut and Christian Hossfeld and Heinz Kussmaul and Gerd Waschbusch, as above, p.101.
[230] Cf. Hoffmann, Wolf-Dieter and Norbert Lüdenbach, Die Abbildung des Tauschs von Anlagevermögen nach den neu gefassten IFRS-Standards, in: Steuern und Bilanzen 2004, p.338.
[231] Cf. Baetge, Jörg and Henning Zülich, Fair Value Accounting, in: Betriebswirtschaftliche Forschung und Praxis 2001, p.543.

and more as the central assessment measure for the valuation of certain assets.[232]

The standard definition in the individual standards describes the "fair value as the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction" [233]This concerns a value by which the assets are assessed under consideration of the usual market conditions; for this reason, the fair value is to be determined on the basis of the market prices quoted in an active market.[234]

An active market implies the following features according to IAS 38.8 that are regularly available especially with regard to financial instruments and raw materials:

- Homogeneity of the assets traded,
- The existence at all times of buyers willing to enter into contracts and sellers for the asset in question,
- Availability of prices for the public.[235]

If these conditions are present, the quoted price according to IAS 38.39 regularly corresponds to the current bid price.[236] In the case of financial assets, the quoted market price is set at the asking price as long as the company intends to purchase the assets.[237]

If neither a current bid price nor an asking price is available, then in accordance with IAS 38.39 the fair value will be based on the price at which

[232] Cf. Streim, Hannes and Marcus Bieker and Maik Esser, Vermittlung entscheidungsnützlicher Informationen durch Fair Values, in: Betriebswirtschaftliche Forschung und Praxis 2003, p. 459
[233] Commission regulation (EC) No. 1126/2008, as above, L320/181 on IAS 32.11, italics in original. Cf. also ibid. to IAS 16.6, IAS 18.7, IAS 21.8, IAS 38.8, IAS 39.9, IAS 40.5, IAS 41.8.
[234] Cf. Bieg, Hartmut and Christian Hossfeld and Heinz Kussmaul and Gerd Waschbusch, as above, p.88.
[235] Cf. Baetge, Jörg and Hans-Jürgen Kirsch and Stefan Thiele, Bilanzen, as above, p.263.
[236] Cf. Commission regulation (EC) No. 1126/2008, as above, L320/257.
[237] Cf. Bieker, Marcus and Jens Hackenberger, Finanzinstrumente im IFRS-Abschluss, in: DB 2004, p.1627.

the last comparable transaction was carried out.[238] This is to ensure that the value ratios on the valuation date are still representative and that an active market can be assumed in this respect.[239] If however the economic conditions have changed since the time of the transaction, the fair value will be adjusted to these changes with reference to the current prices of comparable assets and liabilities. The same also applies if the company can prove that the price of the last transaction does not correspond to the fair value.

If there is no active market, the particular regulations of the individual standards are to be taken into account when determining the fair value. The fair value is fixed, in accordance with IAS 16.33, with the amortized replacement costs if no market prices can be calculated.[240] Furthermore, when valuing financial instruments, the fair value is calculated by referring to market prices of similar financial instruments or using financial-mathematical models. In this case, at least the input parameters must be derived from active markets.[241]

In the case of property investments, when market values according to IAS 40.45 are missing, the current market prices of similar properties are to be used; if this is not possible, the fair value is to be assigned using the procedure listed in IAS 40.46 (e.g. cash flow forecasts).[242] If the company is not in a position to calculate the fair value according to IAS 40.45 or IAS 40.46, then the fair value is to be determined with the historic acquisition costs in line with the precedence of an objectification.

5.4.5 Necessity of notional costs of acquisition

The applicability of the fair value assessment is to be challenged against the background as to whether the principles of exchange theory receive

[238] Cf. Commission regulation (EC) No. 1126/2008, as above, L320/257.
[239] Cf. Küting, Karlheinz and Sascha Dawo, fair-value-Bewertung bei nicht-finanziellen Vermögenswerten im Rahmen der IFRS, in: Zeitschrift für kapitalmarktorientierte Rechnungslegung, 2003, p.231
[240] Cf. Commission regulation (EC) No. 1126/2008, as above, L320/76.
[241] Cf. Bieg, Hartmut und Christian Hossfeld und Heinz Kussmaul und Gerd Waschbusch, as above, p.89.
[242] Cf. Commission regulation (EC) No. 1126/2008, as above, L320/328.

similar application. This was already rejected for the lack of valid arguments for clear applicability in connection with the assessment concept for acquisition costs according to the HGB. For the assessment concept acquisition costs according to IFRS, nothing else can apply. Furthermore, there are no acquisition costs at all in the case of non-cash contributions in the context of company start-ups.

A term that more neutrally describes the problem of the assessment of non-cash contributions would therefore be "contribution value". This is taken as meaning the money amount that is to be attributed to the contributed asset at the time of assessment. In the literature on the subject however, the term notional acquisition costs is generally used. In accordance with the view represented by some authors, the term notional acquisition costs covers the full range of possible valuations in this study.
Now that we have established the possibility for a range of valuations of non-cash contributions in the start-up balance sheet, the following chapter will go on to discuss the individual valuations.

5.4.6 Prevalence of IFRS

The IFRS are used in over 110 states worldwide and thus demonstrate a success shown by no other accounting system; in the EU, the preparation of the consolidated financial statements of capital market-oriented companies according to the IFRS is mandatory.[243] Depending on the member state, there is either a ban, a voting option or an obligation for individual financial statements of publicly traded companies as well as group or individual non-publicly traded companies:[244]

[243] Cf. Bieg, Hartmut and Christian Hossfeld and Heinz Kussmaul and Gerd Waschbusch, as above, p. 89.
[244] Cf. Commission Regulation (EC) No 1126/2008, as above, L320/328.

	Companies	Publicly traded companies		Non-publicly traded companies	
		Consolidated	**Legal entity**	**Consolidated**	**Legal entity**
Austria	All	Required	Not permitted	Permitted	Not permitted
Belgium	Credit institutions Other	Required Required	Not permitted Not permitted	Required Permitted	Not permitted Not permitted
Cyprus	All	Required	Required	Required	Required
Czech Republic	All	Required	Required	Permitted	Not permitted
Denmark	All	Required	Permitted	Permitted	Permitted
Estonia	Credit institutions, insurance companies, financial and mixed financial holding companies and investment companies Other	Required Required	Required Required	Required Permitted	Required Permitted
Finland	Insurance Other	Required Required	Not permitted Permitted	Required Permitted	Not permitted Permitted
France	All	Required	Not permitted	Permitted	Not permitted
Germany	All	Required	Not permitted	Permitted	Not permitted
Greece	All	Required	Required	Permitted	Permitted
Hungary	All	Required	Not permitted	Permitted	Not permitted
Ireland	All	Required	Permitted	Permitted	Permitted
Italy	Supervised financial companies, companies with financial instruments widely distributed among the public Insurance companies Other	Required Required Required	Required Not permitted Required	Required Required Permitted	Required Not permitted Permitted
Latvia	Banks, insurance companies and other financial institutions Other	Required Required	Required Permitted*	Required Permitted	Required Not permitted
Lithuania	Banks and controlled financial institutions Other	Required Required	Required Required	Required Not permitted	Required Not permitted
Luxembourg	All	Required	Permitted	Permitted	Permitted
Malta	All	Required	Required	Required	Required
Netherlands	All	Required	Permitted	Permitted	Permitted
Poland	Banks	Required	Not permitted	Required	Not permitted

	Pending admission to regulated market	N/A	N/A	Permitted	Permitted
	Subsidiary in IFRS group	N/A	N/A	Permitted	Permitted
	Other	Required	Permitted	Not permitted	Not permitted
Portugal	Banks and financial institutions	Required	Not permitted	Permitted	Not permitted
	Subsidiary in IFRS group	N/A	N/A	Permitted	Permitted
	Other	Required	Permitted	Permitted	Not permitted
Slovakia	All	Required	Not permitted	Required	Not permitted
Slovenia	Banks and insurance companies	Required	Required	Required	Required
	Other	Required	Permitted	Permitted	Permitted
Spain	All	Required	Not permitted	Permitted	Not permitted
Sweden	All	Required	Not permitted	Permitted	Not permitted
United Kingdom	All	Required	Permitted	Permitted	Permitted

*Latvia: companies listed on the official list of the Riga Stock Exchange are required to prepare IFRS-EU legal entity accounts for listing purposes only.

Figure 1: Report from the EU-Commission on application of international accounting standards

For group financial statements of non-publicly traded companies, there is an option in Germany as well as in Austria to prepare these according to the IFRS. According to the users and goals of the accounting system, the individual financial statement in Germany and Austria must be prepared according to the HGB.[245] Germany provides the special regulation of § 325 IIa HGB for certain companies in that for an IFRS individual financial statement prepared in addition to the HGB, only the IFRS statement is to be disclosed.

[245] Cf. Wagenhofer, Alfred, as above, p. 115

6 DISCUSSION OF VARIOUS VALUATIONS OF NOTIONAL COSTS OF ACQUISITION

6.1 Discussion of values according to German Commercial Code (HGB)

6.1.1 Views from the relevant literature

6.1.1.1 Fair market value

Fair market value is to be understood as a general expression.[246] Features of the fair market value are the replacement value on the balance sheet date or the sales value or values derived from them.[247] If intangible values e.g. patents are contributed, the yield value is taken into consideration.[248]

In connection with the German Accounting Law Modernisation BilMoG, the German legislator has introduced the term "beizulegender Zeitwert" **attributable market value (fair value)** as a valuation benchmark in addition to acquisition costs in § 255 IV HGB; its definition is as follows:

> "The attributable market value (fair value) corresponds to the market price. If there is no active market which can be used to determine the market price, the attributable market value is to be determined using generally recognised valuation methods. If the attributable market value cannot be determined according to sentence 1 or sentence 2, the acquisition costs or production costs are to be continued in accordance with § 253 para. 4. The most recently determined attributable market value according to sentence 1 or 2 is considered to be the acquisition or production costs within the meaning of sentence 3."[249]

With the BilMoG and its extension of the use of the valuation benchmark attributable market value (fair value), steps have been taken towards har-

[246] Cf. Vormbaum, Herbert, Tageswerte, in: HWR, published by Erich Kosiol et al., 2nd edition, Stuttgart 1981, p.1539.
[247] Cf. ibid., p.1539ff.
[248] Cf. ibid., p.1539; Joswig, Michael, as above, p. 202.
[249] § 255 IV HGB, as above.

monisation with the IFRS.[250] As the codification in § 255 IV HGB is vague and in need of interpretation in the second part, it seems reasonable to use the definition of the analogous value term fair value in the IFRS.[251] According to § 255 IV S.1 HGB, the market price – from the procurement or sales market – is basically to be used as a benchmark in determining the value of the respective asset. The market price relating to this fair value concept is to be determined hierarchically according to the following methods:

- mark-to-market, for marketable circumstances such as e.g. stock exchange prices
- market-comparative values, if a market price cannot be determined
- mark-to-model, that is generally recognised finance mathematical valuation methods such as the discounted cash flow model.

If generally recognised valuation methods are used, there is the risk of violating the principle of prudence required by commercial law which is why § 285 no. 25 in connection with § 285 no. 20 HGB requires corresponding disclosures in the notes.[252] If not even a finance mathematical valuation method to determine the attributable market value (fair value) is possible, this valuation is eliminated due to a lack of reliable determination and the valuation is to be based on acquisition costs. "A non-reliable determination of the market value can be assumed for example if the valuation method applied allows a range of possible values, the values differ substantially from one another and it is not possible to apply a weighting to the values according to probability of occurrence."[253]

The attributable market value is intended for application to peripheral valuation areas such as provisions for pension obligations, offsetting of pension obligations or comparable liabilities of a long-term nature, to

[250] Cf. BT-Drs. 16/10067, German Federal Government draft law, draft of a law to modernise accounting law (German Accounting Law Modernisation Act – BilMoG), p. 1 and S.34.
[251] Cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, as above, p.103. On the definition of the value term fair value according to IFRS cf. Chapter 5.4.4.2.
[252] Cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, as above, p.104.
[253] BT-Drs. 16/10067, as above, p.61.

group capital consolidation and to financial instruments in the trading portfolios of credit institutions.[254] There was no regulation concerning an application of the attributable market value to non-cash contributions on company start-up however. The German loophole relating to notional acquisition costs therefore continues to exist which is why the opinions in academic literature on the subject will be analysed below.[255]

According to the views of several authors, the fair market value of the contributed asset is taken into consideration for the main valuation of notional acquisition costs. Based on this opinion, the following more detailed differentiation can be observed:

- basically fair market value, without any more precise specification[256]
- fair market value - determined by the purchase market[257]
- fair market value - determined by the sales market[258]
- a combination of the fair market value of the sales and purchase markets[259]

In the case of limited liability companies (KapG), the amount over and above the face value is to be included in the capital reserves, according to

[254] Cf. §§ 246 II S.2, 253 I S.3 and 4, 301 I S.2, 312 II S.1, 340e III S.1 German Commercial Code (HGB), as above.
[255] The assumption made in the dissertation in footnote 15 that the market value always exceeds the value relating to the historical acquisition costs, continues to apply.
In the context of subsequent valuation, the lower attributable market value (fair value) was already to be used before the introduction of the BilMoG for current asset depreciations under the other requirements listed in § 253 III HGB old version, now § 253 IV HGB new version.
[256] Cf. Kropff, Bruno, Über die "Ausgliederung" (Ausgliederung), in: Festschrift für Ernst Geßler, as above, p.116; Kuhn, Klaus, Die Sacheinlage bei Kapitalgesellschaften in betriebswirtschaftlicher Sicht, in: ZfB 10 October 1966, p.664; Husemann, Karl-Heinz, as above, p.106f; Loitelsberger, Erich, as above, p.1775.
[257] Cf. Schiller, Andreas, Gründung, as above, p.169; of the same, Die Prüfung von Sacheinlagen im Rahmen der aktienrechtlichen Gründungsprüfungen (Prüfung), in: AG, 01 January 1992, p.27. Schiller basically calls for the fair market value of the purchase market; only if non-cash contributions are not reconcilable with the company in advance, is the fair market value to be determined by the sales market; Lang, Hans Richard, Sacheinlagen im Recht der GmbH unter Berücksichtigung der Bewertungsproblematik, Diss. Mainz 1971, p.30.
[258] Cf. Saage, Gustav, Zum Umfang der Gründungsprüfung, in: ZGR, 4/1977, p.689; Klein, Werner, as above, p.78ff, Klein basically asks for the fair market value of the sales market, although regards interim values as permissible; Ruchti, Hans, Bewertung von Sacheinlagen, in: HWB, published by Edgar Castan and others, Vol.3, 3rd edition, Stuttgart 1960, p.4746; Thiel, Rudolf, Handelsrechtliche und steuerrechtliche Bewertung von Sacheinlagen bei der Kapitalgesellschaft, in: DB, 16 March 1960, p.302; Mutze, Otto, as above, p.328.
[259] Cf. Kursawe, Edgar, as above, p.90ff; Penné, Günter, as above, p.159ff; Joswig, Michael, as above, p.197; Festl-Wietek, Wolfgang, as above, p.2412f.

§§ 270 I 1, 272 II no.1 HGB. In the case of business partnerships (PersG), the allocation to capital reserves is not legally regulated, but can be regarded as admissible. There is nothing to prevent a voluntary application of the supplementary provisions for capital companies (KapG) regarding an allocation to capital reserves.

6.1.1.2 Face value

The view that can be considered the prevailing opinion regards the face value as the decisive valuation.[260] An option is sometimes granted for fair market valuation.[261] Although not the view represented here, if the analogy to exchange theory were followed, the option of selecting fair market valuation would result from the choice of methods for exchange principles.

If the face value is taken as the notional acquisition cost, then hidden reserves will arise amounting to the difference between the fair value and the face value.[262] As a result, there is no allocation to capital reserves in the amount of the "'hidden'" premium.[263]

6.1.1.3 Value derived from historical costs of the subscriber

In the relevant literature, there are discussions pertaining to a value derived from the historical costs of the subscriber in the start-up balance sheet.[264] As in the case of companies, this is legally an acquisition process, such a valuation is not mandatory however.

If the amortised book value does not reach the face value, then the amortised book value must not be exceeded due to the ban on issues below par. If a value derived from historical costs of the subscriber is used, hidden reserves will arise amounting to the difference to the fair market value.

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[260] Cf. Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.96; Hast, Karl, Grundsätze ordnungsmäßiger Bilanzierung für Anlagegegenstände, 2nd edition, Leipzig 1935, p.68; Heinen, Edmund, as above, p.485; Groh, Manfred, as above, p.528; Angermayer, Birgit, Die Prüfung von Sacheinlagen im neuen Umwandlungsrecht, in: WPg, 15 October 1995, p.681; Bayer, Walter, Stammkapital, Geschäftsanteil, in: GmbH-Gesetz, published by Marcus Lutter and others, 17th edition, Cologne 2009, §5 point no.27.

[261] Cf. Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.97 with further references; Olfert, Klaus and Werner Körner and Jochen Langenbeck, as above, p.114f.

[262] Cf. Husemann, Karl-Heinz, as above, p.107.

[263] Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.97.

[264] Cf. Festl-Wietek, Wolfgang, as above, p.2412f; Husemann, Karl-Heinz, as above, p.106.

When deciding on a valuation relating to historic acquisition costs therefore, the criterion of the admissibility of hidden reserves in the start-up balance sheet can be used.[265]

6.1.1.4 Interim values

When determining notional acquisition costs, some authors believe it possible to use interim values.[266] The range can vary here from EUR 0.00 to the upper limit of the fair market value. Taking EUR 0.00 as a valuation can be explained by the fact that non-cash contributions basically need to be incorporated in the inventory or start-up balance sheet due to the principle of completeness, but that a valuation cannot be demanded. In an analogy to the view represented regarding free acquisition, Adler/Düring/Schmaltz are of the view that the capitalization of non-cash contributions cannot be demanded unless a fair value valuation is laid down in the articles of association.[267] Since arbitrary interim values are admissible in the case of free acquisition,[268] the analogy leads to the question of admissibility of arbitrary interim values for non-cash contributions. This can firstly be contrasted to the principle of the certainty of the valuation. According to this, the valuation of an asset must follow a certain method whereby the method selected can be freely chosen.[269] Secondly the analogy of formation by non-cash contributions to exchange theory suggests a rejection of interim values as in the case of exchange, interim values are considered inadmissible according to the relevant literature.[270] On deciding whether interim values should be permitted as decisive valuations for notional acquisition costs, the criterion of the admissibility of hidden reserves in the start-up balance sheet can be used, for if

[265] This then leads to an examination of the decision criterion objectification.
[266] Cf. Olfert, Klaus and Werner Körner and Jochen Langenbeck, as above, p.114; Klein, Werner, as above, p.80; Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.97 in connection with point no.83. The question of these interim values is of less importance in the relevant literature.
[267] Cf. Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.97 in connection with point no.83.
[268] Cf. to the current opinion Ordelheide, Dieter, Anschaffungskosten, as above, point no.190ff.
[269] Cf. Gelhausen, Wolf Dietrich, Abschnitt E IV Bewertungsvorschriften, in: WP-Handbuch 2000, Vol.1, published by IdW in Deutschland e.V., 12th edition, Düsseldorf 2000, point no.233.
[270] Cf. the exchange principles referred to in Chapter 5.4.4.1.

interim values are used, hidden reserves will arise amounting to the difference to the fair market value.[271]

6.1.2 Decision criteria

6.1.2.1 Derivation of the decision criteria

The HGB accounting standards are a compromise between the functions of profit calculation and information provision. Only when the function of profit calculation is taken into account (as in the HGB) can the question of the admissibility of hidden reserves be considered.

The condition precedent of every accounting procedure in fulfilling the function of information provision is objectivity.

Both decision criteria, the permissibility of hidden reserves in the start-up balance sheet and objectivity, represent a product of both functions of external accounting: the calculation of profit and the provision of information. If a competitive situation arises between both decision criteria, a trade-off is to be carried out between profit calculation and information provision at the accounting function level.

6.1.2.2 Admissibility of hidden reserves in the start-up balance sheet

6.1.2.2.1 Meaning of the decision criterion

If the admissibility of hidden reserves in the start-up balance sheet is rejected, then only the face value is taken into consideration when calculating notional acquisition costs.[272]

6.1.2.2.2 The term hidden reserves and classification

The term hidden reserves denotes certain parts of the share capital whose amount is not obvious from the balance sheet.[273] They can be allocated to individual entries of the assets or liabilities and are therefore not always

[271] Cf. Olfert, Klaus and Werner Körner and Jochen Langenbeck, as above, p.114.
[272] Cf. Schiller, Andreas, Gründung, as above, p.134.
[273] Cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, as above, p.340.

to be reported in the liabilities section, in contrast to open reserves.[274] When determining notional acquisition costs, the level of hidden reserves results from the difference between the face value and the fair value.[275]

Modelled on the work of Küting, the following classification features are taken into consideration when classifying hidden reserves in the start-up balance sheet:[276]

1. Origin: A distinction can be made between hidden capital and revenue reserves. If the face value is used to calculate notional acquisition costs, then they are hidden capital reserves.
2. Comparative value: In contrast to the face value, various forms of the fair value are possible.[277] In this case, the amount of reserves depends on which form of the face value is chosen. This means that it is possible to more precisely differentiate between replacement reserves, sales reserves and earnings value reserves.
3. Influenceability: Endogenous reserves can be influenced by the will of the person drawing up the balance sheet. They are divided into discretionary and arbitrary reserves.

In the case of discretionary reserves, the person drawing up the balance sheet can decide between a range of possible valuations. This leeway in balance sheet terms results "inevitably from the practical impossibility of complete objective verification and therefore a standardization of economic processes".[278]

Arbitrary reserves used to be included which were an infringement of legal provisions or an undervaluation going beyond the level acceptable according to § 253 IV HGB in connection with § 279 I 1 HGB.[279] Arbitrary reserves are now inadmissible.[280]

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[274] Cf. Küting, Karlheinz, Stille Rücklagen-ein betriebswirtschaftliches Phänomen, in: BB, 21.09.1995, supplement 15 to issue 38/1995, p.2.
[275] Cf. Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.97. This equally applies if the reference value chosen is the value derived from the historical acquisition costs or interim values.
[276] Cf. Küting, Karlheinz, as above, p.3ff.
[277] The possibility of the agio or premium can continue to be ignored.
[278] Schedlbauer, Hans, Erfolgsbereinigung um stille Reserven, in: Bilanzanalyse nach neuem Recht, published by Adolf Gerhard Coenenberg, Landsberg/Lech 1989, p.144.
[279] Cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, as above, p.340f.
[280] Cf. Ibid., p.168; Küting, Karlheinz, as above, p.14. Cf. for temporal application chapter 6.1.2.2.5.

According to Schedlbauer, there is a grey area between arbitrary and discretionary reserves, in which approx. 75 % of hidden reserve formation is to be positioned.[281] The calculation of notional acquisition costs is to be filed in this grey area with reference to the face value. Schiller therefore explicitly comes to the conclusion that the face value is an arbitrary value as it violates the principles of proper accounting. [282] The difference between an arbitrary value and the comparative value represents an arbitrary reserve. So the face value as the decisive valuation method of notional acquisition costs is clearly inadmissible.

On the other hand, the face value could be considered a discretionary reserve. In line with the view developed by Küting, hidden discretionary reserves can generally not be rejected,[283] because they result from the impossibility of complete objective verification. Furthermore, as the legal provisions relating to hidden reserves are not clear, there should be a request for for-and-against arguments of hidden discretionary reserves in the start-up balance sheet.

6.1.2.2.3 Appraisal of hidden discretionary reserves in the start-up balance sheet

The following arguments are in favour of admissibility:

1. There is no express legal ban on undervaluation of non-cash contributions. The legislator's concept is in accordance with the principle of actual capital provision that at least the capital raised should be protected; the goal is not to achieve a fixed valuation however. It is therefore the will of the legislator to permit hidden reserves.

2. The law creates compulsory reserves for the conventional balance sheet and permits discretionary reserves depending on the legal form (§§ 253 I, 279 I 1 HGB). There is therefore no need to avoid hidden reserves in the start-up balance sheet. This argument could be restricted if the start-up balance sheet and the conventional balance sheet were to basically follow different purposes. The main purpose of the start-up balance sheet is to

[281] Cf. Schedlbauer, Hans, as above, p.143.
[282] Cf. Schiller, Andreas, Gründung, as above, p.140; the same, AG, as above, p.2408; same view Husemann, Karl-Heinz, as above, p.107.
[283] Cf. Küting, Karlheinz, as above, p.14.

show the asset and capital structure at the start of business as well as creating a starting point for future income calculation. The purposes of the start-up balance sheet are not basically any different from those of the conventional balance sheet so there is no limitation to the argument.

3. The capital protection of the Stock Corporation Act (AktG) always refers only to the reported capital and not the actual capital. Even when hidden reserves are formed, the reported capital remains protected.[284]

4. The Transformation Act (Umwandlungsgesetz) allows continuance of book values in cases where changes of legal form similar to formation by non-cash contributions have occurred. Accordingly, this should also be admissible for a company start-up including the consequence of hidden reserves.[285]

Management theory takes a critical and even negative view of the admissibility of hidden discretionary reserves with the following arguments.

1. The valuation of notional acquisition costs at face value is a violation of legal provisions as the legislator created the position of capital reserves according to § 274 II no.1 HGB to prevent the formation of hidden capital reserves at the time of company start-up.[286] The undervaluation of non-cash contributions is inadmissible because the envisaged capital reserve is not sufficiently allocated.[287]

2. The main purpose of the start-up balance sheet, in line with the general standard of § 264 II HGB is to portray a picture of the assets and capital structure existing on the start-up balance sheet date corresponding to actual conditions. The start-up balance sheet only achieves this task if it does not contain any hidden reserves.[288] The information purpose of the start-up balance sheet requires the valuation of non-cash contributions at fair market value and their disclosure.[289]

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[284] Cf. Barz, Carl Hans, as above, §27 point no.24a-24d.
[285] Cf. ibid., §27 point no.24b; Sarx, Manfred, Bilanzierung, as above, p. 694f; the same, Gründungsbilanz/Eröffnungsbilanz (Gründung), in: Beck Bil-Komm., edited by Wolfgang Dieter Budde et al., Munich 1986, app.3 point no.25 with further references
[286] Cf. Schulze zur Wiesche, Dieter, as above, p.34; same view Husemann, Karl-Heinz, as above, p.107; Kuhn, Klaus, as above, p.664; Mohr, Heinrich, Die Bewertung der Beteiligungen als Problem der aktienrechtlichen Gründungsprüfung, in: WPg 01 November 1960, p.575.
[287] Cf. Kropff, Bruno, comment on §150, in: Aktiengesetz, pubished by Bruno Kroppf et al., Munich 2003, §150 point no.14f.
[288] Cf. Joswig, Michael, as above, p.197f.
[289] Cf. Ballerstedt, Kurt, as above, p.72ff.

3. Furthermore, the asset and income situation is instanced with regard to the general standard because the formation of hidden reserves has effects on future period results as the valuation in the start-up balance sheet determines future depreciation levels.[290] If the establishment of depreciation potential is subject to the discretion of the person drawing up the balance sheet, then influencing the next period results is consequently at his/her discretion.[291] The formation of hidden reserves can achieve a "'reserve volume' in profit policy"[292] right from the start with far-reaching consequences into the next accounting periods.[293]

4. As the start-up balance sheet is also the standard balance sheet and in tax law, the going-concern value, which is normally the fair value, is required, this contradicts the formation of hidden reserves in the start-up balance sheet.[294]

5. The valuation concept of fair market value serves the preservation of capital.[295] Some authors refer to the aspect of preservation of corporate capital.[296] Due to a lack of double meaning [297]of the start-up balance sheet, hidden reserves here have a different meaning to the hidden reserves formed in the conventional annual financial statement. Hidden reserves in the conventional annual financial statement are normally formed to encumber the financial year that is being closed. Due to the lower face value in relation to the comparative value, hidden reserves in the start-up balance sheet are formed without an impact on income. The valuation in the start-up balance sheet thus establishes future expenditure potential. Whilst in a conventional annual financial statement, accumulated hidden reserves only cause a postponement of profits over the entire life of the com-

[290] Cf. Kursawe, Edgar. as above, p.77.
[291] Cf. Kuhn, Klaus, as above, p.664.
[292] Heinen, Edmund, as above, p.323, bold in original.
[293] Cf. Mohr, Heinrich, as above, p.575. On the assessment of consequences of hidden reserves in the following reporting periods cf. Küting, Karlheinz, as above, p.13.
[294] Cf. Joswig, Michael,as above, p.186ff.
[295] Cf. Kritschgau, Jürgen, Die Problematik der Bilanzierung zu Tageswerten aus der Sicht des Abschlußprüfers, Bamberg 1985, p.10.
[296] Cf. Kursawe, Edgar, as above, p.78f; Joswig, Michael, as above, p.123 in connection with p.4f; Schiller, Andreas, Gründung, as above, p.137f; probably also Ballerstedt, Kurt, as above, p.72f.
[297] On the term double meaning in the start-up balance sheet, Joswig comments appropriately: A "valuation in the start-up balance sheet does not simultaneously have an effect on an expired and on at least one future business year," Joswig, Michael, as above, p.4.

pany,[298] the undervaluation in the start-up balance sheet influences the total success of the business.[299] By not reporting expenditure potential through undervaluing the non-cash contribution in the start-up balance sheet, the capacity for future income-related set-off is permanently withdrawn. In the case of assets affected by wear-and-tear, the financing from depreciation is not sufficient to replace the asset. As the depreciation is too low, there is the risk of an excessive reporting of profit. If non-cash contributions not subject to wear-and-tear are undervalued, a fictitious profit will occur when the item is sold if the sales value exceeds the value of the non-cash contribution. If the fictitious profit is then taxed and distributed, capital is removed from the company.

6.1.2.2.4 Interim findings and statement

The concept of capital preservation is convincing and should be taken into account, particularly in the start-up phase. In Chapter 5.3.1 it was shown that through the acquisition costs principle, at the most, nominal capital preservation could be achieved. To protect the actual corporate capital, there are only a few balance sheet measures that can have an effect whilst observing the maxims of the acquisition cost principle towards actual preservation of corporate substance. The company founders should use their discretion to protect corporate capital right from the start as they only have a few measures at their disposal anyway.

It cannot be argued against this result that estimating fair values in the conventional annual financial statement is rejected due to objectivity requirements because the objectivity requirement resulting from the rejection of the estimate of fair values in the annual financial statement differs from that of the start-up balance sheet. When establishing the fair value in the conventional balance sheet, the aim was to grant additional discretionary scope as the asset already has a book value. In the start-up balance sheet on the other hand, an original valuation takes place.

[298] Cf. Rux, Hans-Joachim, Stille Reserven, Abt.129, in: HdB, 65.Teillieferung, published by Rudolf Federmann, Freiburg im Breisgau February 1996, point no.6.
[299] Cf. Kursawe, Edgar, as above, p.77f; Joswig, Michael, as above, p.4.

In the light of the above, the formation of hidden reserves in the start-up balance sheet is rejected.[300]

On the basis of the decision criterion of admissibility of hidden reserves in the start-up balance sheet, only the fair market value can be taken into consideration as a decisive valuation for notional acquisition costs. In the case of non-cash contributions necessary for business, the type of fair value to be used is the replacement fair value and for non-cash contributions not necessary for business, the sales value is to be used.[301]

6.1.2.2.5 Hidden reserves in connection with the legal form

Although the established view in this work is that hidden reserves are not admissible in the start-up balance sheet, there used to be exceptions in certain cases for non-limited liability companies (Nicht-KapG), as the application of the German Commercial Code (HGB) did not explicitly exclude their formation for non-limited liability companies (Nicht-KapG).[302] In § 253 IV HGB old version, all businessmen were given the option of making write-offs using reasonable commercial judgement. According to § 279 I 1 HGB, this provision is waived for limited liability companies (KapG). There is therefore no restriction regarding the admissibility of hidden reserves in the start-up balance sheet for limited liability companies (KapG). Neither is there a rule corresponding to § 253 IV HGB old version in the Austrian Company Code.

[300] The status of opinion on admissibility of hidden reserves in the start-up balance sheet is presented by Joswig, cf. Joswig, Michael, as above, p. 198 Fn 118.

[301] Cf. Penné, Günter, as above, p.163; Joswig, Michael, as above, p.199; Schiller, Andreas, Prüfung, as above, p.24ff.

[302] For financial years that started before 01 January 2010 (cf. art. 66 para 5 Intro. Act to the HGB), depreciations could be carried out according to § 253 III 3 S. 3 HGB old version if they were deemed necessary according to reasonable commercial judgement to prevent the valuation of current assets having to be changed in the future due to fluctuations in value. The aim was therefore to anticipate future value reductions. With the introduction of § 253 IV HGB new version by the BilMoG, this possibility no longer applies to financial years after 31 December 2009.
Non-limited liability companies could carry out depreciations in the context of reasonable commercial judgement according to § 253 IV HGB old version in financial years that began before 1 January 2010. This option has also been cancelled due to the new version of § 253 HGB by the BilMoG. If the reasons for an unplanned depreciation do not apply at a later date for financial years that started before the 01 January 2010, an appreciation in value is to be carried out for limited liability and non-limited liability companies in the amount of the value increase.

We still need to examine whether the option in § 253 IV HGB old version led to an undervaluation of non-cash contributions for sole proprietors, business partnerships (PersG) and also large public companies within the meaning of the German Publicity Act (PublG).[303]

It should firstly be stated that the prevailing opinion is that the formation of hidden reserves is admissible in the case of 253 IV HGB old version.[304] In the justification to § 253 IV HGB old version, the legislator explicitly refers to the admissibility of these commercially legal undervaluations[305] and thereby intends there to be a conscious formation of hidden reserves.[306] These write-offs have their lower value limit in the rule of neutrality,[307] which is expressed in the vague legal term "reasonable commercial judgement".[308]

It is important for the start-up balance sheet to determine which value, in the context of reasonable commercial judgement, these additional devaluations are to be taken from.

The opinion of Karrenbauer, that § 253 IV HGB old version does not suggest that it is permissible for non-limited liability companies (Nicht-KapG) to value additions with a value below the acquisition costs because § 253 IV HGB old version only granted the option of making additional write-offs,[309] can be followed in the start-up balance sheet because the acquisition of non-cash contributions by the business partnership (PersG) represents an addition as an independent acquisition process. With this addition, a value below the notional acquisition costs is not to be used if the fair value is to be regarded as the decisive valuation. When the non-cash contribution is introduced, no acquisition costs are incurred at all which is why the valuation at fair market value represents a first valuation step. A depreciation in accordance with § 253 IV HGB old version represents a second and subsequent valuation step. Hidden reserves in the start-

[303] Cf.Döring, Ulrich, Wertansätze der Vermögensgegenstände und Schulden, in: HdR, as above, § 253 point no.189.
[304] Cf. e.g. ibid., point no.11.
[305] Cf. BT-DrS 10/4268, p.100.
[306] Cf. Döring, Ulrich, as above, point no.189.
[307] Cf. BT-DrS 10/4268, p.100.
[308] On the interpretation of the vague legal term "reasonable commercial judgement" cf. Döring, Ulrich, above, point no.190ff.
[309] Cf. Karrenbauer, Michael, as above, point no.9.

up balance sheet would therefore not be possible for non-limited liability companies (Nicht-KapG), a subsequent devaluation would by contrast be permissible.
If the historical acquisition costs were to be the starting point for non-limited liability companies (Nicht-KapG) however, this can lead to the formation of hidden reserves in the start-up balance sheet through § 253 IV HGB old version. Starting from the historic acquisition costs as the first valuation step, devaluations in the context of reasonable commercial judgement at the date of the start-up balance sheet (=second valuation step) and thus a formation of hidden reserves in the start-up balance sheet, are to be judged as admissible.[310]

The decision as to whether the historical acquisition costs or the fair market value are to be used for non-limited liability companies (Nicht-KapG) is influenced by the objectivity requirements still to be examined.

6.1.2.2.6 Problem of fair market value
On the subject of hidden reserves, we have discussed hidden discretionary or hidden arbitrary reserves. This already shows clearly that there are objectification problems when determining notional acquisition costs as the discussion concerning hidden discretionary reserves can only arise from the room for manoeuvre in balance sheet preparation that "necessarily results from the practical impossibility of complete objectification"[311]. Arbitrary reserves completely evade objectification.
In the relevant literature, objectification problems of non-cash contributions when determining notional acquisition costs using the fair market value are even conceded by proponents of the fair value.[312] It is admitted in these discussions that a fair market value cannot be clearly determined in the case of individual[313] non-cash contributions or in general,[314] and

[310] Cf. Förschle, Gerhart and Manfred Kropp (Eröffnungsbilanz), as above, p.223f, point no.181f.
[311] Schedlbauer, Hans, as above, p.144.
[312] Cf. Kuhn, Klaus, as above, p.661 in connection with p.664; Kropff, Bruno, Ausgliederung, as above, p.116; Penné, Günter, as above, p.168ff; Husemann, Karl-Heinz, as above, p.107; Klein, Werner, as above, p. 78ff; Joswig, Michael, as above, p.51; Hoffmann, Wolf-Dieter, as above, p.326, Rn8ff.
[313] Cf. Klein, Werner, as above, p.79f; Penné, Günter, as above, p.177; Joswig, Michael, as above, p.51.
[314] Cf. Husemann, Karl-Heinz, as above, p.107; Kuhn, Klaus, as above, p.661.

that in the case of fair market value, as a general rule, only an imprecise estimate can be made.[315] Recourse to estimates for the calculation of the fair market value results from the fact that the value to be determined is the one that could be achieved in a sale,[316] or that would have to be paid on purchase.[317] The imprecise nature of the estimate is increased by the frequent lack of a concrete market price and so by the necessary placement on a relevant comparative market or in usual business trading.[318] If the market value does not meet the objectification requirements to be faced, hidden reserves amounting to the difference between the market value and the value which is to be regarded as objectified, should be made admissible.

It is questionable which of these are objectification requirements and which of the quoted valuations is suitable for compliance with the criterion of objectification. Ballerstedt explains relevantly: "Maybe you can object that precisely to avoid valuation arbitrariness, you should not take the fair value which can only be calculated by an estimate, but only on the value *agreed* as decisive for the capital contribution".[319]

6.1.2.3 Objectivity

6.1.2.3.1 Term and necessity

The limited use doctrine suggests making the value of non-cash contributions dependent on their subjective use for the company.[320] A subjective valuation is however "not based on the object, but only determined by the feelings or arbitrary assertions of the subject".[321] Such a valuation is inappropriate for an objective accounting procedure,[322] as a piece of information is only useful for the information recipient when he can consider it believable; this implies that rendering an account must be managed objectively and in a non-arbitrary manner. [323]

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[315] Cf. Penné, Günter, as above, p.168ff; Kritschgau, Jürgen, as above, p.7.
[316] Cf. Ruchti, Hans, as above, p.4746.
[317] Cf. Kursawe, Edgar, as above, p.91.
[318] Cf. Penné, Günter, as above, p.168ff.
[319] Ballerstedt, Kurt, as above, p.73, italics in original.
[320] Cf. Leffson, Ulrich, GoB, as above, p.255. Leffson generally refers to the valuation.
[321] Brugger, Walter, Philosophisches Wörterbuch, 15th edition, Freiburg 1978, p.272.
[322] Cf. Leffson, Ulrich, GoB, as above, p.255.
[323] Cf. Ibid., p.81.

The term objective can be defined as "intersubjectively controllable and valid for everyone".[324] The calculation of notional acquisition costs is therefore objectively correct if it is "non-arbitrary and thus intersubjectively controllable".[325]

The demand for objectivity of accounting standards in the start-up balance sheet results from § 238 I 2 and 3 HGB in connection with § 242 I HGB. It can also be derived on the basis of the connection to the conventional annual financial statement.[326] The objectification of notional acquisition costs serves compliance with the principle of actual capital contribution and the protection of creditors. Together with the principle of freedom from arbitrariness, the principle of objectification supplements and modifies the call for correctness referred to in § 239 II HGB.[327] There is no such thing as absolute correctness in the sense of a true representation of assets and income; correctness is to be understood as relative correctness.[328]

6.1.2.3.2 Views from relevant literature taking legal form into account

The prevailing views to be found in the relevant literature in the case of a sole proprietor are always to take the historical acquisition costs of the subscriber as notional acquisition costs.[329]

Husemann, on the other hand, sees a possibility of orientation in the historical acquisition costs but rejects historical acquisition costs as the maximum limit of notional acquisition costs in the case of the sole proprietor.[330] The process of the non-cash contribution is independent of the

[324] Ibid., p.81. Leffson defines the term objectivity by modelling it on Popper, cf. Popper, Karl R., Logik der Forschung, 5th edition., Tübingen 1973, p.18f.
[325] Baetge, Jörg, Möglichkeiten der Objektivierung des Jahreserfolges (Objektivierung), Düsseldorf 1970, p.17.
[326] Cf. Eisele, Wolfgang and Manfred Kühn, Bilanzierungskriterien bei Sonderbilanzen (Bilanzierungskriterien), in: WiSt, Book 6 June 1984, p.274.
[327] Cf. Baetge, Jörg, Grundsätze ordnungsmäßiger Buchführung und Bilanzierung (Grundsätze), in: HWR, 3rd edition, as above, p.865.
[328] Cf. ibid., p.865.
[329] Cf. Freericks, Wolfgang, as above, p.856, Sarx, Manfred, Bilanzierung, as above, p.696.
[330] Cf. Husemann, Karl-Heinz, as above, p.105ff; same view Dahl, Johann, Die Aktivierung der Sachanlagegüter in Handels- und Steuerrecht, Cologne et al. 1959, p.65.

historic acquisition process which is why a new valuation should be taken; this valuation should be made on the fair value.[331]
In contrast, in the case of companies, that is business partnerships (PersG) and limited liability companies (KapG), there is the discussion concerning face value vs. fair value. The different treatment between sole proprietors on the one hand and companies on the other hand is based on the supposition that there is a possibility of objectification in the articles of association.

6.1.2.3.3 Criteria of objectivity
When drawing up the articles of association, there could be a criterion of objectification in the conflict of interests between the founders[332] or between the founders on the one hand and the company on the other hand.

For example Kuhn is of the opinion that the various interests of the founders determine the notional acquisition costs; a necessity to determine the absolute value of non-cash contributions with the help of business valuation principles is therefore unnecessary.[333] In contrast, it is clear from the interpretation of the objectivity term "valid for everyone"[334] that it does not depend on the interests of an individual or of all founders. Even when you follow the view that a conflict of interests between founders could be decisive, a possible asymmetric distribution of power is to be observed, which e.g. can be the result of the fact that an alternative procurement of the non-cash contribution (e.g. a patent or a certain plot of land) is not possible. The subscriber can then force an overvaluation.[335] The conflict of interests is therefore to be classified[336] as "not sufficiently safe".[337]

Concerns are also to be expressed on the conflict of interests between founders and company as a criterion of objectification. The limited liabil-

[331] Cf. Husemann, Karl-Heinz, as above, p.105f; same view Groh, Manfred, as above, p.528.
[332] Cf. Penné, Günter, as above, p.115 ff.
[333] Cf. Kuhn, Klaus, as above, p.650ff.
[334] Leffson, Ulrich, GoB, as above, p.81.
[335] Cf. Kursawe, Edgar, as above, p.88ff.
[336] Cf. ibid., p.119ff; Lang, Hans Richard, as above, p.55f.
[337] Penné, Günter, as above, p.121.

ity company (KapG) is not yet a legal entity at the time of signing the articles of association which is why there may not be a conflict of interests.[338] If it can be concluded from this situation that the founders could arbitrarily set notional acquisition costs,[339] then this arbitrary value is to be judged as not objective.[340] If however an arbitrary valuation does not occur, then the interests of the members of the company prior to registration are to be equated at least with the interests of the founders[341] and the level of objectification is then restricted.
Furthermore regarding the level of objectification, it must be considered that the same person can act. In particular, this objectification would only seem superficially objective in the case of a one-man public limited company (AG) or a one-man private limited company (GmbH).[342]

These concerns make an objectification of the face value laid down in the articles of association seem questionable. Even if the assumption were to be made that the articles of association represent an objectification criterion, a statement has still not been made about the level of notional acquisition costs because the founders can objectify the face value as well as the fair market value with the articles of association.

The notional acquisition costs could be seen as objectified if they are based on an actual acquisition transaction with a contractual partner in the market in the past.[343] For example, the sole proprietor is not allowed to derive the value of the non-cash contributions himself for objectification and precautionary reasons and must therefore refer for the valuation calculation to the historic acquisition costs in consideration of the acquisition cost principle.[344] It is open to question as to which level of objectification can be awarded to the value derived from historical acquisition costs on formation of the company by non-cash contribution.

[338] Cf. Mohr, Heinrich, as above, p.574; Schiller, Andreas, Gründung, as above, p.140.
[339] Cf. Schiller, Andreas, Gründung, as above, p.140.
[340] Cf. Ballerstedt, Kurt, as above, p.74.
[341] Cf. Penné, Günter, as above, p.116.
[342] Cf. Lang, Hans Richard, as above, p.55f.
[343] Cf. Penné, Günter, as above, p.119.
[344] Cf. Förschle, Gerhart and Manfred Kropp (Eröffnungsbilanz), as above, p.35, point no.93.

Against an objectification based on reference to the historical acquisition costs of the subscriber, it can be argued that

- the acquirer can be cheated upon when purchasing from a supplier
- the acquirer may have been deceived in the suitability of the asset on purchase
- at the time the non-cash contribution was made, the historic acquisition costs no longer had any importance.[345] Although the historic acquisition costs can be an important indicator,[346] objectification is impaired by the fact that the value is to be derived from historic acquisition costs. Recourse to purely historic costs can therefore not always be described as objective. Edey explains on this point:

"HC is not factual (Historical cost; bold in original, author's comments). A few minutes' consideration shows that historical cost accounts do not stick to 'objectively determined facts'. To do so, they would have to exclude such items as depreciation, capitalisation of expenditure, stock inventory, write-downs".[347]

A further modification of historical acquisition costs and thus a restriction of objectivity can result from the fact that the asset now serves as a non-cash contribution contrary to its original intended use, and thus serves another need.[348] The historical acquisition costs can therefore only be considered as notional acquisition costs if the original acquisition was made according to the later use of the non-cash contribution[349] and if the acquisition was only made a short time[350] before the non-cash contribution.

With the valuation of non-cash contributions by a value that goes back to the derived historical acquisition costs, a valuation can emerge that is only apparently objective.[351]

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[345] Cf. Kursawe, Edgar, as above, p.83; Penné, Günter, as above, p.119.
[346] Cf. § 32 II 2 no.2 AktG; Husemann, Karl-Heinz, as above, p.106f.
[347] Edey, Harold, CCA and HCA:facts and fantasy, in: Accountancy, 8/1982, p.109.
[348] Cf. Kursawe, Edgar, as above, p.89.
[349] Cf. Dahl, Johann, as above, p.65. The proof of intended use as a non-cash contribution will encounter problems in practice.
[350] Tax law mentions a time period of three years in § 6 I no.5 half sentence 2 EStG (Income Tax Act). This period can be accepted if no significant value changes have occurred since the start-up balance sheet date.
[351] Cf. Kritschgau, Jürgen, as above, p.5ff.

It cannot be argued against this outcome that the reference to historical acquisition costs is appropriate for prudent reasons. Then the principle of prudence can be complied with by a cautious determination of the fair value.[352]

For a value of notional acquisition costs which can be regarded as objectified, a request could be made for it to be determined (=official expert) or checked [353](start-up inspector) by a neutral third party.
It seems appropriate to have a value determined by an independent expert to form a value which can be regarded as objectified. It may be necessary for a business partnership (PersG) for reasons of internal profit distribution.[354] Objectification by an expert report could be advisable for a limited liability company (KapG) for two reasons. Firstly it avoids the risk of a possible later differential liability and secondly the register court could refuse Commercial Register entry in cases of doubt.[355]
In addition to the internal inspection by the members of the board of management and supervisory board, § 33 II to V AktG requires an external start-up inspection by independent inspectors for non-cash contributions. According to § 34 I no.2 AktG, the start-up inspection must consider whether the value of the non-cash contribution reaches the face value. § 38 AktG only prescribes an independent inspection obligation in certain cases.
The start-up inspection seems appropriate for the objectification of intrinsic value of non-cash contributions,[356] as it is carried out by an independent third party.[357] However, the start-up examination is restricted to the AG (public limited company) and, as it is supposed to ensure the satisfaction of the principle of real capital contribution, can objectify both the face value and the fair value.

[352] Cf. Husemann, Karl-Heinz, as above, p.106.
[353] Cf. Penné, Günter, as above, p.121.
[354] Cf. Eisele, Wolfgang and Alois P. Knobloch, as above, p.1023.
[355] Cf. ibid., p.1023.
[356] Cf. Schiller, Andreas, Prüfung, as above, p.21; Joswig, Michael, as above, p.179f.
[357] Cf. Penné, Günter, as above, p.123.

The objectification requirement for notional acquisition costs could furthermore be complied with through the differential liability.[358] If using the fair value results in an overvaluation of the non-cash contribution, the subscriber is liable for the amount of the difference between the lower value of the non-cash contribution and the amount of the shares taken over. The liability applying is without fault[359] and is immediately due in accordance with § 271 I BGB.[360]

The differential liability not only ensures that at least liable capital amounting to the face value is available but it is also effective towards an objective value determination of the fair value because the subscriber runs the risk of having to pay the shortfall later in the case of overvaluation .[361]

6.1.2.3.4 Interim findings and statement

The value of notional acquisition costs which can be seen as objectified depends on the requirements imposed on the objectification criterion. Objectification is mostly complied with by an independent third party. The criterion of inspection by a neutral third party in connection with differential liability seems appropriate bearing in mind the lack of more suitable possibilities to objectify the fair value.

The articles of association as a criterion neither speak for or against the face value or fair value, regardless of the level of objectification attached to it.

The reference to historical acquisition costs required for the sole proprietor can be used for objectification as an approximate under certain circumstances. Otherwise it just has the effect of creating an apparent objectification.

Based on the decision criterion objectivity, there is no definite valuation of notional acquisition costs that can be clearly stipulated for any of the legal forms.

[358] Cf. ibid., p.121.
[359] Cf. BT-DrS 8/1347, p.35.
[360] Cf. Hueck, Alfred and Lorenz Fastrich, comment on §9, in: GmbH-Gesetz, published by Adolf Baumbach et al., 19th edition, Munich 2010, §9 point no.8 with further references.
[361] Cf. Penné, Günter, as above, p.121f.

6.1.3 Summary of both interim findings

When calculating notional acquisition costs, there is basically no distinction between business partnerships (PersG) and limited liability companies (KapG).[362] In the case of business partnerships, when non-cash contributions occur, a purchasing transaction takes place which is why the calculation of notional acquisition costs can be detached from historical acquisition costs.

Based on the key decision criterion of admissibility of hidden reserves for the choice between possible value alternatives, the calculation of notional acquisition costs in the case of business partnerships must exclusively be based on the fair value. There can therefore be no hidden reserves in the start-up balance sheet. Backing this up is the fact that hidden reserves would be formed in the start-up balance sheet without any impact on income and the preservation of company capital is therefore at risk.

Differentiation could only be carried out in a second, subsequent valuation phase, whereby business partnerships (PersG) must be granted the deliberate formation of hidden reserves due to § 253 IV HGB old version. The lack of a corresponding provision to § 253 IV HGB old version in the Austrian Company Code supports the author's demand for a fair-value valuation, exclusively.[363]

In the case of sole proprietors, you could justify determining notional acquisition costs using both the value derived from the historical acquisition costs of the subscriber as well as the fair value.

As far as the historical acquisition costs are concerned, it must first be said that there is no purchasing transaction in the case of the sole proprietor and therefore a new valuation does not seem necessary for objectification reasons. The criterion of objectification only speaks for the reference to historical acquisition costs under certain conditions. Only in these cases is a hidden fair value reserve and the deliberate formation of hidden reserves in accordance with § 253 IV HGB old version to be regarded as admissible in the start-up balance sheet.

[362] same view Ellrott, Helmut and Hans-Jochen Gutike, as above, point no.158.
[363] Also Thiele, Konstanze, as above, p. 44.

The same arguments supporting the selection of fair value for business partnerships also apply in this case. However, the fair value approach seems particularly appropriate for the sole proprietor as the main purpose of the start-up balance sheet is mainly to provide information for himself. The purpose of providing information for himself is suitably complied with by using the fair value and creditor protection is provided for by the personal liability of the sole proprietor.

The formation of hidden reserves by an entry in the start-up balance sheet below the fair value reduces the information content of the financial statement both for the creditors (primary users according to the HGB) and for investors (users IFRS), because "through the formation and release of hidden reserves, information especially concerning the income situation cannot be regarded as publicly available if it is not apparent for the external readers of the balance sheet from the annual financial statement and this can lead to making the wrong decisions"[364]. Even creditor protection according to the HGB, with which hidden reserves are normally justified, "would be better served by the formation of open reserves as these allow the calculation of an exact profit"[365] in subsequent reporting periods.

[364] Ibid., p. 95f.
[365] Ibid, p. 95f.

6.2 Discussion of values according to Austrian Commercial Code (UGB)

6.2.1 Valuation according to § 202 I UGB

In conformance with §§ 242, 253 HGB, the same framework initially applies in Austria with the §§ 193, 203 Austrian Commercial Code UGB, however the German legal loophole concerning the valuation of notional acquisition costs is rectified with the valuation according to § 202 UGB. § 202 I s.1 UGB stipulates that:

> "Contributions...are to be valued at the amount that is to be attached to them at the time of their performance unless a lower value results from the possibility of their use in the company."[366]

The explanations offered above on the valuation of acquisition costs according to the HGB do apply in Austria - for example concerning the question of whether fair value is to be determined from the buying market or the sales market or the (subordinate) question of objectification of the non-cash contribution in the case of a sole shareholder - are however of minor importance due to the explicit statutory provision. § 202 UGB therefore contains the valuation benchmark for the start-up balance sheet as well as the point in time for the valuation of notional acquisition costs.[367] By valuing with the attributable market value, non-cash contributions must therefore not be undervalued in the start-up balance sheet.[368]

6.2.2 Attributable value

6.2.2.1 The attributable value in Austria

The term "attributable value" can also be found in Austrian literature as a valuation standard. In comparative literature from the USA and Ger-

[366] § 202 I s.1 Austrian Commercial Code UGB.
[367] Cf. Feil, Erich, as above, p. 442.
[368] Cf. ibid, p. 443.

many, valuation in Austria can be equated with that in Germany.[369] In Austria, the attributable value on the balance sheet date is taken as an appropriate valuation for fixed assets and depreciation on the attributable value is also referred to in the context of current assets.[370] The consistent terminology in the Austrian and German legislation is due to the adoption of tax laws from the German Reich in 1938, which also formed the basis of Austrian tax law after 1945; the individual tax laws were adopted unchanged but with new wording, they were, if you like, "austrified".[371]

6.2.2.2 Definition

The attributable value is a unit of value under commercial law which is mainly concerned with the current or present value. The attributable value corresponds to the market price on an active market; if this value cannot be ascertained, the attributable value is to be determined using generally recognised valuation methods. Following the introduction of the German Accounting Law Modernisation Act (BilMoG), the calculation of the attributable current market value is regulated analogously in Germany in § 255 IV HGB. It is a generic term for various types of current market values and is to be used as a benchmark both for the valuation of fixed assets and current assets. When calculating the attributable value, the following auxiliary values are used:[372]

- Replacement costs in the form of replacement reinstatement value, replacement current value or depreciated replacement reinstatement value
- Reproduction costs

[369] Cf. Thiele, Konstanze, as above, p. 40.
[370] Cf. ibid., p. 40; Holzhammer, Richard, Allgemeines Handelsrecht und Wertpapierrecht, 8th edition, Vienna et al. 1998, p. 156.
[371] Cf. Doralt, Werner and Hans Georg Ruppe, Grundriß des österreichischen Steuerrechts, Volume I, 8th edition, Vienna 2003, p. 7, point no.12.
[372] Cf. Gabler Wirtschaftslexikon, 16th edition, Wiesbaden 2004, p. 349; cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, as above, p. 105.

- retrograde, i.e. the current value derived from expected sales proceeds
- productive value

How the value is calculated, is determined by the intended purpose of the asset; calculation benchmarks are market values on both the procurement and sales markets.[373]

6.2.2.3 The attributable value according to assets

When valuing assets under commercial law, the general principles of § 252 HGB are to be observed. The starting point for the valuation is to take the acquisition costs of the asset, so adopting the acquisition costs principle with its effect as maximum value principle[374]. As the attributable market value according to § 202 I p.1 UGB or the attributable market value according to § 255 IV HGB has its own value measure in addition to the acquisition costs,[375] depending on the assets, it is also possible to use the option of a market value that exceeds the acquisition costs.

In the case of non-depreciable assets such as patents or shareholdings therefore, it is often only the productive value that is used.[376]

In the case of depreciable assets - apart from planned depreciation - unplanned depreciations are to be carried out according to § 253 III sentence 3 HGB where permanent decline in value appears probable. Apart from the financial assets, an unplanned depreciation is only to be undertaken for other assets in the case of a probable permanent decline in value; the reduction in value takes place to value the assets with the lower value that is to be attributed to them on the balance sheet date. This attributable value takes unplanned depreciations into account which

[373] Cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, as above, p. 103.
[374] Cf. Leffson, Ulrich, GoB, as above, p.81.
[375] Cf. Feil, Erich, as above, p. 442.
[376] Cf. Gabler Wirtschaftslexikon, as above, p.349; same view Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, as above, p. 106.

need to be carried out due to the reduction in technical or economic usability or the lower replacement price. The attributable value is therefore a corrected valuation for unplanned depreciations. The reproduction or replacement costs of a comparable asset serve as a benchmark.[377] If the reasons for the unplanned depreciation do not apply, the lower valuation may not be retained and can at most be attributed to the acquisition costs.[378]

In the case of current assets, the acquisition costs are also to be used as a basis, whereby depreciations for the decline in value are based on the lower stock exchange or market price on the balance sheet date. If a stock exchange price or market price cannot be determined, but the acquisition costs exceed the value that is to be attributed to the asset (e.g. goods, stock, products, receivables) on the balance sheet date, then the lower attributable value is to be used for the depreciation, § 253 IV sentence 2 HGB. The value can be lower than the acquisition costs if the usability of the object is limited due to obsolescence for example; in this case, the attributable value can also be the scrap value.

In the case of raw materials, additives and operating supplies, the attributable value is to be derived from the procurement market, in the case of finished and unfinished products and excess stock from the net realisable value.[379] The devaluation of current assets is to be carried out in accordance with the strict lowest value principle regardless of the probable duration of the impairment in value. If there are no reasons for depreciation, there is an obligation to adjust assets up to the level of the acquisition costs, just as there is for depreciable assets.[380] If the raw materials, additives and operating supplies are still usable in the plant, the replacement price is used as a basis and in the case of limited usability in the plant, deductions must be made by means of the so-called deprecia-

[377] Cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, as above, p. 105.
[378] Cf. § 253 paragraph 5 HGB in connection with § 253 paragraph 1 sentence 1 HGB, see above.
[379] Cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, as above, p. 106.
[380] Cf. § 253 paragraph. 5 HGB, as above.

tion allowance for slow/non-moving inventories. If they are no longer useable on the other hand, the valuation is to be based on the carefully estimated sales price derived from the sales market less all expenses incurred up to the sale.

In the case of unfinished and finished products and goods for which there is no stock exchange or market price, the valuation is always to be based on the sales price in the sales market within the context of loss-free valuation which is to be reduced by all the expenses incurred up to the sale.

The following examples serve as clarification:

Example 1: Calculation of the valuation of an inventory asset. The value is determined from the stock exchange or market price.
Manufacturing costs: EUR 1,000

a) Procurement market-oriented:

Stock exchange or market price on the balance sheet day in the procurement market	EUR 1,050
+ incidental acquisition costs	EUR 10
./. Revenue deductions (e.g. 10 % discount)	EUR 105
= value resulting from the stock exchange or market price	EUR 955

In this case, a depreciation amounting to EUR 45 is to be made to EUR 955.
Booking record:
Unplanned depreciations on current assets of inventories EUR 45

b) Sales market oriented:

Stock exchange or market price on the sales market	EUR 1,500
./. Revenue deductions (e.g. 10 % discount)	EUR 150
./. estimated expenses still to be incurred (after balance sheet date)	EUR 400
= Value resulting from stock exchange or market price	EUR 950

In this case, a depreciation amounting to EUR 50 is to be made to EUR 950.
Booking record:

Unplanned depreciations on current assets of inventories	EUR 50

Example 2: Calculation of value of an inventory asset

a) procurement market oriented

Replacement price or reproduction value	EUR 1,000
+ incidental acquisition costs	EUR 10
./. revenue reductions (e.g. 10 % discount)	EUR 100
= attributable value	EUR 910

In this case, a depreciation amounting to EUR 90 to EUR 910 is to be made.
Booking record:

Unplanned depreciation on current assets of inventories	EUR 90

a) sales market oriented:

Carefully estimated sales price	EUR 1,500
./. Revenue deductions (e.g. 10 % discount)	EUR 150
./. estimated expenses still to be incurred	EUR 400
= attributable value	EUR 950

In this case, a depreciation amounting to EUR 50 is to be made to EUR 950.
Booking record:

Unplanned depreciations on current assets of inventories	EUR 50

6.2.2.4 The lower attributable value

The use of the attributable value is supplemented in § 202 I sentence 1 HS 2 UGB with "unless a lower value results from the potential use in

the company."[381] Therefore, not only the attributable value but also a lower value is to be used as a basis under the condition mentioned – that is the lower attributable value.

The lower attributable value is a term from commercial law and corresponds to the term, going-concern value ("Teilwert") in tax law.[382] The going-concern value and the fair market value ("gemeine Wert") are also used as valuation benchmarks in Austrian tax literature, due to the above-mentioned common roots.[383]

The term going-concern value was originally developed by the Reich Fiscal Court and was first anchored in German income tax law in 1934. The legal definition of the term used exclusively in tax law according to § 6 I no. 1 sentence 3 EStG German Income Tax Act, § 10 sentence 2 BewG German Valuation Act and § 6 line 1 Austrian Income Tax Act: "Going-concern value is the amount that the purchaser of the entire business would use within the context of the total purchase price for the individual commodity; in the process, it is to be assumed that the purchaser will continue the business."[384]

The going-concern value is accordingly an estimated value based on the fiction of the sale of a business.[385] This value arises for every commodity based on its affiliation to the business, that is taking its importance to the company into account.[386]

The going-concern value differs from the fair market value which is defined in § 9 II BewG German Valuation Act as follows: "The fair market value is determined by the price which would be obtained at a sale in the

[381] § 202 I sentence1 HS 2 UGB.
[382] Cf. Winkeljohann, Norbert, Teilwertabschreibung, Comments on § 6 EStG, in: Einkommensteuer- und Körperschaftsteuergesetz Comment Herrmann/Heuer/Raupach, p. E262/3 – E298, published by Johanna Hey et al., Lfg. 221, Cologne, 1950/2013, note 618.
[383] Cf. Doralt, Werner and Hans Georg Ruppe, as above, p. 142, note 315.
[384] § 6 I no. 1 sentence 3 German Income Tax Act EStG; § 10 S.2 German Valuation Act BewG in the version of the announcement dated 1 February 1991, BGBl. I sentence 230; § 6 line 1 Austrian Income Tax Act EStG-Österreich, federal law dated 07 July 1988 on the taxation of income of natural persons, Federal Law Gazette BGBl. no. 400/1988 last changed by the Federal Law Gazette BGBl. I no. 13/2014.
[385] Cf. Doralt, Werner and Hans Georg Ruppe, as above, p. 148, note 336; same view Tiedtke, Klaus, Einkommensteuer- und Bilanzsteuerrecht, 2nd edition, Herne et al. 1995, p. 397.
[386] Cf. Doralt, Werner and Hans Georg Ruppe, as above, p. 148, note 336; same view Tiedtke, Klaus, as above, p. 397.

normal course of business according to the quality of the commodity. In the process, all the circumstances affecting the price are to be taken into account. Unusual or personal circumstances are not to be taken into account."[387] The fair market value results from the market value and is not related to the business. It is an individual sales price and is equal to the liquidiation value.[388] In contrast to the going-concern value, it is therefore of no consequence whether there is any added value resulting from an affiliation to the business.[389] In the case of fixed assets, the going-concern value is regularly above the fair market value.[390] Take as an example a newly purchased machine costing EUR 100,000 which would in fact have a going-concern value of e.g. EUR 100,000, because the fictitious purchaser of the company would have to spend this amount to buy an equivalent machine. The fair market value lies below the acquisition costs however because in the case of a further resale, the acquisition costs could no longer be achieved. In the case of current asset commodities, the going-concern value is usually under the fair market value because the going-concern value is equivalent to the cost price and the fair market value is geared to the achievable sales price.

The calculation of the going-concern value is difficult to carry out because it is based on notional parameters. To calculate an individual going-concern value, it is not feasible to appraise the value of a sale of the company, assume the company will be carried on by the intended purchaser and apportion the total purchase price to the individual commodity. Even case law has detached itself from the going-concern value term as established by law and instead is based on refutable going-concern value assumptions.[391] The following going-concern value assumptions can be distinguished in the case of initial and subsequent valuations which were established by case law and are based on general underlying estimates from experience and without legally binding effect:[392]

[387] § 9 II BewG.
[388] Cf. Doralt, Werner and Hans Georg Ruppe, as above, p. 148, note 337.
[389] Cf. Tiedke, Klaus, as above, p. 398.
[390] Cf. Doralt, Werner and Hans Georg Ruppe, as above, p. 148, point number 337.
[391] Cf. Tiedke, Klaus, as above, p. 291.
[392] Cf. Winkeljohann, Norbert, as above, note 586.

1. Going-concern value assumption at the time of the acquisition of the commodity

- The going-concern value of every commodity at the time of its acquisition is equal to its acquisition costs.[393]
- In the case of non-depreciable assets, the going-concern value is equivalent to the acquisition costs for later valuation dates too.
- For depreciable assets, the going-concern value is equivalent to amortised acquisition costs. It concerns the reduced acquisition costs using the straight-line depreciation methods in accordance with § 7 German Income Tax Law EStG.
- For current asset commodities, the going-concern value is normally equivalent to replacement costs on the balance sheet date, in the case of disposable commodities, to the market price (individual sales price).

If a commodity is valued on the balance sheet date according to § 6 I no. 1 p.2 and no. 2 p.2 EStG with the lower going-concern value, this is termed write-downs to the going-concern value. The term "write-down to the going-concern value" is not understood as depreciation in the normal sense but the valuation of a commodity with the going-concern value.[394] According to the principle of individual valuation, the going-concern value is to be determined for each individual commodity.[395] The write-down to going-concern value is similar to the depreciation for exceptional commercial wear and tear although the boundary is often difficult to draw. To write down to the going-concern value, a decrease in value is all that is required, there is no need for an impairment of use of the commodity. Depreciation for exceptional wear and tear is only permissible on the other hand if there has been exceptional technical or commer-

[393] Cf. on this and the following three going-concern value assumptions: German Federal Fiscal Court judgement dated 29 April 1999, IV R 63/97, Federal Law Gazette BStBl. II 2004, p.639; H 6.7 Teilwertvermutungen EstH; Tiedke, Klaus, as above, p. 397.
[394] Cf. Tiedtke, Klaus, as above, p. 410.
[395] Cf. Falterbaum, Hermann and Wolfgang Bolk and Wolfram Reiß and Thomas Kirchner, Buchführung und Bilanz, 21st edition, Achim 2010, p. 693.

cial wear and tear. On the other hand, write-downs to the going-concern value are permissible for non-depreciable and depreciable commodities. Depreciation for exceptional wear and tear can only be carried out for depreciable commodities on the other hand. Write-downs to the going-concern value can also be carried out regardless of the depreciation method, they are also permissible in addition to normal depreciation. The depreciation for exceptional wear and tear can lead to a book value below the going-concern value.[396]

The going-concern value of the individual commodities is not determined subjectively. The going-concern value is determined objectively whereby the value of a commodity is not standard across all companies. On the contrary, the individual commodity should be valued precisely in the context of the total purchase price of the company. However, due to the use of going-concern value assumptions, this requirement is largely neglected.[397]

In case of doubt, commodities of similar nature and quality, similar age and similar state of wear and tear have the same going-concern value in the same company. This must also apply if they were acquired at different prices.[398]

According to established case law, there is the assumption that the going-concern value of every commodity corresponds to the acquisition costs at the time of its acquisition. There are special features to be taken into account however that affect the calculation of the going-concern value and so can lead to a different result:[399]

- For example, if there are excessive expenses which the taxpayer incurred because the commodity was worth a corresponding amount to him then there will be an imbalance between performance and consideration from the point of view of a third party. In the case of these excessive expenses, there is therefore the as-

[396] Cf. Tiedke, Klaus, as above, p.410f.
[397] Cf. Winkeljohann, Norbert, as above, note 604.
[398] Cf. ibid., note 606.
[399] Cf. ibid., note 587.

sumption that the going-concern value corresponds to the acquisition costs because for an imaginary purchaser, the commodity belonged to the business at the time of acquisition and therefore has the value which had to be expended at the time of its acquisition. [400]

- In the case of futile expenditure, that is costs incurred that do not correspond to any economic value, an imaginary purchaser will probably not replace the expenditure based on the lack of equivalent value.[401]

- If there is enforced expenditure, it is assumed that the going-concern value corresponds to the acquisition costs even if the taxpayer paid an excessive price due to his predicament. In case of doubt, the purchaser of his business would reimburse him for the acquisition costs paid in the context of the total purchase price.[402]

- Investment subsidies that the taxpayer receives from a third party can be deducted from the acquisition costs of the commodity under commercial law. The going-concern value assumption is based on the unadjusted acquisition costs on the other hand, so public subsidies do not have any effect on the level of acquisition costs. The going-concern value is determined in accordance with the price fixed with the supplier.[403]

- Tax-free investment bonuses can also not be offset against acquisition costs. Just like subsidies, tax-free investment bonuses should also not reduce the going-concern value. There is a possible exception to this legal assumption in the case of unlimited allow-

[400] Cf. ibid., note 588 with further references
[401] Cf. ibid., note 589.
[402] Cf. ibid., note 590; in agreement Ehmcke, Torsten, § 6 EStG Bewertung, in: Einkommensteuergesetz, Körperschaftsteuergesetz und Gewerbesteuergesetz Kommentar Blümich, p. 1-332, published by Bernd Heuermann amongst others, Munich 2011, point no.603.
[403] Cf. Winkeljohann, Norbert, as above, note 591; cf. BFH judgement of 20 September 1989, II R 96/89, BStBl. II 1990, p.206.

ances however, which have a long-lasting effect on the market price and therefore the going-concern value.[404]

- An unused cash discount deduction does not justify a write-down to the going-concern value to the level of the cash discount deduction that would have been possible.[405] Only when the purchase money debt is settled under cash discount deduction after the time of acquisition, can the acquisition costs be reduced by this amount.

2. Going-concern value assumptions at later valuation dates

The same going-concern assumption applies to non-depreciating assets at later valuation dates.[406]

In the case of depreciable assets however, it is basically assumed that the going-concern value on the balance sheet date corresponds to the acquisition costs less the depreciation in accordance with § 7 EStG. This only applies to the period of acquisition and for a short time afterwards.[407] The shorter the time period between the time of acquisition and the balance sheet date, the stronger the assumption that the going-concern value and the acquisition costs are identical. The greater the time period, the higher the requirements relating to proof of a reduction in the going-concern value. A period of up to three years is regarded as a short period.[408] Due to a lack of case law from the supreme court, it is left open in the literature as to whether increased depreciations and special depreciations and deductions have an effect on this going-concern value assumption according to § 6 b EStG.[409]

[404] Cf. Winkeljohann, Norbert, as above, note 592.
[405] Cf. ibid., note 593.
[406] Cf. ibid., note 594.
[407] Cf. Ehmcke, Torsten , as above, point no. 614.
[408] Cf. ibid., point no. 614.
[409] Cf. ibid., point no. 614.

In the case of depreciable fixed asset items, a distinction is made between commodities that have no market value and commodities that are marketable. Commodities without a market value are those that are by their very nature unique or those that can only be used in a certain business. The above-mentioned assumption applies to these commodities without reservation. The BFH (German Federal Finance Court) has mainly been of the opinion, especially for marketable fixed assets, that the going-concern value corresponds to the replacement costs at a later time than the time of acquisition. In this case, the assumption applies that the current replacement costs less depreciation correspond to the going-concern value on the balance sheet date.

At the same time, it is assumed that in terms of value, the replacement costs correspond to the actual acquisition costs. There is correspondingly no difference in determining the going-concern value. In the context of determining the going-concern value, it is more appropriate to use the replacement costs as a corrective measure when refuting the going-concern value assumption.[410] It can be assumed that the taxpayer acquired the commodity on the basis of economic considerations. As it is always assumed that the business will be continued, it can be supposed that an imaginary purchaser of the business would acquire the commodity himself if it were lacking and in this case would incur the costs that would be necessary to manufacture the object himself.[411]

For current assets, case law has established the assumption that the going-concern value corresponds to the replacement costs on the balance sheet date following that of the acquisition.[412] This going-concern value assumption is based on the fact that the factors influencing the going-concern value of current assets affect them more quickly than in the case of fixed assets.[413]

[410] Cf. Winkeljohann, Norbert, as above, note 595; same view Ehmcke, Torsten , as above, point no. 608.
[411] Cf. Ehmcke, Torsten, as above, point no. 611.
[412] Cf. Winkeljohann, Norbert, as above, note 596; same view Ehmcke, Torsten , as above, point no. 613.
[413] Cf. Ehmcke, Torsten, as above, point no. 611.

In the case of products and stock, a lower going-concern value may result compared to replacement costs if the probable future sales proceeds no longer cover the original costs and an entrepreneurial profit customary in the business. The going-concern value therefore is not exclusively dependent on the replacement costs but on the probable sales proceeds of certain commodities intended for sale.[414] For the determination of the value according to commercial law, the valuations of the procurement market are of less importance whereas the fiscal going-concern assumption in financial case law has declared the replacement costs as the dominant measure of value.[415] Under commercial law, future expenditure i.e. not yet realised losses must be taken into account due to the imparity principle but a calculatory share of profits may not be deducted. On the other hand, the deduction of a calculatory share of profits is permissible under tax law in the case of retrograde determination of replacement costs.[416]

The fiscal authorities basically use two methods to determine the going-concern value for current assets, namely the subtraction method and the formula method.[417]

Stock intended for sale such as goods or finished products can experience a decrease in value due to storage, changing tastes and fashions or other reasons. In accordance with R 6.8 II S. 3 EStR, the lower going-concern value is taken as a valuation in this case, that is the value remaining after taking the probably achievable sales proceeds and deducting the average entrepreneurial profit and the business expenditure yet to be incurred after the balance sheet date. The calculation according to the subtraction method is as follows:

Probable future sales proceeds

[414] Cf. BFH judgement of 24 February 1994, IV R 18/92, BStBl. II 1994, p.514.
[415] Cf. Winkeljohann, Norbert, as above, note 619.
[416] Cf. ibid., note 619.
[417] Cf. Kleinle, Werner und Tobias Dreixler, Bewertung des Vorratsvermögens, Kommentierung zu § 6 EStG, in: Einkommensteuer- und Körperschaftsteuergesetz Kommentar Herrmann/Heuer/Raupach, p. E461 – E586/2, published by Johanna Hey amongst others, lot 255, Cologne, 1950/2013, note 1011.

./. average entrepreneurial profit

./. expenditure yet to be incurred after the balance sheet date

= going-concern value (sales value)

The subtraction method basically corresponds to the method used by the BFH.[418] The probably still achievable sales proceeds are determined from records of clearance sales and special sales. To be able to ascertain the going-concern value of a certain item, the total goods that are reduced in value must be assigned to the sales prices that were achieved in the clearance sales after the balance sheet date.[419] These values can be determined using correspondng price records from clearance sales.

The use of the formula method according to R 6.8 para. 2 sentence 5, 6 EStR is possible for businesses that cannot calculate the required data according to the subtraction method. The formula is as follows:

Going-concern value = Z : (1 + Y1 + Y2 x W)

where

- W = percentage of costs accruing after deduction of the average entrepreneurial profit rate from the gross profit markup rate after the balance sheet date
- Y1 = average entrepreneurial profit. In this case, it is assumed that a potential purchaser of the business would also calculate a corresponding return on the sale of the goods.
- Y2 = gross profit markup remainder
- Z = achievable sales price
- The gross profit and the gross profit markup rate are calculated as follows:

[418] Cf. Ref. 6.8 Beispiele für die Bewertung des Vorratsvermögens 1. Spiegelstrich EStH; cf. Kleinle, Werner and Tobias Dreixler, as above, note 1011.
[419] Cf. BFH judgement of 27 October 1983, BStBl. 1984 II, p.35.

- Gross profit = turnover (commercial turnover) – cost of sales

- Gross profit markup rate in % = Gross profit x 100 : cost of sales

The sales prices actually achieved for the commodities reduced in value are often verifiable in such a way and in such a large number of cases that general conclusions can be drawn for them.[420] According to § 6 I no. 2 sentence 3 EStG in connection with § 6 I no. 1 sentence 4 EStG, stock which already belonged to fixed assets on the previous balance sheet date is to be valued at acquisition cost unless the taxpayer can prove that a lower going-concern value can be used. The going-concern value of stock-in-trade whose cost price has fallen below acquisition costs on the balance sheet date normally corresponds to the replacement costs on the balance sheet date.[421] This is also the case if there is no need to calculate a corresponding decline in sales prices.[422]

As the going-concern value assumptions presented above are an estimate in the sense of prima facie evidence, the taxpayer can refute them in individual cases if he presents facts which result in the going-concern value not corresponding to an amount that was used due to the going-concern assumption.[423] Such facts could be that the replacement costs have dropped, the acquisition of a commodity has proved to be a mistaken investment, the sales prices have dropped below cost price or the commodity is no longer available. The taxpayer has to prove his claims,[424] he must prove any incorrectness by providing specific provable facts or at least by making them credible.[425] The finance office and if necessary the fiscal court must be able to form their own judgement on the basis of the objective documents submitted.

[420] Cf. G 6.8 para. 2 sentence 9 EStR.
[421] Cf. G 6.8 para. 2 sentence 1 EStR.
[422] Cf. Tiedke, Klaus, as above, sentence 397.
[423] Cf. ibid. p. 397-398; same view Doralt, Werner and Hans Georg Ruppe, as above, p. 149, point no. 344 and Winkeljohann, Norbert, as above, note 598.
[424] Cf. Tiedke, Klaus, as above, p. 397 ff.
[425] Cf. Ehmcke, Torsten, as above, point no. 618.

Circumstances reducing the value that are made known after the balance sheet date can only be taken into account if the taxpayer can prove that they already existed on the balance sheet date.[426]

Possible individual examples of mistaken investments based on Winkeljohann are the following:[427]

- Shareholding: on founding a corporate entity, there is a mistaken investment if it turns out that a company cannot make profits in the long term.
- Deliberate calculation of a loss: if products are quite deliberately not calculated as covering costs, no write downs to the going-concern value can be carried out.
- Defects: There is a mistaken investment if a newly purchased machine shows serious defects from the start and thus does not function properly or only occasionally functions properly. The condition is that the defects could not be remedied by the seller within a short period of time.
- Oversizing: There is also a mistaken investment if a machine has been purchased which is considerably and permanently oversized in relation to individual business circumstances.
- Overprice: If an overprice is paid, this in itself does not justify the use of the lower going-concern value, especially when the over price is paid for non-company, purely personal reasons.
- Dire financial straits: There is no mistaken investment if expenditure is necessary due to being in dire financial straits.

As an imaginary purchaser of the company would pay at the most the replacement cost and at least the individual sales price for the individual commodity, the replacement cost is regarded as the upper value limit and

[426] Cf. Winkeljohann, Norbert, as above, note 598.
[427] Cf. ibid., note. 600.

the individual sales prices as the lower value limit when calculating the going-concern value.[428]

As regards the replacement cost, this refers to the costs that would need to be incurred to purchase an equivalent commodity on the valuation date. In this case, the replacement costs that would arise in the relevant company must to be taken into account and not the costs that could be determined for a commodity of similar type regardless of the company.[429] If an exchange price or market price is available, this is to be used for the determination of the replacement costs, otherwise the cost price on the balance sheet date is used as a basis for the value calculation. If the level of expenditure for replacement is not known, then the replacement costs including incidental acquisition costs and decreases are to be estimated on the basis of the price for a new commodity; the condition of the used commodity to be valued is to be taken into account at the same time.[430]

The lower limit for the valuation of the going-concern value is the individual sales price. In this case, it concerns the price that the taxpayer could achieve if he sold the commodity on the appointed date and without considering the affiliation to the company. The individual sales price corresponds at least to the material value or scrap value less sales costs.[431] In individual cases, it may be even higher than the replacement cost.[432] The commodities superfluous to the company are basically to be valued using the individual sales price as going-concern value. In general, the going-concern value cannot be lower than the individual sales price, neither can it be below EUR 0.[433] If relevant market prices for commodities of the same type are lacking, the individual sales price on the valuation date can be inferred from the proceeds achieved from a sale

[428] Cf. ibid., note 614.
[429] Cf. ibid., note 615.
[430] Cf. Kleinle, Werner and Tobias Dreixler, as above, note 1008.
[431] Cf. Falterbaum, Hermann and Wolfgang Bolk and Wolfram Reiß and Thomas Kirchner, as above, p. 694.
[432] Cf. Winkeljohann, Norbert, as above, note 616.
[433] Cf. ibid., note 616.

of the commodity after the valuation date taking any price changes that have occurred in the meantime into account; this does not apply however if the sales price came about in exceptional circumstances. Furthermore, the individual sales price can be determined indirectly. Accordingly, the probable sales proceeds are to be estimated in view of the conditions applying on the balance sheet date and reduced by the costs still to be incurred such as the directly attributable staff, storage and operating costs with a profit markup.

6.3 Discussion of values according to IFRS

The accounting standards according to IFRS do not provide for an income recognition function. The only objective is the provision of information relevant for making decisions.

However, with the formation of hidden reserves, information would not be made available to the users and the information provision function could not be fulfilled.

Hidden reserves in the start-up balance sheet are therefore not admissible. Accordingly, to determine notional acquisition costs, only the fair value comes into question.

6.4 Discussion of values in the case of company mergers

6.4.1 Values of notional acquisition costs in the case of company mergers according to German Commercial Code (HGB)

6.4.1.1 Legal Basis of German Transformation Act (=UmwG)

If an entire company is introduced in the form of a merger then the valuation question is of particular importance.[434]

Legal entities with their registered office in Germany are to be transformed by means of merger according to § 1 German Transformation Act UmwG. In § 2 UmwG, there are two possible ways of regulating mergers whereby the merger through absorption (§ 2 no. 1 UmwG) represents the basic legal form and the merger by new formation (§ 2 no. 2 UmwG) investigated here builds on this basis.

"Legal entities can be merged by liquidation without dissolution

1. through absorption by means of the transfer of assets from one legal entity or several legal entities (transferring legal entities) as a whole to another established legal entity (receiving legal entity) or
2. through new formation by means of the transfer of assets of two or more legal entities (transferring legal entities) each as a whole to one new legal entity founded by them

against the granting of shares or memberships of/in the receiving or new legal entity to the shareholders (stockholder, partner, shareholder, associate or member) of the transferring legal entity."[435]

With the entry of the merger in the respective registry, the assets of the transferring legal entity are transferred to the receiving legal entity in the form of a complete asset deal and through this the transferring legal entity is erased without the need for a special cancellation to be performed and therewith becomes the shareholder of the receiving legal entity, cf. § 20 I-III UmwG. As the former shareholders are now entitled to shares of the receiving legal entity in return for their lost shares, the

[434] Cf. Grünberger, David, as above, p.1019.
[435] § 2 Transformation Act UmwG.

shares are, as it were, “swapped”, cf § 20 I no. 3 s. 1 HS 1 UmwG as well as the heading to § 87 UmwG. If the receiving legal entity was already the shareholder of the transferring legal entity before the merger, then he does not become the shareholder of the acquiring legal entity, i.e. there is no “swap” to himself, cf. § 20 I no.3 s.1 HS.2 UmwG.

The valuations of the receiving legal entity are regulated in § 24 UmwG: "The values recorded in the final balance sheet of the transferring legal entity can also be used as acquisition costs in the sense of § 253 paragraph 1 of the HGB in the annual balance sheets of the receiving legal entity." [436] With its legal fiction “can also be used as acquisition costs.....”, [437] the wording of § 24 UmwG grants an option of choosing between the method with or without the book-value link.

6.4.1.2 Valuations of the receiving legal entity according to § 24 UmwG (German Transformation Act)

6.4.1.2.1 Development and purpose of regulation

Before the Transformation Act 1995 came into force, it was generally stipulated for mergers that the values recorded in the final balance sheet of the transferring legal entity applied as acquisition costs for the receiving legal entity within the meaning of § 253 para. 1 HGB. The consequence of this strict link to the book value was that for the receiving legal entity there could be an effect on profit or loss both on the merger against a capital increase and against a cancellation of the holding and this profit or loss would basically have to be reported in the profit and loss account. As merger fusion processes have to be regarded as acquisition processes, the system has contradicted the principle of income-neutrality.[438] The version of § 24 UmwG which has become law dropped the principle of a strict link to the book value. The link to the book value is only upheld as a valuation option within the context of § 253 HGB. The provision is restricted to the granting of a valuation option regard-

[436] § 24 Transformation Act UmwG.
[437] Ibid.
[438] Cf. Kallmeyer, Harald, Umwandlungsgesetz Kommentar, 4th edition, edited by Welf Müller, Cologne 2010, p.315f. The further explanations in chapter 6.4.1 are based on Kallmeyer.

ing the acquisition costs for the receiving legal entity and represents an addition or rather improvement to §§ 253, 255 HGB. If the option is exercised, the book values from the transferring legal entity's final balance sheet apply as acquisition costs within the meaning of a fiction with all consequences in accordance with § 17 II UmwG. For example, write-ups or revaluations exceeding the original book value are prohibited. The Transformation Act does not contain any provisions concerning the use and valuation on the part of the receiving legal entity in addition to § 24. Therefore, the general regulations apply. Of relevance are the legal provisions and the basic principles of proper accounting for non-cash contributions and asset acquisitions and exchange processes. Both circumstances are to be treated as notional acquisition processes so that it is justifiable to speak of a return to the acquisition value principle.

6.4.1.2.2 Valuation regulations

When granting shares, notional acquisition costs are involved. Acquisition costs are particularly relevant in the case of business partnerships and limited liability companies because capital accounts are opened or basic capital or equity is issued and furthermore, an agio is determined, if necessary. The issue of equity or of shares to the receiving legal entity does not generally represent acquisition costs. There is further freedom of action and valuation regarding the level of capital to be issued, also because of the freedom of contract for the terms in the merger agreement. At best, it can be referred to as a circumstance "similar to an acquisition" in which the cash-related process is to be replaced by the notional acquisition costs. Classical acquisition costs could be arrived at if you first conceptually defined the obligation to make non-cash contributions as a debt and afterwards in a second step regarded the transfer of the outstanding capital as meeting this nominal commitment. However, this interpretation does not do justice to the nature of the merger agreement.[439]

These features have caused the prevailing opinion at least to allow the

[439] Cf. ibid., p.327.

transferred assets and debts to be valued at their fair market value.[440] Unless there is a legal provision or company regulation to the contrary, the fair market value is always to be taken for notional acquisition costs, at least as the top limit. Widmann generally only allows the fair market value to be used as a valuation. He explains this by saying that in granting corporate rights, acquisition costs cannot be seen in accounting terms. He allows only one exception to this basic principle namely if tax regulations provide for a valuation below the fair market value.[441] The basic rules of the acquisition cost principle are to be applied despite the features mentioned and it is, at best, a question of terminology as to whether the application should be performed directly or correspondingly. The fact remains that due to the acquisition cost principle, the fair market value must not be exceeded.

The cancellation of a participation in the course of the merger differs from the issuance of capital in that the receiving legal entity, e.g. through start-up and if necessary further investments or through purchase, has unquestionably at one time expended acquisition costs for the participation. From this, we could assume that these costs are indirect acquisition costs for the received assets and therefore may not be exceeded by the receiving legal entity according to § 253 paragraph 1 HGB. In contrast, it should not be overlooked that the merger has the effect of an asset transfer and that the participation as a legal balance sheet item is substituted completely or proportionately by the transferring legal entity's assets. It therefore seems more appropriate to apply the accounting principles for exchange transactions.[442]

The term book valuation is understood as taking over the valuations from the transferring company's final balance sheet. For the valuation level, the consequence of the book value link is that it has a strict bond to ac-

[440] Cf. ibid., p.27f with further references.
[441] Cf. Widmann, Siegfried, Kommentierung zu §24 UmwG, in:Umwandlungsrecht Kommentar, published by Siegfried Widmann and Dieter Mayer, Bonn et al., loose leaf, 121. instalment, June 2011, subsection 289ff.
[442] Cf. Kallmeyer, Harald, reference as above, p.329.

counting decisions in the final balance sheet of the transferring legal entity.[443] This also applies to valuations which are prohibited for the receiving legal entity because of its legal form. In accordance with legal fiction, the values used are considered to be acquisition costs of the receiving legal entity and not as the continuation of the financial legal position of the transferring entity.[444]
If the receiving legal entity is a business partnership, the fair market value can be set as the highest value. As there is contract freedom within the scope of the merger contract however, the contribution value can be freely agreed between the parties. Such an agreement is binding for the balance sheet even if it does not consider a higher fair market value. If the fair market value is taken because no agreement exists and if it exceeds the consideration granted, then this results in a merger gain because there is no appropriate regulation existing for business partnerships which corresponds to § 272 II no. 1 HGB.

If the receiving legal entity is a limited liability company and if nothing has been agreed, the fair market value can also be taken as the highest value. However, a specific contribution to be invested can be determined in the merger contract. It is then binding and, in the case of a higher fair market value, contains a hidden reserve as permitted; the value of the investment contribution determines the notional acquisition costs.[445]

If regulations do not exist, interim values can also be used in addition to the fair market value. Capitalization must take place at the level of the extended nominal capital, however.

If the receiving legal entity already has a shareholding with the transferring legal entity, the shareholding is dropped from the balance sheet when the merger becomes effective and is completely or proportionately substituted by the transferred assets. In this respect, it is similar to an

[443] Cf. Lutter, Marcus and Martin Winter, Umwandlungsgesetz Kommentar, edited by Hans-Joachim Priester, 4th edition, Cologne 2009, p.577.
[444] Cf. ibid., p.532, with further references
[445] Cf. Kallmeyer, Harald, as above, p.330f.

exchange transaction which is to be processed according to the principles of exchange theory. The same applies if the receiving legal entity uses its own shares to carry out the merger.

The following methods for determining acquisition costs are regarded as admissible:[446]

1. In continuing the book values of the shareholding or the entity's own shares, the book values of the previous shareholding or own shares are taken as acquisition costs, distributed amongst the individual assets and continued under the condition that they are covered by the fair market value. This leads to reasonable accounting values confirmed by fair market values, at least for recently acquired shareholdings. If hidden reserves are contained in the shareholdings, then these are continued.

2. When using the fair market value for the shareholding or own shares (realisation method), the transferred assets are valued on the basis of the fair market value of the shareholding to be deleted from the accounts. In this special case, this is equivalent to the fair market value of the transferred enterprise value. The effect on earnings is booked in the profit and loss account and changes the annual surplus of the receiving legal entity.

3. For the income-neutrality method, the starting point is always the continuation of the shareholding valuations. A higher valuation is chosen if necessary to neutralise the costs and taxes associated with the merger and their effect on income.

In addition, there is the fourth method which is the book value link with the values from the final balance sheet of the transferring legal entity. This method is not to be confused with the above-mentioned continuation of the book value of the shareholding valuation.

[446] Cf. ibid., p.332.

According to Müller[447], limits for exercising options arise from regulations in the merger contract which can only be changed under special conditions e.g. when the annual financial statement is determined. They can also arise in particular if, through appropriate means, the merger is not performed without an impact on earnings, but a merger loss is reported at the expense of the shareholders of the receiving legal entity or a merger gain is reported at the expense of the creditors.

In individual cases, it could become difficult from an arbitrary point of view to select the book value link if there is a very much higher shareholding valuation for the receiving legal entity due to high hidden reserves and the substantial goodwill of the transferring legal entity. A merger loss that can only be justified by accounting means can reduce the payout potential of the receiving legal entity in the long run.

A restriction in options can also result from the principle of capital contribution in cases of merger against capital increase in the case of limited liability companies as receiving legal entities. It is debatable whether a book value link is admissible when the fair market value of the received assets does not cover the book value of the nominal amount of the new shares due to high hidden reserves or non-reported intangible assets. There is then a formal issue below par which leads to a takeover loss to be accounted for in the profit and loss account and which has to be offset from current or future earnings. The currently prevailing opinion also allows a link to the book value in this case as long as there is no below-par issue. This opinion is not systematically convincing because it makes an acquisition process, and what's more an acquisition against issuance of shares, recognized in profit and loss, which contradicts the principle of the income neutrality of acquisition processes.

6.4.2 Values in the case of company mergers according to Austrian Commercial Code (UGB)

In the case of investment contributions, the applicable option according

[447] Cf. ibid., p.339f.

to § 202 II Austrian Commercial Code UGB is to select the book value link instead of the attributable value according to § 202 I UGB. If the notional acquisition costs in the case of book value continuation are higher, the surplus may be capitalised separately according to § 202 II as a reorganisation surplus and goodwill.

6.4.3 Values in the case of company mergers according to IFRS

When § 24 UmwG deals with the annual balance sheet, what is meant is the final statement according to § 242 I or II HGB as already implied in the reference to § 253 I HGB regarding the definition of acquisition costs. If the receiving legal entity prepares the balance sheet compulsorily or voluntarily according to international accounting standards (IAS/IFRS) or if the receiving legal entity creates an annual financial statement based on international accounting standards for publication purposes according to § 325 IIa, HGB, then § 24 UmwG shall not apply to these financial statements. Even if international accounting standards are applied, the receiving legal entity must always draw up an individual HGB-balance sheet according to §§ 242 ff. HGB, as long as he is a sole proprietor. § 24 UmwG only refers to this.[448]

According to IFRS 3.14, all company mergers are to be included in the balance sheets of the receiving legal entities in accordance with the so-called purchase method.[449] The purchase method regards a merger from the perspective of the merging company identified as the purchaser. The purchaser receives net assets and reports the acquired assets in the balance sheet including those that the purchased company had not previously reported. The valuation of the purchasing company's asset values is neither influenced by the transaction nor are any additional asset values of the purchasing company reported as a consequence of the transaction because they are not part of the transaction. The basic principles of exchange theory apply i.e. in accordance with IFRS 3.24, the acquirer shall determine the acquisition costs of a company merger as the aggre-

[448] Cf. ibid., p.345.
[449] Cf. Commission regulation (EC) No. 1126/2008, reference as above, L320/374.

gate of:

a) the fair values, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued by the acquirer, in exchange for control of the acquiree; plus

b) any costs directly attributable to the business combination."[450]

According to F 3.24, the valuation is to be made on the basis of the fair value which is to be discounted on the basis of the cash value in the case of a later settlement of the acquisition costs according to F 3.26. According to international accounting standards, the book value link to the final balance sheet of the transferring legal entity, admissible under § 24 UmwG [451], is therefore simply not permitted. The consequence of this is that different acquisition costs are shown right from the start in accounting using the book value link under the HGB and accounting using the IAS/IFRS standards.

[450] Ibid., L320/375.
[451] Cf. Kallmeyer, as above, p.346.

7 EFFECTS OF VARIOUS VALUATIONS OF NOTIONAL COSTS OF ACQUISITION USING CASE STUDIES

7.1 Base case

In the base case, the company founder makes a non-cash contribution in the form of e.g. a machine as at 31.12.2014. He supposedly purchased this for EUR 55K in 2013.

As it is a machine, it can be assumed that it will be allocated to fixed assets in the start-up balance sheet. To calculate the fair market value, I therefore believe we should take the value from the purchasing market.[452] The upper limit of acquisition costs in the start-up balance sheet is determined by the fair value,[453] which is why in the base case this has the highest value at EUR 60K.
The attributable market value should also be derived from the purchasing market due to the allocation to fixed assets. This refers to either a marketable circumstance (mark-to-market) or, if a market price cannot be determined for the machine, to a market-comparative value. The replacement costs of the machine will supposedly also amount to EUR 60K in 2014. As the term attributable market value includes the replacement value or the values derived from it,[454] there is no need to further differentiate between the fair value and an attributable market value which is why the term fair value will now be used for reasons of simplicity.

The lower attributable value corresponds to the legal tax term, going-concern value. To better differentiate between the "attributable value" and the "lower attributable value", the term going-concern value shall be used for the latter. The going-concern value assumption for capital goods subject to wear and tear assumes acquisition costs reduced by straight-line depreciation. The going-concern value is supposedly EUR 50K in 2014.

[452] Cf. Schiller, Andreas, Gründung, as above, p.169.
[453] Cf. Schulze zur Wiesche, Dieter, as above, p.33; Freericks, Wolfgang, as above, p.856; Sarx, Manfred, Bilanzierung, as above, p.694.
[454] Cf. Vormbaum, Herbert, as above, p.1539ff.

The value derived from the historical acquisition costs of the subscriber is reduced - in contrast to the going-concern value - by degressive depreciation. The acquisition costs carried on in this way are referred to as "book value" in the following discussion and amount to EUR 45K.

The face value of the shares, which is the value to be used for notional acquisition costs according to prevailing opinion[455] amounts to EUR 40K. Due to the ban on below-par issues, the face value always represents the lower limit of the valuation.

In summary, the base case can be represented as follows:

- fair value: 60
- historical acquisition costs: 55
- going-concern value: 50
- book value: 45
- face value: 40

[455] Cf. Adler, Hans and Walther Düring and Kurt Schmaltz, Rechnungslegung, as above, §255 point no.96; Hast, Karl, as above, p.68; Heinen, Edmund, as above, p.485; Groh, Manfred, as above, p.528; Angermayer, Birgit, as above, p.681; Bayer, Walter, as above, §5 point no.27.

7.2 Criteria to judge case studies

The effects of individual notional acquisition costs are assessed below using case studies with the help of standard criteria. In my view, such criteria should consider or include:

- avoiding hidden reserves in the start-up balance sheet[456]
- objectification of valuation[457]
- practical efforts for the founder to determine the notional acquisition costs[458]
- share capital of the start-up company in the year of the investment contribution and in the following year
- information content for external users
- compliance with the creditor protection principle according to the HGB

The criteria quoted have already been explained in the dissertation;[459] the criterion compliance with the creditor protection principle according to the HGB will however be briefly explained below. The aim of the creditor protection principle is to help the creditor to protect himself from developments relating to unjustifiable increases in risks.[460]

There is no legal definition, the creditor protection principle is rather a vague legal term and individual legal regulations guarantee the implementation of this principle.[461] The commercial balance sheet in particular

[456] according to Chapter 6.1.2.2.4 with the result that hidden reserves in the start-up balance sheet in connection with the fulfilment of accounting goals are in my view not admissible.
[457] according to Chapter 6.1.2.3.4, the decision criterion objectification in connection with the fulfilment of accounting goals only has a subordinate role in my view compared to the central criterion of hidden reserves.
[458] Cf.: Pfitzer, Norbert und Sebastian Höfner und Peter Lauer und Vanesa Wassong, Informationsnutzen versus Informationskosten der externen Rechnungslegung, in: DStR, 14 February 2014, p.345-350 and 21 February 2014, p.384-387, Munich 2014.
[459] The criteria have already been explained in the dissertation or are self-explanatory.
[460] Cf. Thole, Christoph, Gläubigerschutz durch Insolvenzrecht, Tübingen 2010, p. 12.
[461] Cf. Solmecke, Henrik, Auswirkungen des BilMoG auf die handelsrechtlichen GoB, Düsseldorf 2009, p. 2.

serves as a protection for creditors and is imposed by company law.[462] The commercial balance sheet in turn is to be prepared according to the principles of proper accounting. Many principles of proper accounting were not legally regulated for a long time, only with the implementation of the 4th EC Directive of the BiRiLiG were a large number of previously non-codified regulations included in the HGB and numerous standards were thus created at the same time.[463]

The following principles of proper accounting are therefore to be found in §§ 238 ff. HGB:

- Principle of clarity and clearness, § 243 II
- Principle of completeness, § 246 I
- Principle of balance sheet consistency, § 252 I no. 1
- Principle of cut-off date (§ 242 I/II, § 252 I no. 5
- Ban on set-off, § 246 II
- Going-concern principle, § 252 I no. 2
- Principle of individual valuation, § 252 I no. 3
- Principle of prudence:
    - Imparity principle, § 252 I no. 4 1. HS
    - Realisation principle, § 252 I no. 4 2. HS
- Lower of cost or market principle, § 253 II/III
- Accrual principle, § 252 I no. 5
- Consistency of valuation, § 252 I no. 6
- Historical cost principle, § 253 I

The profit from the balance sheet corresponds to the surplus of assets over liabilities. It also represents the upper limit of distributions to ensure the liable equity capital remains untouched. Accordingly, profits can only be removed if they are not required to cover and preserve eq-

[462] Cf. Winnefeld, Robert, Bilanzhandbuch, Handels- und Steuerbilanz – Rechtsformspezifisches Bilanzrecht – Bilanzielle Sonderfragen – Sonderbilanzen – IAS/US-GAAP, 4th edition, Munich 2006, p. 21.
[463] Cf. Morck, Winfried, Kommentierung zu § 243, in: Handelsgesetzbuch Kommentar, p.506-508, edited by Ingo Koller, Wulf-Henning Roth and Winfried Morck, 7th edition, Munich 2011, point no. 1f.

uity and outside capital.[464] The HGB generally applies more and higher regulations to such companies for reasons of creditor protection in which at least one partner is not fully liable as a natural person for the creditors.[465]

For reasons of creditor protection, businessmen and women are subject to a duty of information so that creditors can form a picture of the company's assets, financial position and performance of the debtor because creditors can only protect themselves from unjustifiable risks in this way. This duty to provide information results from various principles of proper accounting.[466]

The principle of clarity and clearness according to § 243 II HGB commits the company to keep the accounts properly and to establish individual balance sheet positions in such a way that these are clearly understandable and well arranged. The principle of comparability aims to make comparisons possible between different annual financial statements by different businessmen or women or statements from different years by one businessman or woman. For example, account names, balance sheet breakdowns and also valuation and appropriation methods are to be retained. This avoids arbitrary transfers of profits or losses by the businessman or woman.[467] The principle of accuracy is also to be seen in this context which makes the annual financial statement objectively verifiable and free of arbitrariness.[468]

The principle of completeness according to § 246 I HGB requires that all assets, liabilities, accruals and deferrals and risks are taken into account in the annual financial statement. The principle of completeness is complemented by the principle of cut-off date and the periodisation princi-

[464] Cf. Winnefeld, Robert, as above, p. 21.
[465] Cf. Schildbach, Thomas and Thomas Stobbe and Geritt Brösel, Der handelsrechtliche Jahresabschluss, 10th edition, Sternenfels 2013, p. 119.
[466] Cf. Solmecke, Henrik, as above, p. 34.
[467] Cf. Winkeljohann, Norbert and Thomas Büssow, Kommentierung zu § 252, in: Beck Bil.-Komm., p. 411-438, published by Gerhart Förschle et al., 9th edition, Munich 2014, point no. 55f.
[468] Cf. Ballwieser, Wolfgang, Kommentierung zu § 243 (Kommentierung § 243), in: Münchener Kommentar zum Handelsgesetzbuch, p. 41-61, 2nd edition, Munich 2008, point no. 12f.

ple.[469] According to these, all income and expenses are to be recorded in the annual financial statement at the valuation date irrespective of the timing of the payment.[470]

The principle of prudence is anchored in § 252 HGB as one of the central provisions of the creditor protection principle.[471] The principle of prudence aims to prevent a businessman or woman from making him or herself richer and correspondingly showing liability assets which are however not actually available to the creditors.[472] The principle of prudence is substantiated in the obligation to form provisions for impending losses and provisions for uncertain liabilities, § 249 I HGB as well as in the realisation principle. The principle of prudence is also reflected in the obligation for individual valuation and in the imparity principle.[473]

The imparity principle in turn says that profits and losses are to be treated differently. Profits can only be shown in the annual financial statement if they were actually realised by the balance sheet date. In contrast, losses or foreseeable risks are to be recorded as soon as these are sufficiently specific. They do not have to be realised in this case. This unequal treatment leads to assets being valued as low as possible in accordance with the strict lower of cost or market principle. On the other hand, liabilities are to be taken into account according to the higher of cost or market principle i.e. they are to be valued rather too high than too low.[474]

Due to the same historical roots, the corresponding regulations on the creditor protection principle are also codified in Austria in the UGB, mainly in §§ 190 – 211 UGB. These are to be applied analogous to the principles of proper bookkeeping (Cf. amongst others §§ 190, 193, 201

[469] Cf. Solmecke, Henrik, as above, p. 35.
[470] Cf. Ballwieser, Wolfgang, (Kommentierung § 243), as above, point no. 15.
[471] Cf. Merkt, Hanno, Kommentierung zu § 252, in Beck Kurz-Kommentare, p. 1003-1013, edited by Klaus J. Hopt and Christoph Kumpan and Hanno Merkt and Markus Roth, 36th edition, Munich 2014, point no. 10.
[472] Cf. Morck, Winfried, as above, point no. 5.
[473] Cf. Ballwieser, Wolfgang, (Kommentierung § 243), as above, point no. 56.
[474] Cf. Merkt, Hanno, as above, point no. 11.

UGB) and the codification of the central principle of prudence in § 201 II no. 4 UGB.

So creditor protection continues to be assigned great importance both in Germany and in Austria; the German and Austrian commercial law continues to adhere to its traditional values such as the principle of prudence and consequently the principles of proper accounting.[475]

[475] Cf. relating to the HGB: Förschle, Gerhart and Rainer Usinger, Kommentierung zu § 243 (Kommentierung §243), in: Beck Bil.-Komm., p. 69-92, published by Gerhart Förschle et al., 9th edition, Munich 2014, point no. 130ff.

7.3 Case study 1: fair value as notional acquisition costs

The attributable value according to § 202 I S.1 UGB or the attributable market value according to § 255 IV HGB is a separate valuation benchmark in addition to acquisition costs.[476] In Austria, there is a legal regulation on the non-cash contribution, machine, based on § 202 I UGB, whereas there is still a loophole in Germany despite the extension of the term attributable market value in connection with the German Accounting Law Modernisation Act BilMoG. The reason for this is that the application of the attributable market value was not regulated for non-cash contributions in the HGB which is why the term notional acquisition costs is still being used. In literature, market values are considered permissible as notional acquisition costs because the acquisition costs principle does not act as a maximum value principle[477] in the case of notional acquisition costs.[478] This is why in the case of the machine, the approach of using the market value (EUR 60K) which exceeds the acquisition costs (EUR 55K) is an alternative.

By using the valuation method, fair value, hidden reserves are completely avoided; this concept is based on the view of preserving the original, nominal capital and not the capital related to purchasing-power.[479]

If, as is necessary for the valuation fair value, it concerns either a marketable circumstance (mark-to-market) or, if a market price cannot be determined for the machine, it concerns a market-comparative value, there is a high degree of objectification. If a generally recognised valuation method has to be used as a basis, which is not the case in case study 1 however, there is the risk of a lower degree of objectification.

The practical efforts for the founder to determine notional acquisition

[476] Cf. §§ 202 I, 203 I Austrian Commercial Code UGB and §§ 253 I, 255 I and IV German Commercial Code HGB, as above; Feil, Erich, as above, p. 442.
[477] Cf. Leffson, Ulrich and Andreas Schmid, (Prinzipien), as above, point no.112.
[478] same view. Feil, Erich, as above, p.443.
[479] Cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, reference as above, p.1.230.

costs are simple as he only needs to determine the current manufacturing price in the case of mark-to-market or the market-comparative value at the manufacturer's or another supplier's.

In line with the value of the assets, the capital resources in the investment contribution year 2014 amount to c.p. EUR 60K.

Balance Sheet 2014	
Machine 60	CAP 60

For an assumed useful life of five years, EUR 12K is to be depreciated using the straight-line method. If there is an annual profit in 2015 of EUR 100K, then the reduced profit taking the depreciation of EUR 12 into account would amount to EUR 88K. This EUR 88K would be subject to a tax rate of 30% (=EUR 26.4K) leaving a profit after tax of EUR 61.6K. As this profit is to be allocated to share capital and reserves, the greatly simplified balance sheet for the following year 2015 can be shown as follows.

Balance Sheet 2015	
Machine 48	CAP 109.6
Bank 61.6	

The capital resources (109,6) for the following year 2015 are the highest in comparison with the following cases. This is because no hidden reserves were set up and instead the machine was capitalised in 2014 at EUR 60K. Compared to the following cases, although we have the lowest profit at EUR 88K, since the machine has the highest depreciation calculation basis with EUR 60K, there is no taxation of fictitious profits. The tax burden is the lowest of all the cases at EUR 26.4K.

For the external users, there is increased information content compared to the following cases due to the complete lack of hidden reserves.

Due to the increased information content creditors can get a better picture of the assets, financial position and performance compared to the following cases. Also as there is no taxation of fictitious profits, a capital payout is prevented. The principle of prudence as principle of proper valuation is complied with in the author's opinion because the acquisition costs principle in case study 1 does not act as the highest principle i.e. valuation EUR 55K instead of EUR 60K.

7.4 Case study 2: historical acquisition costs as notional acquisition costs

In case study 2, the historic acquisition costs amounting to EUR 55K represent the notional acquisition costs.

By using the valuation of historical acquisition costs (55K), lower hidden reserves are formed amounting to EUR 5K compared to the fair value valuation (60K).

The historical acquisition costs show a higher degree of objectification in the author's opinion than the fair value, as there was an actual market transaction involved in the acquisition instead of a notional circumstance (mark-to-market) or even that of only a market comparison. If the acquisition transaction occurred a long time ago, the objectification could again be restricted by changed market conditions. The historic acquisition costs are accorded a high level of objectification.[480] The argument that it could be regarded as an apparent objectification, e.g. because the machine was overpriced when the subscriber bought it in 2013 or had made a mistake regarding its suitability for the business are not convincing because if such circumstances were to prevail, the going-concern value would be used (cf. case study 3).

The practical efforts for the founder to determine notional acquisition costs are very simple as he only needs to take his invoice from 2013.

In line with the value of the assets, the capital resources in the investment contribution year 2014 amount to c.p. EUR 55K.

Balance Sheet 2014

Machine 55	CAP 55

For an assumed useful life of five years, EUR 11K is to be depreciated using the straight-line method. If there is an annual profit in 2015 of EUR 100K, then the reduced profit taking the depreciation of EUR 11

[480] Cf. § 32 II 2 no.2 AktG; Husemann, Karl-Heinz, as above, p.106f.

into account would amount to EUR 89K. This EUR 89K would be subject to a tax rate of 30% (=EUR 26.7K) leaving a profit after tax of EUR 62.3K. As this profit is to be allocated to share capital and reserves, the greatly simplified balance sheet for the following year 2015 can be shown as follows.

Balance Sheet 2015	
Machine 44	CAP 106.3
Bank 62.3	

The capital resources in the following year 2015 stand at EUR 106,3K, EUR 3.3K lower than case study 1 (EUR 106.3K). This is because hidden reserves of EUR 5K were created as the machine was only capitalised at EUR 55K in 2014. In comparison to the first case, there is a slightly higher profit of EUR 89K, but since the machine has a comparatively lower depreciation measurement basis of EUR 55K, there is a taxation of fictitious profits. This taxation of fictitious profits results from the fact that the depreciation for 2015 was only EUR 11K and not EUR 12K as in the first case. Therefore 30% of EUR 1K is taxed "too much". The tax burden is at EUR 26,7K, EUR 0.3K higher compared to the first case.

The capital resources for the following year 2015 are less than in case study 1 but higher in comparison with the following cases. This is because a low level of hidden reserves was set up (EUR 5K) and instead the machine was capitalised in 2014 at EUR 55K. Compared to the following cases, although we have a lower profit at EUR 89K, since the machine has a higher depreciation calculation basis with EUR 55K, there is only a low taxation of fictitious profits. The tax burden is higher at EUR 26.7K than in case study 1 (EUR 26.4K) but lower than in the following cases.

For the external users, there is a lower information content than in case study 1 due to less hidden reserves and to a higher level compared to the

following cases.

Due to the lower information content compared to case study 1, creditors will not have such an accurate picture of the company's assets, financial situation and performance. There is also a low level of taxation of fictitious profits and due to the slightly higher profit of EUR 89K compared to EUR 88K, there could be a capital payout. Also in connection with the valuation, historic acquisition costs EUR 55K, it is to be emphasised that in the author’s opinion the principle of prudence as the principle of proper valuation and therefore the creditor protection principle was not complied with in case study 2 if it is considered that the acquisition principle would have to act as the highest principle i.e. valuation EUR 55K instead of EUR 60K.

7.5 Case study 3: going-concern value as notional acquisition costs

By using the valuation, going-concern value amounting to EUR 50K, EUR 10K of hidden reserves would arise compared to the fair value serving as the highest value of EUR 60K.

There is no higher level of objectification compared to the fair value valuation or historical acquisition costs or the face value because although there are the going-concern assumptions according to tax law, these can be refuted. The level of objectification continues to be restricted as it is not based on an original value such as historical acquisition costs or the face value but an additional valuation step occurs in the derivation of a lower value.

The practical efforts for the founder in determining notional acquisition costs are more involved than in case study 1 and 2 as he must first take an initial value and then determine a lower value.

Also in line with the value of the assets, the capital resources in the year of investment contribution 2014 c.p. EUR 50K.

Balance Sheet 2014	
Machine 50	CAP 50

With the assumed useful life of five years, EUR 10K is to be depreciated using the straight-line depreciation method. If there is again an annual profit in 2015 of EUR 100K without the depreciation, the profit reduced by depreciation of EUR 10K would be EUR 90K. This EUR 90K would be subject to a tax rate of 30% (=EUR 27K) resulting in profit after tax of EUR 63K. As this profit is to be allocated to share capital and reserves, the again simplified balance sheet for the following year 2015 would be as follows.

Balance Sheet 2015	
Machine 40	CAP 103
Bank 63	

The capital resources in the following year 2015 stand at EUR 103K, EUR 6.6K lower than case study 1 (EUR 109.6K). This is because hidden reserves of EUR 10K were created as the machine was only capitalised at EUR 50K in 2014. In comparison to the first case, there is a slightly higher profit of EUR 90K, but since the machine has a comparatively lower depreciation measurement basis of EUR 50K, there is a taxation of fictitious profits. This taxation of fictitious profits results from the fact that the depreciation for 2015 was only EUR 10K and not EUR 12K as in the first case. Therefore 30% of EUR 2K is taxed "too much". The tax burden is at EUR 27K, EUR 0.6K higher compared to the first case (26,4K).

For the external users, there is somewhat less information content compared to case studies 1 and 2 due to the existence of hidden reserves.

Due to the low information content, creditors will not have such an accurate picture of the company's assets, financial situation and performance. There is also a low level of taxation of fictitious profits and due to the slightly higher profit of EUR 90K compared to EUR 88K, there could be a capital payout.

7.6 Case study 4: Book value as notional acquisition costs

If the book value is set at EUR 45K, EUR 15K of hidden reserves will occur compared to the fair value at EUR 60K.

There is no higher level of objectification compared to the previous valuations as it concerns a value that has been determined through options such as degressive depreciation, special depreciation allowance, straight-line depreciation. The objectification level continues to be restricted by the additional step of the book value being derived from the historical acquisition costs.

The practical efforts for the founder in determining the notional acquisition costs are approximately just as much as in case study 1 and somewhat more involved than in case study 2 as he needs to carry on the value from the original acquisition costs. This continuation is somewhat simpler than determining the going-concern value (case study 3).

Also in line with the value of the assets, the capital resources in the investment contribution year 2014 amount to c.p. EUR 45K.

Balance Sheet 2014	
Machine 45	CAP 45

With an assumed useful life of five years, EUR 9K is to be depreciated using the straight-line method. If the annual profit 2015 without depreciation is again EUR 100K, the reduced profit after depreciation of EUR 9K amounts to EUR 91K. This EUR 91K is subject to a tax rate of 30% (=EUR 27.3K) resulting in a profit after tax of EUR 63.7K. As this profit is to be allocated to share capital and reserves, the simplified balance sheet for the following year 2015 is as follows.

Balance Sheet 2015	
Machine 36	CAP 99.7
Bank 63.7	

The share capital and reserves for the following year 2015 is at EUR

99.7K, EUR 3.3K lower than case study 3 (at EUR 103K). This results from the fact that hidden reserves of EUR 15K were created as the machine was only capitalised at EUR 45K in 2014. Compared to the third case, there is a slightly higher profit of EUR 91K, however there is a higher taxation on fictitious profits as the machine was depreciated at the comparatively lower depreciation measurement basis of EUR 45K. This taxation on fictitious profits arises from the fact that the depreciation in 2015 only amounts to EUR 9K and not EUR 10K as in the third case. Therefore there is a taxation of 30% of EUR 1K "too much". At EUR 27.3K, the tax burden is again EUR 0.3K higher than in the third case.

For the external users, there is an even lower information content than in case study 3 due to the existence of even higher hidden reserves.

Due to the even lower information content, creditors will have an even less accurate picture of the company's assets, financial situation and performance than in the third case. There is also increased taxation on fictitious profits and due to the slightly higher profit of EUR 91K compared to EUR 90K more capital could be paid out.

7.7 Case study 5: Face value as notional acquisition costs

Using the face value of EUR 40K results in EUR 20K of hidden reserves compared to the fair value of EUR 60K serving as the highest value.

There is no higher level of objectification compared to the valuation at fair value or historical acquisition costs. This is because when interpreting the objectivity term, it firstly does not depend on an objectification via a possible conflict of interests existing amongst the founders[481] and secondly this objectification only seems superficially objective, for example in the case of a single shareholder limited liability company (Ein-Mann-GmbH).[482]

The practical efforts expended by the founder in determining the notional acquisition costs are simple as he only needs to take the face value from the contract.

In line with the value of the assets, the capital resources in the year of the investment contribution 2014 amount to c.p. EUR 40K.

Balance Sheet 2014

Machine 40	CAP 40

Continuing to assume a useful life of five years, there would be depreciation of EUR 8K using the straight-line method. If there is again an annual profit without depreciation of EUR 100K in 2015, the profit reduced by the depreciation amount of EUR 8K would amount to EUR 92K. This EUR 92K would be subject to a tax rate of 30% (=EUR 27.6K) resulting in a profit after tax of EUR 64.4K. As this profit is to be allocated to share capital and reserves, the simplified balance sheet for the following year 2015 is as follows.

Balance Sheet 2015

Machine 32	CAP 96.4
Bank 64.4	

[481] Cf. Leffson, Ulrich, GoB, as above, p.81.
[482] Cf. Lang, Richard, as above, p.55f.

The share capital and reserves in the following year 2015 at EUR 96.4K would again be EUR 3.3K less than in case study 4 (at EUR 99.7K), representing the lowest value of all case studies compared. This is because the highest possible amount of hidden reserves are created, namely EUR 20K. In comparison to the fourth case, there is a slightly higher profit at EUR 92K, however there would be taxation on fictitious profits as the machine has a lower depreciation measurement basis at only EUR 40K. This taxation on fictitious profits results from the fact that the depreciation in 2015 was only EUR 8K and not EUR 9K as in the fourth case. Therefore there is again a taxation of 30% of EUR 1K "too much". In comparison to the first case, the valuation with fair value without the formation of hidden reserves, there is a taxation of 30% of EUR 4K "too much" (=profit EUR 92K in case study 4 compared to a profit of EUR 88K in case study 1). At EUR 27.6K, the tax burden is again EUR 0.3K higher in comparison to the fourth case and EUR 1.2K higher than in the first case.

For the external users, there is the lowest information content of all case studies due to the existence of the maximum level of hidden reserves.

As a result of this very low information content, creditors obtain the least accurate picture of the company's assets, financial situation and performance compared to the four other cases. Furthermore, this case has the highest taxation on fictitious profits and due to the highest profit of EUR 92K, there could be the highest capital payout of all four cases.

7.8 Summary of the results of the case studies

The calculated results are summarised in the following table:

Summary of case studies					
Figures in EUR K					
case study no.	1	2	3	4	5
notional costs	fair value	hist.acqn.costs	going-concern value	book value	face value
Value of machine in bal. sheet 2014	60	55	50	45	40
Depreciation 2015	12	11	10	9	8
Value of machine in bal. sheet 2015	48	44	40	36	32
Profit after depreciation	88	89	90	91	92
Taxes	26,4	26,7	27	27,3	27,6
Profit after tax	61,6	62,3	63	63,7	64,4
Capital resources 2015	109,6	106,3	103	99,7	96,4

Fig 2: Summary of case studies

8 DECISION FOR VALUATION ACCORDING TO NOTIONAL COSTS OF ACQUISITION USING UTILITY ANALYSIS MODEL ACCORDING TO ZANGEMEISTER

8.1 General field of application

It is particularly complicated to identify a solution to a non-monetary selection problem as in the aim of this dissertation, namely to answer the question as to whether there should be a uniform valuation of non-cash contributions on company start-up in Germany and to suggest an ideal valuation method, when many goals have to be taken into account, when there are differing goal measurements, the preference structure of the decision makers differs considerably, several people have to be taken into account when making a decision and when there is no obvious decision criterion.[483] It is only possible to identify goals, set priorities and accurately assess the total value of the possible action alternatives by carrying out a systematic analysis of the facts.[484]

The utility analysis applied in this dissertation is such a helpful scientific model used in decision theory[485] and was developed by Zangemeister.[486] The utility analysis is defined as:

> "Utility analysis is the analysis of a quantity of complex action alternatives with the purpose of ordering the elements of this quantity according to the preferences of the decision maker with respect to a multidimensional target system. This order is illustrated by specifying the utility values (total values) of the various alternatives"[487]

As can be seen from the definition, the particular hallmark of utility models is that the result selection takes both objective and subjective

[483] Cf. Zangemeister, Christof, as above, p. 36.
[484] Cf. ibid., p. 36.
[485] Cf. Keeney, Ralph L. and Howard Raiffa, Decisions with multiple objectives, Cambridge 2003, p.16.
[486] Cf. Zangemeister, Christof, as above, p.6-345. The statements made in Chapter 8 therefore refer to Zangemeister, as above.
[487] Ibid., p.45.

information into account.[488] In the process, emphasis is placed on the subjective aspect which means the decision-making process is improved as the innate subjective aspects of a complex decision, are clarified.[489] The total sum of environmental conditions existing as objective elements and which constrain or limit the scope of the decision-making is termed the decision field whilst the "decision-making determinants (include) all the subjective circumstances, which significantly influence the decision-making process of the decision maker"[490].

The quantity of "action alternatives available for selection" according to the definition of the utility analysis "is to be ordered in the most favourable manner by taking into account pre-determined restrictions with respect to the relevant targets and objectives and the preferences of the decision-maker concerning these"[491], whereby the alternative with the highest utility value represents the best possible achievement of targets. From a methodological viewpoint, the optimal course of action is accordingly determined by direct consideration of the preference structure of the decision maker, that is the subjective value concept, i.e. the preference structure is "to be understood as a summarised expression of the relative importance that the decision maker attributes to the targets and differing target yields of the various alternatives"[492]. This utility concept is accordingly based on the approach that the decision maker wishes to maximise his utility or benefits, i.e. he chooses the alternative in which the totality of weighted target values is the greatest.[493]

[488] Cf. ibid., p.9.
[489] Cf. ibid., p.9.
[490] Ibid. p.40, author's underlining.
[491] Ibid., p.35.
[492] Ibid., p.44.
[493] Cf. ibid., p.44.

8.2 Scientific principles

8.2.1 Basic model of multi-dimensional utility analysis

The utility analysis is based on a rational decision-making process which is based on the principle of direct valuation of alternatives, i.e. the evaluative comparison is limited from the start to the alternatives specifically available for selection.[494] The principle is formulated as follows: "Choose from the quantity of alternatives available for selection the alternative whose consequences comparatively have the highest value."[495] From this, we can derive the following steps of a systematic utility analysis:[496]

1. Determination of the targets or target criteria relevant to the situation k_j with j = 1 (1)m.
2. Description of the consequences relevant to the target, i.e. the target yields k_{ij} of alternative A_i with i = 1 (1)n.
3. Evaluation, i.e. order according to preference of the alternatives based on their target yields.

The general structure of the utility model resulting from this, which is one-dimensional initially, is graphically illustrated as follows:

[494] Cf. ibid., p. 47 and p. 57.
[495] Ibid., p.57.
[496] Cf. ibid., p. 60.

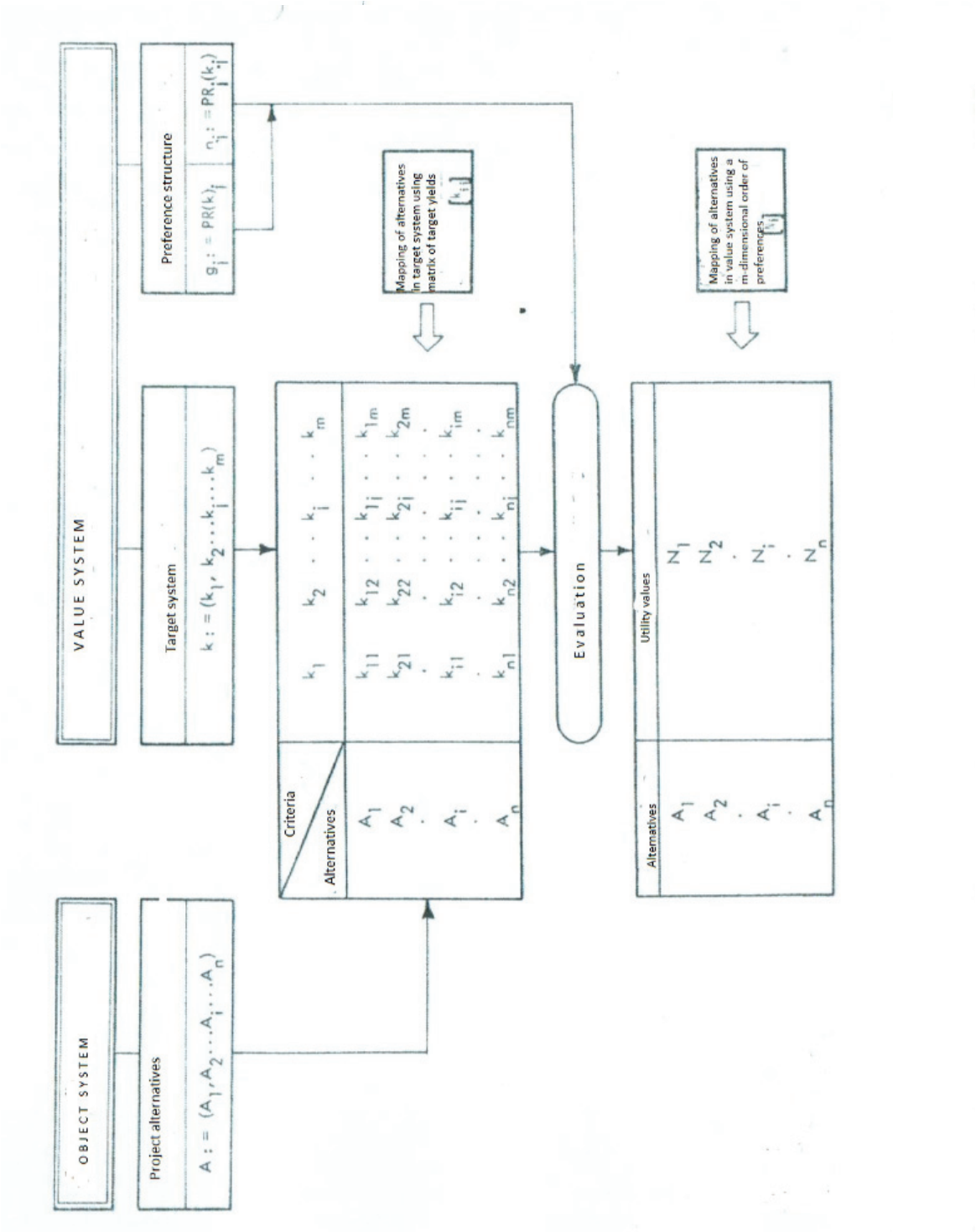

Fig. 3: General structure of utility models

The general structure of utility models shows that an object system "project alternatives" is to be represented in the value system “preference structure and target system” in m target dimensions as an empirical order

model k_{ij}. The resultant matrix of target yields is then to be mapped by rational decision making using systematic evaluation on the order index "utility (N_i) of alternatives". The decision maker therefore has to be able to decide in each case which of two target yields k_{ij} he prefers. The structure illustrated in figure 3 is initially one-dimensional, i.e. for each ij, only one target yield is given, in the sense of a best estimate, instead of comparing the target yields one against the other and thus evaluating them.[497]

The evaluation to be carried out is achieved using the multi-dimensional utility analysis. For this purpose "the relevant project-specific target yields need to be compared with one another on the basis of the target-relevant preferences and then all the comparative results need to be illustrated by an order of preference (N_i) of the alternatives".[498] Thus, the evaluation problem to be solved is defined as follows: "The evaluation problem of the multi-dimensional utility analysis lies in transforming the empirical order model described by n·m target yields (k_{ij}) into an m-dimensional order of preference (N_i) of the alternatives whilst systematically taking into account the decision maker's target-relevant preference structure".[499]

The purely theoretical solution to the evaluation problem is made through utility functions.[500] According to Zangemeister, a utility function is "a transformation rule whose purpose is to map a complete multi-dimensional empirical order model that is described by all possible combinations of the forms of the function arguments, onto an order of preference".[501] The conditions for the existence of utility functions are the axioms usually encountered for utility functions in microeconomics: completeness of the order of preference, transitivity, and reflexivity.[502] These are ordinal utility functions which merely make statements con-

[497] Cf. ibid., p.60.
[498] Ibid., p. 60.
[499] Ibid., p. 61.
[500] Cf. ibid., p. 64.
[501] Ibid., p. 62.
[502] Cf. ibid., p.63f.

cerning the order, in contrast to cardinal utility functions. The representation of the decision maker's preferences using utility functions dependent on the target criteria causes so many problems in practice because from experience "multidimensional circumstances cannot be completely abstracted intellectually in a consciously and objectively verifiable manner, either from the point of view of the diversity of their aspects nor with respect to their interdependencies,"[503] so that utility functions do not play an active role in the practical solution of multidimensional evaluation problems.[504]

In practice, multidimensional evaluation problems are solved by formalising empirical evaluation processes.[505] The complex evaluation problem is broken down "by firstly prefixing three principles as rationally acceptable procedures ... which provides the basis for the formulation of the method of resolution"[506]. These three solution principles are:

1. "Solution principle 1: The evaluation of the alternatives takes place directly by comparative assessment of their target yields k_{ij}.
   Instead ... of mapping the target-relevant preferences by defining a utility function valid for all the alternatives contained in $K = k_1 \times k_2 \times \ldots k_j \times \ldots k_m$ and inserting the target yields kij into this function to thus indirectly calculate the utilities of the alternatives via the function, the utilities are determined by direct assessment of the project-specific target yields...

2. Solution principle 2: The assessment of the alternatives takes place by means of a sequence of partial evaluations in which each partial evaluation is only based on one of the m value dimensions...
   Instead of determining the utilities N_i directly through a global act of judgement simultaneously based on m value dimensions, the al-

[503] Ibid., p. 64.
[504] Cf. ibid., p. 64.
[505] Cf. ibid., p. 69.
[506] Ibid., p.69.

ternatives A_i are weighed up one against the other step-by-step and ordered, for each of the m goal criteria k_j separately ...you thus get m one-dimensional orders of preference $(n_j)_j$ overall...

3. Solution principle 3: The target values n_{ij} of an alternative A_i are summarised to utility N_i with the help of a decision rule to be given in each individual case in accordance with the relative importance g_j subjectively attributed to the target criteria k_j. In the process, the target weightings g_j are constant factors that are independent of the level of target values n_j and/or the target yields k_j.
   The breakdown of the m-dimensional evaluation task in m one-dimensional partial evaluations makes it necessary for the results of the partial evaluations to be summarised in a "correct" overall evaluation. In terms of the individual alternatives, this value synthesis consists in a rational combination whose part worth utilities n_{ij} relate to the total utility $N_{i...}$In this connection...it should be remembered that the target criteria k_j may typically be of varying importance for the decision maker. Accordingly, the part worth utilities of an alternative must be entered into their total utilities with differing weightings as far as the individual criteria are concerned...The decision maker must therefore also formulate his preferences in this regard and carry out an order of preference of the criteria."[507]

This approach is graphically illustrated as follows:

[507] Ibid., p. 69ff.

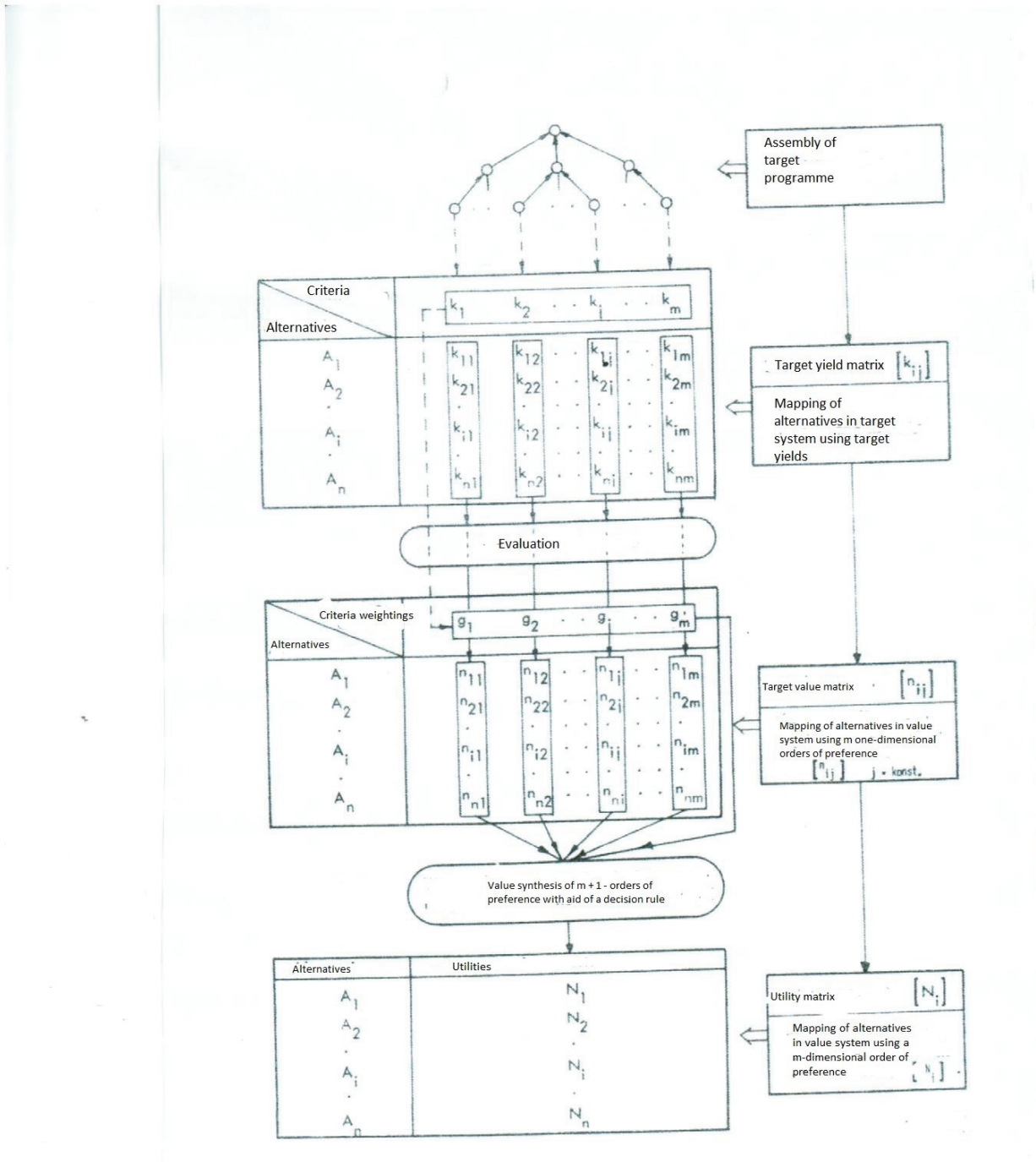

Fig. 4: Logic of the practical method of resolution together with the preceding steps of the utility model

Figure 4 is explained briefly below: "Proceeding from the last links of the target chains of the target programme which describes the decision-relevant target criteria k_j, the alternatives A_i are shown by explicit specification of their target yields k_{ij} in the target yield matrix. (author's note: corresponds to solution principle 1 above). The elements k_{ij} of the

target yield matrix are to be understood as numerical and / or verbal descriptions of target yields.

Each column j of the target yield matrix is an objective point of reference for m partial evaluations necessary to represent the alternatives in the value system by n·m target values n_{ij}. For each partial evaluation j the alternative courses of action A_i are weighed up against each other in relation to their target yields k_{ij} and ordered according to the subjective preferences of the assessor by explicit allocation of target values n_{ij}. In other words, the m columns of the target yield matrix are transformed into m orders of preference – shown by the columns of the target value matrix $(n_{ij})_j$ (author's note: corresponds to solution principle 2 above).

To finally obtain the desired m-dimensional orders of preference of the alternatives - represented by the utilities (N_i) - from the m one-dimensional orders of preference, the target values of the individual alternatives are subsumed with the help of a given decision rule and taking into account the preferences determining the relative importance of the criteria g_j (author's note: corresponds to solution principle 3 above)."[508]

Decision theory is also basically a justifiable practical method of resolution of multidimensional evaluation problems if the three following decision-theoretical assumptions on the assessment situation implicitly underlying the three solution principles mentioned above are observed:[509]

1. Assumption for solution principle 1

   "An order of preference established by direct evaluation of the alternatives specifically available for selection is basically consistent with the order of preference of all the alternatives theoretically contained in $K = k_1 \times k_2 \times \ldots \times k_j \times \ldots \times k_m$."[510]

   This means that the order of preference of a subset of alternatives essentially remains the same regardless of whether this subset is increased or decreased.[511] "For the practical utility analysis, this assumption therefore ultimately means that the assessment is car-

[508] Ibid., p. 72ff.
[509] Cf. ibid., p. 88.
[510] Ibid., p. 75.
[511] Cf. ibid., p. 75.

ried out by decision makers who are experienced in handling both the circumstances to be assessed and in pronouncing clearly formulated judgements."[512]

2. Assumption for solution principle 2

   "The target criteria k_j on which the assessment is based are independent of one another as regards utility."[513]

   Accordingly, a target yield k_{ij} must make a contribution to the utility of the alternative for itself exclusively - and not in conjunction with other target yields.[514] At the same time, complete independence of utility is not absolutely necessary but conditional utility independence is sufficient because an alternative is only useable if it results in certain minimum target yields in relation to most criteria.[515] A common mistake in the assessment problem of multidimensional utility analysis is that the assessor does not check the utility independence assumption.[516] "For an initial approximation, you can proceed by examining the criteria k_j in pairs to see whether you can set a value relating to one criterion that is independent of the level of the target yield of the other or not."[517]

   Zangemeister illustrates the utility independence assumption using the example of a car purchase:[518] The general utility dependence between the purchase costs as one of the target criteria and most of the other target criteria such as e.g. operating costs, maximum speed, performance and prestige is acceptable according to the demand for only conditional utility independence. However, both original target criteria: performance (hp) and unladen weight (kg), exhibit a specific utility dependence when reviewed as a pair which is why they are combined to form a new goal criterion: performance weight (kg/hp).

3. Assumption for solution principle 3

[512] Ibid., p. 77.
[513] Ibid., p. 77, author's underlining.
[514] Cf. ibid., p.77.
[515] Cf. ibid., 78f.
[516] Cf. ibid., p. 164.
[517] Ibid., p. 78.
[518] Cf. ibid., p.79ff.

> "The total utility function is a linear, monotonically increasing function of part worth utilities."[519]
>
> Experience shows that this assumption is not a problem for practical utility analysis because taking a monotonically increasing total utility function as a basis means that with every increase in a part worth utility $n_{ij,}$ the total utility N_i of an alternative A_i also increases.[520]

8.2.2 Methodology of practical utility analysis

8.2.2.1 Establishment of a target system

Targets for practical utility analysis are to be determined and systematically ordered in such a way that the evaluation can be based on a system of targets and objectives appropriate to the situation and suitable for the model.[521] In this connection, a target system is defined as the ordered "quantity of all action-determining targets which are to be taken into account when deriving a rational decision recommendation... a target system is appropriate to the situation when it is complete...(and) suitable for the model..., when the individual targets underlying the evaluation are so defined that the assumption of their conditional utility independence is justified."[522]

On the one hand, a complete target search is difficult in practice.[523] In connection with the appropriateness of the situation, it must be emphasised that a "rough but complete target system is always preferable...as an assessment basis to an incompletely formulated target system due to the risk of a making a mistake,"[524] i.e. for reasons of clarity and traceability, only the most important target criteria k_{ij} are to be taken into account.

On the other hand, the correct model also causes considerable difficul-

[519] Ibid. p. 85, author's underlining.
[520] Cf. ibid., p.86.
[521] Cf. ibid., p. 89f.
[522] Ibid., p. 89f author's underlining.
[523] Cf. ibid., p. 42 and p. 90.
[524] Ibid., p.93f. Cf. ibidem p. 289.

ties in practice,[525] which is why Zangemeister essentially sets down the following principles for establishing a target system:[526]

- The definition of objectives or targets is a creative process.
- Possible objectives are to be discussed and critically examined to see whether they can be implemented.
- Objectives are to be recorded factually in writing and need to be formulated clearly enough to prevent any individual interpretations.
- Initially the objectives or targets are to be recorded in a disordered manner and only in a second step, are they to be ordered and supplemented corresponding to the hierarchical structure of target systems.

  Target systems are always based on a hierarchical structure with the following macrostructure:[527] Vertically, the target system is first determined by target levels and secondly by target steps based on means-purpose relations within the target pyramid at the individual target levels. At the same time, the endpoints of the target chains represent the target criteria k_j at each goal level. Horizontally, the target system represents a pyramid with overall targets and sub-targets, within which the horizontal diversification corresponds to functional target areas such as economically, socially or technically relevant targets.
- The specification of targets is simplified by target chains based on means-purpose relations. “A target chain consists of a continuous row of overall targets and sub-targets which can branch out to a greater or lesser extent. The targets at the beginning of a target chain normally represent only verbally formulated guidelines, not directly quantifiable ones (author's note: imperative). In contrast, there are often guide numbers at the end of a multistage chain that

[525] Cf. ibid., p. 90.
[526] Cf. ibid., p. 137ff.
[527] Cf. ibid., p. 112ff.

are easier to check."[528]

- The target system needs to be consistent, i.e. between each target pair of sub-target and directly superordinate overall target, there is a means-purpose relation. For this purpose, it is useful to set up the target system in the form of a complete target hierarchy.
- The target criteria k_{ij} should be operationally verifiable.
- The targets at the highest levels must correspond with the requirement of conditional utility dependence, mentioned above. If conditional utility dependences cannot be avoided at the lowest levels of the target system, these may only be taken into account in respect of the next common overall target.
- As target conflicts are unavoidable, mutually exclusive targets must be eliminated and partial target conflicts are to be solved by weighting.
- In every phase of the target definition, there should be feedback and changing environmental conditions are to be taken into account.

8.2.2.2 One-dimensional evaluation methods

The breakdown of the m-dimensional assessment task into m one-dimensional partial assessments makes it necessary to illustrate the one-dimensional order of preference in an operational manner whereby the target criteria k_j are assessed and ordered one against the other and the target yields k_{ij} of the alternatives are assessed and ordered mutually and according to preference.[529] Accordingly, the assessment task formally consists of mapping the subjective preference structure of the assessor by taking one quantity of elements at a time under uniform conditions and naming isomorphic number relations and comparing, i.e. scaling these one against the other. [530]

With reference to the scaling methods developed in psychometrics to authentically illustrate preferences by numerical utility parameters, the

[528] Ibid., p. 107.
[529] Cf. ibid., p. 143.
[530] Cf. ibid., p. 143.

term "reaction" is to be understood as the subjective assessment of the feature to be measured as a weighting g_j (relating to the mutual assessment of the target criteria k_j among themselves) and as a target value n_{ij} (relating to the mutual assessment of the alternatives A_i among themselves).[531] In this psychometric model, the following must thus be specified to systematically illustrate the one-dimensional preferences:

> "1. a scale (e.g. 1,2,3,4,5) as well as an agreement on what relations between the numbers of the scale (their sequence, difference etc.) are relevant for the illustration of the reactions.
> 2. a rule as to how the assessor should communicate his reaction…
> 3. a theoretical measurement model prescribing how systematically numerical values can be assigned to quantitative response categories."[532] This third specification only applies to response categories such as e.g. "yes" or "no", i.e. there are less stringent requirements of the decision maker's ability to judge.

In the practical application of the utility analysis, distinctions can be made between different scales depending on the specific assessment situation. Consequently, a scaling method with a higher scale level maps a one-dimensional order of preference with greater operability. On the other hand, a high scale level requires a higher degree of information and considerable reasoning powers and experience on the part of the decision maker.[533] The scale level for the specific assessment situation is to be established before the assessment and varies according to which characteristics of the properties identity, ranking and additivity of the numbers used in a scale are relevant for the illustration of the subjective preference relations.[534] Accordingly, a distinction is made between nominal, ordinal, interval and ratio scales whereby the last two are often grouped together as the cardinal scale:[535]

[531] Cf. ibid., p. 145.
[532] Ibid., p. 148.
[533] Cf. ibid., p. 156.
[534] Cf. ibid., p. 149.
[535] Cf. on the types of scale ibid., p. 149ff.

- Nominal scale:

  The lowest scale level is only based on the property of identity in a statement on the illustration of preferences, i.e. the utility equality or utility diversity - e.g. in the case of a colour scale. Nominal scales are therefore only used when looking for initial approximate solutions.

- Ordinal scale

  If you go beyond illustrating identity to include the ranking of the preferences, there is an additional statement concerning the direction of preferences in the sense of greater or smaller i.e. alternative A_1 brings a larger or similar or smaller utility in relation to criterion k_j than alternative A_2. It is to be emphasised that the ordinal scale only determines rankings such as e.g. 1st place, 2nd place and 3rd place at the Olympic Games but that the sportsman who gained 1st place was not twice as fast as the sportsman who gained 2nd place. Ordinal scales are therefore used when there are low requirements concerning the decision maker's ability to judge and when inter-individual comparability is to be achieved with relatively simple assessment techniques.[536]

- Interval scale

  If additivity of the numbers used for the illustration of subjective preferences is added to identity and to ranking, you have an interval scale, i.e. the numerical differences of the numbers used to illustrate the preferences reflect utility differences. Accordingly, not only the utility parameters themselves are capable of being ordered but the utility intervals too. Both the zero point as well as the utility unit that is supposed to represent a number unit are irrelevant which is why an example of interval scales is temperature measurement in degrees Fahrenheit or Celsius. Additivity is a given with interval scales because these are transformable linearly, that is every measurement value can be multiplied with a constant

[536] However, for the frequently applied ranking sum rule, the ordinal scale is based on a measurement of preferences at interval level. Cf. ibid., p. 84 and p. 270.

or changed by addition.

- Ratio scale

  Similar to interval scales, all three properties are present for ratio scales too, whereby the zero point of the scale is clearly determined in addition e.g. in the case of length and weight measurement. Ratio scales therefore represent the strongest form of illustration of preferences and are only suitable if a natural zero point can be agreed.

For the illustration of one-dimensional orders of preference, the nominal scale imposes no requirement regarding evaluation methods and the ordinal scale only low requirements.[537] In the case of interval scales, the direct vs. the indirect interval scale are of practical significance as methodological approaches.[538]

"In the case of direct interval scaling, it can be assumed that the assessor "works like a measuring instrument" and can give the scale search values n_{ij} according to the number interval of the given decision scheme.[539] This scaling method, also known as a rating, is based on the following two assumptions:

1. "The decision-maker can directly map the relevant extent of his reaction to the various characteristics of a one-dimensional quantity by quantitative decisions so that every decision is based on the same scale jump and the same scale unit, however random. The numerical differences between scale values then reflect subjective distances…
2. If the decisions taken vary when decision-making is repeated then this is interpreted as a normal measurement error and the "true" scale value is understood as the average value of the individual

[537] Cf. ibid., p. 158.
[538] Within the context of the aim of the dissertation, there is no zero point in the scale which is why the cardinal scale in the form of an interval scale comes into question as a maximum scale and the ratio scale as the highest type of scale is therefore eliminated.
[539] Ibid., p. 163.

decisions.[540]

The rating is widespread in practice as its evaluation technique is easy to carry out and the scale values sought are obtained immediately; as the evaluation results can also be clearly summarised, the rating is very widespread in connection with scoring models.[541] "In the scoring models, the target values n_{ij} of an alternative A_i are normally determined in the rating procedure and added up to give a "project score" N_i."[542]
In practice, there is the risk of mistakes if the system-innate conditions of utility independence of criteria k_j and the two assumptions of direct interval scaling just mentioned are not explicitly observed.[543] Beyond the fulfilment of these system-innate requirements, when evaluations are made by various <u>different</u> decision-makers, it is also essential to determine a binding zero point to anchor the decisions and establish a common evaluation unit.[544] If only one person is making the decision, it has been proved in experiments that there is no need for a fixed zero point and a common evaluation unit as the decision maker – of whom high decision standards are expected as he delivers interval decisions –[545] maps his preferences based on his personal expertise and experience.[546] This mapping can be random or arbitrary which is why the consistency of the decision-making must be ensured by "evaluating the alternatives to be compared successively with regard to <u>all</u> m criteria k_{ij} until after several decision sequences a stable decision behaviour occurs."[547] Examining the empirical relevance of the intervals between the achieved scale values – i.e. whether the value reactions of the decision maker relating to the objects to be compared are mapped on the given decision schema in accordance with the assumed scale level – is not possible with direct interval scaling and also not required under normative aspects.[548]

[540] Ibid., p. 163f.
[541] Cf. ibid., p. 164.
[542] Ibid., p. 164.
[543] Cf. ibid., p. 164.
[544] Cf. ibid., p.165ff and ibid. p. 251.
[545] Cf. ibid., p. 206.
[546] Cf. ibid., p. 168f.
[547] Ibid., p. 170f, author's underlining.
[548] Cf. ibid., p. 176.

In contrast to direct interval scaling, the decision-making demands on the evaluator are lower than for indirect interval scaling as it is assumed "that a decision maker can basically only localise his preference reaction on an ordinal decision schema but that the ordinal scale values can be transformed with the help of mathematical measurement models into the empirically relevant values of an interval scale."[549] In this connection, either complete rankings or binary preference frequencies are transformed. The transformation of complete rankings is seldom satisfactory in practice however as it is only possible under the assumption of a certain distribution of target values n_{ij} on the interval scale – e.g. equidistant or normally distributed.[550] If the transformation of preference frequencies occurs in indirect interval scaling on the other hand, the ordinal decision schema does not require any complete ranking of the objects of comparison, but only binary ordinal decisions in each case.[551] The transformation of preference frequencies requires an inconsistency of decision behaviour as otherwise only scale values of the ordinal level but not of the interval level occur in the evaluation procedure of the transformation of preference frequencies.[552] The required system-innate inconsistency is evident for example in that "an alternative A_i is only classified in the same category of a decision schema after r-times of evaluation in less than r-cases or e.g. when comparing a pair with an alternative A_h, it is not r-times superior."[553]

Through scaling, the one-dimensional orders of preference were mapped operationally whereby the target criteria k_j were assessed against each other and ordered according to preference and the target yields k_{ij} of the alternatives were mutually assessed and ordered according to preference. This measuring evaluation is now to be examined to see if the decision results calculated actually map the individual one-dimensional order of

[549] Ibid., p. 163, author's underlining.
[550] Cf. ibid., p. 172f.
[551] Cf. ibid., p.172.
[552] Cf. ibid., p. 177.
[553] Ibid., p. 177.

preference appropriately. Only if this is the case, can the "true value" be determined by communicating the results, taking any decision variability into account.[554] As the evaluation task formally requires the mention of isomorphic number relations amongst other things, we can also speak of evaluation isomorphism which includes the following components in its complete form:

> "1. Isomorphism of information.
> Every decision sequence is based on the same object information.
> 2. Isomorphism of preference structure.
> Every decision sequence is based on the same preferences.
> 3. Isomorphism of recognition process.
> The perception of the object information and preferences as well as the intellectual processing of this information is the same in all decision sequences.
> 4. Isomorphism of the categorisation process.
> The given decision schema is handled the same way in all decision sequences."[555]

The individual components of this evaluation isomorphism are more or less strongly impaired, mainly by time differences and the individualism of the decision maker.[556] Characteristic reasons for a low level of decision consistency include[557]

- Changing value aspects
  If the criterion k_j is formulated too vaguely, this will not result in a mapping of one-dimensional orders of preference but a mapping of orders of preference with various value dimensions. Variable value aspects can be avoided by clearly formulating target criteria which minimises individual room for interpretation.
- Differing preference structures

[554] Cf. ibid., p. 227. As the decision behaviour of the decision-maker is not sufficiently inconsistent in this dissertation, the transformation of preference frequencies will not be explored in any more detail.
[555] Ibid., p. 227f
[556] Cf. ibid., p. 228.
[557] Cf. ibid., p. 244ff.

The individual nature of the different evaluators is one of the main reasons why there is a low level of agreement on a decision. Due to this variability in the decisions made, no communication of the results may be carried out as the consequences of the decision differ from each other systematically. This deficiency in evaluation can be avoided by the evaluators communicating their individual decision motives and then repeating the evaluation. The communication of the results is only justified when the following applies: "The totality of the r decision consequences consists of r_1 decision consequences whose evaluation bases differ from one other randomly as well as of r_2 decision consequences whose evaluation bases are systematically different from one another and/or in comparison to other r_1 evaluation bases...(and) if r_2 is sufficiently small and the related decision consequences are not taken into account."[558]

- Low value differences
  Although value differences of the alternatives A_i are not serious for practical evaluation purposes, the target formulation and competence of the evaluator should be examined.
- Deficient professional competence
  If the evaluator only has a low level of expertise and a low level of understanding of decision techniques and little experience, this can lead to inconsistencies, especially to a low level of personal consistency. The evaluators should therefore be selected carefully.

Even if there is a high level of agreement on the decision, an examination must be made to check that the decision results being determined are an appropriate representation of the individual one-dimensional order of preference because constant human and procedure-related decision errors such as the arrangement of answers on a questionnaire or the effects of an unrealistic decision anchorage in the case of different evaluators can exist in the direct interval scaling carried out during the rating.[559]

[558] Ibid., p. 229.
[559] Cf. ibid., p.249ff.

8.2.2.3 Decision rules for value synthesis

The mapping of alternatives in the value system by m one-dimensional orders of preference – that is the creation of the target value matrix [n_{ij}] according to solution principle 2 above - is followed by the value synthesis of m+1-orders of preference according to figure 4, with the help of a decision rule according to solution principle 3 above.[560] Therefore the breakdown of the m-dimensional evaluation task into m one-dimensional partial evaluations makes it necessary "for the results of the partial evaluations to be combined to give a "correct" total evaluation. With respect to the individual alternatives, this value synthesis consists of a rational combination of their part worth utilities n_{ij} to a total utility N_i...In this connection...the normally existing fact is to be taken into account that the target criteria k_j may be of varying significance for the decision maker. Correspondingly, the part worth utilities of an alternative must be viewed as having varying weightings as regards the individual criteria, within their total utility."[561] Technically therefore, a decision rule is required that determines how the utility value matrix [N_i] can be determined from the m columns of the target value matrix [n_{ij}] to thus arrive at an order of preference of the alternatives A_i.[562] In addition to the axioms, completeness and transitivity, the axiom of non-dictatorship of an individual order of preference[563] is of significance for the practical utility value analysis, i.e. exclusion criteria are to be defined e.g. the breach of applicable trade law.

This decision rule is contingent on the type of scale it is based on.

If the nominal scale is established to map the subjective preference relations for the specific evaluation situation before evaluation takes place, the decision rules to be taken into account are the rule of the satisfactory solution (so-called Simon rule) and the method of lexicographical order.

[560] Cf. Chapter 8.2.1. Solution principle 3 says that: "The target values n_{ij} of an alternative A_i are combined to give a utility value N_i with the help of a decision rule given in each case according to the relative importance gj subjectively ascribed to the target criteria kj", ibid., p.70.
[561] Ibid., p. 71.
[562] Cf. ibid., p. 253.
[563] Cf. Luce, Robert Duncan and Howard Raiffa, *Games and decisions: introduction and critical surveys,* New York 1957, p.333.

In the case of the Simon rule, the target values n_{ij} and the utility values N_i are divided in accordance with the following equation into those that are at least satisfactory in all m goal value dimensions and those that are not.[564]

$$N_i = \begin{cases} 1, & if \sum_{j=1}^{m} n_{ij}^{+} = m \\ 0, & if \sum_{j=1}^{m} n_{ij}^{+} < m \end{cases}$$

and

$$n_{ij}^{+} = \begin{cases} 1, if\ n_{ij}\ is\ at\ least\ satisfactory \\ 0, \quad if\ n_{ij}\ is\ not\ satisfactory \end{cases}$$

If, on the other hand, the criteria have different weightings and if the nominal decision schema contains for example the category good above the category satisfactory, then the quantity of parts of the satisfactory alternatives can be further ordered according to the method of lexicographical order.[565] There is no completeness of the order of preference of alternatives A_i in the value synthesis of nominal orders of preference.[566]

In the case of the value synthesis of ordinal orders of preference on the other hand, the decision rule requirement is complied with, so that a complete order of the alternatives A_i is arrived at.[567] The operational and frequently-used rank sum rule is of practical use as a decision rule here.[568] The rank sum rule is based on the specific assumption "that the utility distances between neighbouring ranks are equal in size in all value dimensions. This means.., that the value synthesis in effect is not based on an ordinal target value matrix but on a target value matrix of

[564] Cf. Zangemeister, Christof, as above, p.256.
[565] Cf. ibid., p. 258. "The term lexicographical order is based on the analogous procedure of ordering words alphabetically in which the first letter comes first and if this is the same, then the second etc. letter is examined to determine the order of words." Ibid. p. 259.
[566] Cf. ibid., p. 259.
[567] Cf. ibid., p. 259.
[568] Cf. ibid., p. 269. The less operational decision rules of the value synthesis of ordinal orders of preference are only referred to here for the sake of completeness - these are the majority rule, the Copeland rule, the Austin-Slight rule and the Thurstone rule.

interval level with a constant evaluation unit."[569] The utility values are calculated in this case by simple line-by-line addition of the elements of the target value matrix [n_{hj}] if necessary by taking into account the criteria weightings beforehand,[570] i.e.

$$N_h = \sum_{j=1}^{m} R_{hj}^{+}\,; \quad h = 1\,(1)\,n$$

with R^{+}_{hj} as inverted rank as per $R^{+} = n + 1 - R$, "as the decision schema underlying a ranking sequence usually denotes high target values with low numbers in contrast to the decision schema of an interval scale."[571]

In the value synthesis of cardinal orders of preference, this dissertation examines the decision rule to be established for scoring models of addition in the case of fixed-interval target value scales (so-called Goodman-Markowitz rule).[572] Even if the illustration of subjective preference relations were only ordinal, the Goodman-Markowitz rule should be analysed as the above-mentioned rank sum rule represents a special case of the Goodman-Markowiz rule. Although cardinal target value scales are based on a constant evaluation unit, this is not the same across all m value dimensions. The addition rule for fixed-interval target value scales therefore defines the individual evaluation units in such a way that the addition of target values of an alternative is allowed, that is, all the target values in the same unit are measured.[573] This is achieved in the following four steps:[574]

"(1) Additive transformation of all m target value scales as per

$$n'_{ij} = n_{ij} - (n_{ij})_{Min}$$

[569] Ibid., p. 270.
[570] Cf. ibid., p. 270.
[571] Ibid., p.172.
[572] In the context of the aim of this disseration, there is no zero point on the scale which is why the cardinal scale in the form of interval scaling is taken into account as the maximum scale. Within interval scaling, only direct interval scaling is of relevance.
[573] Cf. ibid., p. 273ff.
[574] Ibid., p. 276.

The scale origins are thus placed at the point $(n_{ij})_{Min}$ of the jth target value scale in each case. This point corresponds to the target value that was assigned to the lowest rated alternative relating to $k_{.j}$.

(2) Selection of one of the j = (1) m criteria as a standard comparison criterion $k_{.s}$.

(3) Assessment of utility relationships

$$\frac{\{(n'_{.j})_{Max}\}}{\{(n'_{.s})_{Max}\}} = s_j \; ; \; j = 1(1)m$$

whereby $(n'_{.j})_{Max}$ and $(n'_{.s})_{Max}$ represent the target values transformed according to step (1) of the highest rated alternatives with reference to $k_{.j}$ or $k_{.s.}$

(4) Transformation of all target values n'_{ij} according to the transformation correlation

$$n''_{ij} = (n'_{.s})_{Max} \; s_j \; \frac{n'_{ij}}{(n'_{ij})_{Max}}$$

The target values n''_{ij} are then all measured in the scale unit of the standard comparison criterion $k_{.s}$."

In connection with the Goodman-Markowitz rule, the following two aspects are to be taken into account in the practical utility analysis:[575]

- When adding target values, it is frequently unjustifiably assumed that there is a common evaluation unit and - especially in the case of evaluation in the m value dimensions by various decision makers - that there is a common scale origin. We therefore need to check if a decision rule with weaker assumptions could lead to a contradictory order of preference [N_i]

[575] Cf. ibid., p. 283f.

- The rule should only be applied if the criteria have different weightings. As the order of preference [N_i] is only based on an interval scale, the utility values should not be placed in relation to one another.

As the utility value does not allow any direct conclusions on the distribution of the target values of an alternative in the m value dimensions, it may be appropriate to plot the information contained in a target value matrix [n_{ij}] using value profiles - according to the scale level of the m orders of preference.[576]

[576] Cf. ibid., p. 289.

8.3 Application to notional costs of acquisition

8.3.1 Task

The scientific principles of the utility analysis model shown will now be gradually and specifically applied to the aim of the dissertation, that is the answer to the question as to whether there should be a uniform valuation of non-cash contributions on company start-up in Germany and to suggest an ideal valuation method.

8.3.2 Establishment of the target system

First, a clear and written formulation of the target is required – free of individual leeway - which, as described, is to answer the question as to whether there should be a uniform valuation of non-cash contributions on company start-up in Germany and to suggest an ideal valuation method.

The objective environmental conditions, also referred to as the decision field, form the alternatives mentioned in the case study:

- no standard valuation of notional acquisition costs or application of interim values
- fair value
- historical acquisition costs
- going-concern value
- book value
- face value

A violation of established law could be regarded in this case as an exclusion criterion within the context of the decision field. As the acquisition costs principle does not act as a maximum value principle in the case of notional acquisition costs in the author's opinion, an evaluation with the fair value of EUR 60K was possible in case study 1. So in this utility analysis, the exclusion criterion - e.g. that the historical acquisition costs of EUR 55K are decisive as a maximum value due to compliance

with legal requirements (here § 255 I HGB) - does not apply.

The highly subjective circumstances are laid down in the value system, the decision determinants. The following goals or targets were listed in the context of the case study:

- avoidance of hidden reserves in the start-up balance sheet
- objectification of valuation
- practical time and effort spent on investigation by the founder to determine notional acquisition costs
- equity of the established company in the year of the capital contribution and in the subsequent year
- information content for external users
- compliance with creditor protection principle according to HGB

The basic principles laid down by Zangemeister to establish targets have been met, in particular the feasibility of the targets can be examined and the targets are clearly formulated and complete.
Both original target criteria, avoidance of hidden reserves and information content for external users, show a specific utility dependence when examined as a pair because the avoidance of hidden reserves as illustrated in the case study is always accompanied by an increase in information content for external users. They are therefore only shown as the target criterion, avoidance of hidden reserves. Furthermore, there is partly only general utility dependence between the target criteria. For example, the goal criterion, compliance with creditor protection according to HGB has an effect on the goal criterion, avoidance of hidden reserves in the start-up balance sheet because the acquisition costs principle is one of its principles. These only generally existing utility dependences are acceptable in accordance with the requirement for conditional utility independence.
Due to the model requirement that only the most important criteria should be included in the utility analysis for reasons of transparency and

clarity, the target criterion "practical time and effort spent" can be regarded as subordinate in the context of the target programme and can therefore be deleted.
There are no mutually exclusive goals; as there are only a few target criteria, a target hierarchy consisting of several layers is not appropriate. Furthermore, the target system is consistent and the subsequent evaluation of alternatives is also clearly possible.

The target programme has therefore been designed in accordance with the aim of the dissertation to answer the question as to whether there should be a uniform valuation of non-cash contributions on company start-up in Germany and to suggest an ideal valuation method with the following target criteria at the same level with the abbreviated designations:

- avoidance of hidden reserves
- objectification of valuation
- equity
- creditor protection

8.3.3 Creation of target yield matrix

The existing six alternatives will be described in concrete terms below through the creation of the target yield matrix $[k_{ij}]$ and thus illustrated in the target system by means of their target yields kij. For space reasons, only key words will be used in the target yield matrix which is why these are described in more detail below:

Alternative A_1: no standard value ($=k_{1j}$)

- k_{11} (=with goal criterion avoidance of hidden reserves): if no standard value is called for, the formation of hidden reserves, e.g. by the fixing of any value such as the face value or a freely selectable interim value between fair value and face value, cannot be avoided. So depending on which valuation for notional acquisition

costs is chosen, the hidden reserves will be between to EUR 0 – 20K. The entry in the target yield matrix is therefore “hidden reserves 0-20”.

- k_{12} (=with target criterion objectification): If interim values are chosen, these can be freely selected in the context of notional acquisition costs between EUR 60 - 40K and therefore avoid an objectification ceteris paribus. The entry in the target yield matrix is therefore “freely selectable+low”.
- k_{13} (=with target criterion equity): As shown in the case study, in the case of interim values as notional acquisition costs, values for equity in the year of capital contribution can be between EUR 60 – 40K and in the following year between EUR 109.6 – 96.4K. So the entry in the target yield matrix is “year of capital contribution 60–40, following year 109.6–96.4”.
- k_{14} (=with target criterion creditor protection): If values or even any interim values are fixed as notional acquisition costs below fair value, then creditors get a less appropriate picture of the company's assets, financial position and performance and this results in a taxation of fictitious profits and too high capital distribution. So the entry in the target yield matrix is “Taxation on fictitious profits and distribution of capital possible”.

Alternative A_2: fair value (=k_{2j})

- k_{21} (=with target criterion avoidance of hidden reserves): If the fair value with the value EUR 60K from case study 1 is used for notional acquisition costs, the creation of hidden reserves will be completely avoided. The entry in the target yield matrix is therefore "hidden reserves 0".
- k_{22} (=with target criterion objectification): A high degree of objectification is accorded to the fair value as described, especially in market-to-market situations and in market-comparative values. So the entry in the target yield matrix is "high".
- k_{23} (=with target criterion equity): As shown in case study 1, the

value for equity in the year of capital contribution is EUR 60K and in the following year EUR 109.6K. So the entry in the target yield matrix is “year of capital contribution 60, following year 109.6”.

- k_{24} (=with target criterion creditor protection): If the fair value is used for notional acquisition costs, creditors can get an appropriate picture of the company's assets, financial position and performance and there is no taxation of fictitious profits and no distribution of capital. The entry in the target yield matrix is therefore "appropriate picture, no taxation of fictitious profits and no distribution of capital”.

Alternative A_3: historical acquisition costs (=k_{3j})

- k_{31} (=with target criterion avoidance of hidden reserves): If the historical acquisition costs are used for the notional acquisition costs with the value EUR 55K from case study 2, the formation of hidden reserves is completely avoided. The entry in the target yield matrix is therefore “hidden reserves 5”.
- k_{32} (=with target criterion objectification): the historical acquisition costs is accorded a higher level of objectification as described. So the entry in the target yield matrix is "high".
- k_{33} (=with target criterion equity): As shown in case study 2, the value for equity in the year of capital contribution is EUR 55K and in the following year EUR 106.3K. So the entry in the target yield matrix is “year of capital contribution 55, following year 106.3”.
- k_{34} (=with target criterion creditor protection): If the historical acquisition costs are used as notional acquisition costs, creditors get a less appropriate picture of the company's assets, financial situation and performance compared to the fair value valuation and this results in a low level of taxation of fictitious profits and a low level of distribution of capital. So the entry in the target yield matrix is “less appropriate picture, low level of taxation of fictitious profits and distribution of capital”.

Alternative A_4: going-concern value (=k_{4j})

- k_{41} (=with target criterion avoidance of hidden reserves): If the going-concern value with the value EUR 50K from case study 3 is used for the notional acquisition costs, EUR 10K of hidden reserves are formed. So the entry in the target yield matrix is “hidden reserves 10”.
- k_{42} (=with target criterion objectification): The objectification of the valuation, going-concern value, is low particularly because it is a value derived in a further second valuation step. So the entry in the target yield matrix is “low+derived”.
- k_{43} (=with target criterion equity): According to case study 3, the value for equity in the year of capital contribution is EUR 50K and in the following year EUR 103K. So the entry in the target yield matrix is “year of capital contribution 50, following year 103”.
- k_{44} (=with target criterion creditor protection): If the going-concern value is selected for the notional acquisition costs, creditors do not get such an appropriate picture of the company assets, financial situation and performance – compared to fair value – and there is a low level of taxation of fictitious profits and distribution of capital. So the entry in the target yield matrix is “even less appropriate picture, increased taxation of fictitious profits and distribution of capital”.

Alternative A_5: book value (=k_{5j})

- k_{51} (=with target criterion avoidance of hidden reserves): If the book value with the value EUR 45 K from case study 4 is used for notional acquisition costs, EUR 15K of hidden reserves is formed. So the entry in the target yield matrix is “hidden reserves 15”.
- k_{52} (=with target criterion objectification): The objectification of the valuation book value is low mainly because it is influenced by options such as e.g. special depreciation allowance and is derived in a further second valuation step from the historical acquisition costs. So the entry in the target yield matrix is “low+derived”.

- k_{53} (=with target criterion equity): According to case study 4, the value for equity in the year of capital contribution is EUR 45K and in the following year EUR 99.7K. So the entry in the target yield matrix is “year of capital contribution 45, following year 99.7”.
- k_{54} (=with target criterion creditor protection): If the book value is selected for the notional acquisition costs, creditors get an even less appropriate picture of the company's assets, financial situation and performance, compared to the going-concern value and this results in increased taxation on fictitious profits and distribution of capital. So the entry in the target yield matrix is “even less appropriate picture than A_4, increased taxation of fictitious profits and distribution of capital."

Alternative A_6: Face value (=k_{6j})

- k_{61} (=with target criterion avoidance of hidden reserves): The highest amount of hidden reserves is formed amounting to EUR 20K when the face value is used. So the entry in the target yield matrix is “hidden reserves 20”.
- K_{62} (=with target criterion objectification): The objectification of the valuation is high as described in case study 5, but is still below that of historical acquisition costs. So the entry in the target yield matrix is "high".
- k_{63} (=with target criterion equity): As the value for the equity in the year of capital contribution is EUR 40 K and in the following year EUR 96.4K, the entry in the target yield matrix is "year of capital contribution 40, following year 96.4”.
- k_{64} (=with target criterion creditor protection): Creditors get the least appropriate picture of the company's assets, financial situation and performance of all alternatives and this results in the highest level of taxation of fictitious profits and distribution of capital. So the entry in the target yield matrix is “least appropriate picture, highest taxation of fictitious profits and distribution of capital”.

The target yield matrix for notional acquisition costs is therefore shown in figure 5:

Target yield matrix [k_{ij}] of notional acquisition costs						
	Criteria k_j	Avoidance	Objectification	Equity		Creditor protection
		of h.r.[3]	of valuation	3		
Alternatives Ai	i=\ j=	1	2	Year 1[2]	Year 2[2]	4
no standard value	1	h.r. 0-20	freely selectable+low	60–40	109,6-96,4	f.p. possible[1]
fair value	2	h.r. 0	high	60	109,6	appropriate view, no f.p.
hist. acquisition costs	3	h.r. 5	high	55	106,3	less appropriate view, low f.p.
going-concern value	4	h.r. 10	low+derived	50	103	even less appropriate view, increased f.p.
book value	5	h.r. 15	low+derived	45	99,7	even less appropriate view than A_4, increased f.p.
face value	6	h.r. 20	high	40	96,4	least appropriate view, highest f.p.
[1] f.p. = abbreviation for taxation of fictitious profits and distribution of capital						
[2] Year 1 = year of capital contribution, Year 2 = following year						
[3] h.r. = hidden reserves						

Fig. 5 Target yield matrix for notional acquisition costs

8.3.4 Creation of target value matrix

With the creation of the target value matrix $[n_{ij}]$, the alternatives A_i are shown in the value system according to the above-mentioned solution principles 1 and 2 by m one-dimensional orders of preference, i.e. valued step-by-step by direct comparative assessment in the form of a sequence of partial evaluations relating to their target yields k_{ij}. Both corresponding model assumptions consistency and conditional utility independence can also be considered as given when determining notional acquisition costs. So each individual evaluation process can be allocated a column of the target yield matrix as an objective point of reference.

Before we begin with the evaluation, we need to establish the scale level. In the author's opinion, the ordinal scale or direct interval scale

can be considered.[577]

The target criteria: avoidance of hidden reserves, objectification of valuation, equity and creditor protection, were laid down during the analysis of the target programme. A direct interval scale is apparently possible for the criteria: avoidance of hidden reserves and equity. On the other hand, the ordinal scale is appropriate for the target criteria: objectification of valuation and creditor protection - the last in particular due to the statement concerning an appropriate picture of the company's assets, financial situation and performance. As there is no conclusive scale level for all the target criteria, the ordinal scale is selected as the lowest common denominator. The aim of the dissertation with an answer to the question as to whether there should be a uniform valuation of non-cash contributions on company start-up in Germany and to suggest an ideal valuation method continues to be supported by mapping the subjective preferences only in the form of rankings i.e. which evaluation is the most appropriate and takes first place. It is not a matter of how many utility units the ideal valuation of notional acquisition costs is better than the next best.

On the basis of the explanations of the target yield matrix, the rankings given in the target value matrix in figure 6 are self explanatory. A brief explanation is necessary regarding rankings 4 and 5 for the target criteria: avoidance of hidden reserves, equity and creditor protection. The alternative, no standard value, comes before the alternative, face value, as better results can be gained with this alternative in the target criteria, whilst with the alternative face value per se, the worse value is always achieved.

The m one-dimensional orders of preference $(n_j)_j$ of the ordinal goal value matrix $[n_{ij}]$ thus achieved are shown in figure 6 below:

[577] A nominal scale would not be an adequate scale level with its statement on equality or disparity. An indirect interval scale is not appropriate due to the required innate inconsistency.

Ordinal target value matrix [n_{ij}] of notional acquisition costs					
	Criteria k_j	Avoidance of h.r.	Objectification of valuation	Equity	Creditor protection
	j =	1	2	3	4
Weightings g_j (of criteria k_j) in %		40	30	15	15
Alternatives A_i	i=				
no standard value	1	5	6	5	5
fair value	2	1	2	1	1
hist. acquisitions costs	3	2	1	2	2
going-concern value	4	3	4	3	3
book value	5	4	5	4	4
face value	6	6	3	6	6

Figure 6: Ordinal target value matrix [n_{ij}] of notional acquisition costs

8.3.5 Determination of criteria weightings

As the target criteria k_j can be of varying importance for the decision maker, a requirement was laid down in connection with solution principle 3 that the decision maker formulate his preferences in this connection and make an order of preference of the target criteria. This takes place through the criteria weightings g_j which as constant factors are independent of the level of target values n_j or the target yields k_j. The following weightings result from the comparison of criteria weightings g_j in pairs:

- The matter of permissibility of hidden reserves in the German start-up balance sheet was derived as the crucial decision criterion from the goals of accounting. It therefore enters the assessment as the strongest factor at 40 %.
- The target criterion, objectification of the valuation of notional acquisition costs is also important but only played a secondary role as a decision criterion especially as this criterion did not lead to any clear statement for or against a particular valuation. It is therefore weighted at 30%.
- The author considers the target criteria: equity and creditor protection, to be of equal weight and they are both therefore weighted at 15%.

The characteristic assessment errors quoted by Zangemeister[578] were taken into account in this dissertation and therefore do not apply; in particular, stable decision behaviour has been observed. The criteria weightings given g_j are also included in figure 6.

8.3.6 Execution of value synthesis

The m-dimensional evaluation task has so far been broken down into m one-dimensional sub-evaluations whose partial results will now be combined in a total evaluation. According to solution principle 3, the following applies: "The target values n_{ij} of an alternative A_i are combined with the help of a decision rule to be given in each individual case according to the relative importance g_j, which has been subjectively attributed to the target criteria k_j, to the utility N_i."[579] The correspondingly implied model assumption, proven in various experiments, that the total utility function is a linear, monotonically increasing function of the part worth utility, is generally and in this case not a problem for the practical application of the utility analysis.

The rank sum rule which is frequently used with ordinal scales will be used as a decision rule. The assumption innate in the system that the rank sum rule is a special case of the Goodman-Markowitz rule is of no significance for the practical application of the utility analysis. According to the rank sum rule, the rankings of an alternative A_i are added according to their criteria weightings g_j by simple line-by-line addition of the elements n_i of the target value matrix to the utilities N_i. The utilities N_i with their inverted rankings are shown in figure 7.

[578] Cf. Zangemeister, as above, p. 170f and p.244ff.
[579] Ibid., p. 70.

Rank sum rule and rankings							
	Criteria k_j	Avoidance of h.r.	Objectification of valuation	Equity	Creditor protection	Utility N_i	Rank
	j =	1	2	3	4		
Weightings g_j (of the criteria k_j) in %		40	30	15	15	Total 100	
Alternatives A_i	i=						
no standard value	1	5 x 40% +	6 x 30% +	5 x 15% +	5 x 15% =	5,3	6
fair value	2	1 x 40% +	2 x 30% +	1 x 15% +	1 x 15% =	1,3	**1**
hist. acquisition costs	3	2 x 40% +	1 x 30% +	2 x 15% +	2 x 15% =	1,7	2
going-concern value	4	3 x 40% +	4 x 30% +	3 x 15% +	3 x 15% =	3,3	3
book value	5	4 x 40% +	5 x 30% +	4 x 15% +	4 x 15% =	4,3	4
face value	6	6 x 40% +	3 x 30% +	6 x 15% +	6 x 15% =	5,1	5

Figure 7: Rank sum rule and rankings

Ranked first is the valuation fair value for notional acquisition costs.

8.4 Result

The scientific principles of the utility analysis model were specifically applied step-by-step to the aim of the dissertation. The aim of the dissertation which was to answer the question as to whether there should be a uniform valuation of non-cash contributions on company start-up in Germany and to suggest an ideal valuation method, on the basis of the utility analysis carried out, can therefore be answered as follows:

1. **Yes, there should be a uniform valuation of non-cash contributions on company start-up in Germany.** Because the alternative A_1, no standard value, was ranked 6th, that is in the final place, in the author's utility analysis as shown in figure 7.

2. **As an ideal valuation method, the valuation of notional acquisition costs using the fair value can be recommended.** Because the alternative of the highest valuation fair value was ranked first in the author's utility analysis, as shown in figure 7.

The result is convincing as it was derived by applying the scientific model of utility analysis and because it complies with the goals of accounting, according to which there should be no hidden reserves in the German start-up balance sheet. Nevertheless, the German legislator permits all six alternatives shown.

9 CONCLUSION

Based on the analysis of valuation methods of non-cash contributions on company start-up under German rules, Austrian rules and IFRS rules, the dissertation answers the question as to whether there should be a uniform valuation of non-cash contributions on company start-up in Germany and suggests an ideal valuation method. The interest in setting this objective stems from the fact that a clear codification is still missing in the German Commercial Code despite the introduction of the term “attributable market value” (“beizulegender Zeitwert”) in § 255 IV HGB, translated in EU Directive 2013/34 as "fair value accounting". This loophole results from the fact that when valuing non-cash contributions on company start-up, the paragraphs §§ 242 I, 253 I, 255 I HGB are only to be applied by analogy. In contrast, when comparing this reporting point with other reporting systems at an international level, the valuation of non-cash contributions is clearly regulated on company start-up. In the Austrian Commercial Code for example, the value of a non-cash contribution is legally codified as "attributable value" (=fair value) in §§ 202, 203 UGB and in the IFRS reporting standard, the valuation of the non-cash contribution on company start-up is clearly derived from the principle of fair value.

Since §§ 253 I, 255 I HGB applies analogously, the legal definition of acquisition costs must first be examined, which is defined in § 255 I HGB. The acquisition cost principle states that a capital object has to be valued on the basis of its acquisition costs and in a second step that acquisition costs form the absolute top limit which can never be exceeded (highest value principle). Valuation on the basis of the acquisition costs means that the procurement act is always treated as income-neutral. Income neutrality is achieved by means of the authoritative principle of performance in turn i.e. the capital object received is valued at the amount the acquirer had to invest to acquire it. The application premise is thereby the financial accounting-related comparison between the performance received and the performance invested in return. As non-cash investments are independent acquisition processes, the valuation rate in the start-up balance sheet can be determined independent of the historical acquisition costs of the investor, which is why the term notional acquisition costs is used in the relevant literature.

The term notional acquisition costs is also to be used following the introduction of the attributable market value as an evaluation benchmark in § 255 IV HGB in connection with the German Accounting Modernisation Act (BilMoG). Although the German legis-

lator has actually introduced the term attributable market value, its application does not cover non-cash contributions on company start-up, which is why there is still a German loophole for notional acquisition costs. Therefore there is still no uniform perspective on the valuation of non-cash contributions on company start-up in German academic literature due to the loophole. In fact, there are numerous different views which cover the entire scope of conceivable valuations, namely the

- Market value, specifically
  - basic market value without more detailed specification
  - market value - determined by the procurement market
  - market value - determined by the sales market
  - a combination of market value from the sales and procurement markets
- Face value of the shares
- Value derived from the historical costs of acquisitions of the subscriber
- Interim value

The range of possible valuations of notional acquisition costs discussed must first be examined against the background of the aims of the German accounting system. The German legislator, and also the Austrian legislator due to their common historical roots, have not made a definitive decision for either the income-calculating function or the information function; both goals are followed in accounting based on the instructions of the German Commercial Code. In contrast to this, the goal of IFRS accounting is exclusively the information function. Both decision criteria, namely the permissibility of hidden reserves in the start-up balance sheet and objectification, represent a result of both accounting tasks: the calculation of income and provision of information. The decision criterion, objectification, therefore does not definitely give a specific valuation. The decision criterion, permissibility of hidden reserves, only occurs when the task of income calculation is included in the accounting rules – as in the German Commercial Code. The valuation of notional acquisition costs should be based exclusively on the attributable market value in the author's opinion due to the central decision criterion, permissibility of hidden reserves. There can therefore be no hidden reserves in the start-up balance sheet. It can thus be seen that hidden reserves in the start-up balance have an income-neutral effect and as a consequence the preservation of the company’s capital is threatened or put at risk. The

company founders should use their judgement from the start to ensure the company's capital is preserved.

Despite Austria's common roots with Germany and the similarly strong anchoring of the principle of prudence and therefore the creditor protection concept by using the "attributable value" according to § 202 UGB for valuation in the start-up balance sheet, the fact that non-cash contributions in Austria must not be undervalued supports the author's opinion.

IFRS accounting regulations do not require income calculation. The exclusive goal in these accounting regulations is to provide the information required for decision-making. If hidden reserves were formed, the users would not receive any information and it would be impossible to carry out the information provision task satisfactorily. Hidden reserves within the start-up balance sheet are therefore not permissible according to IFRS regulations. Fair value is the only valuation to be taken into account when determining notional acquisition costs. The author's recommendation to use fair value is also convincing because the German legislator is moving towards the same approach as the IFRS – one recent example is the German Accounting Modernisation Act BilMoG.[580] Another example in this connection is the extension of the application of the valuation benchmark attributable market value.[581] As the codification in § 255 IV HGB is somewhat vague however and requires interpreting, it seems reasonable to use the definition of the analogous value term, fair value from the IFRS.[582]

The convergence of the HGB with the IFRS through the German Accounting Modernisation Act BilMoG is a further step towards harmonisation of the HGB with the IFRS in response to calls that have long been made for such action.[583] This development towards the IFRS can be clearly seen.[584] With the German Accounting Law Reform Act (BilReG) of 4 December 2004, companies governed by EU law must draw up their consolidated

[580] Cf. BT paper 16/10067, German federal draft law, draft of a law on modernising accounting law (German Accounting Modernisation Act – BilMoG), p. 1.
[581] Cf. ibid., p.1 and p.34.
[582] Cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, as above, p.103. For a definition of the value term, fair value,according to IFRS cf. Chapter 5.4.4.2.
[583] Cf. Thiele, Konstanze, as above, p.177: The HGB should consequently be oriented towards its information task, its (creditor) protection task and therefore the capital market requirements which in turn could lead to an initial harmonisation of both accounting systems.
[584] The remarks on the BilReG and BilMoG are shown below according to Coenenberg, cf. Coenenberg, Adolf Gerhard and Axel Haller and Wolfgang Schultze, as above, p.13ff.

annual financial statement according to IFRS if their securities are admitted to trading on a regulated market. Furthermore, capital market-oriented parent companies are not allowed to prepare an exempting IFRS consolidated financial statement according to § 315a III HGB. This option applies exclusively for purposes of disclosure but not however for purposes of calculating distributions and for tax purposes. The HGB therefore holds on to the creditor protection concept and justifies this with the argument that the IFRS is not suitable for calculating distributions because of its primarily fair value-orientation and the fact that profits can only be shown according to the HGB when they have been fully realised.

In 2009 as part of increasing globalisation, the information function of the HGB was strengthened with the German Accounting Modernisation Act BilMoG, among other things by abolishing numerous capitalisation and valuation options.[585] According to § 325 IIa HGB, it has become possible to publish an annual financial statement according to IFRS instead of a HGB individual financial statement for the purposes of providing improved information. However, many intended adjustments to the IFRS were deleted again in the BilMoG because the fair value valuation encountered increasing criticisms[586] in practice "because it aggravated crises with its strongly pro-cyclical effect"[587]. Accordingly there is a continued obligation to prepare an individual financial statement according to the HGB.[588]

This increasing criticism in practice results from the creditor protection concept to which great importance continues to be attached both in Germany and in Austria. Despite the German Accounting Modernisation Act BilMoG and the associated convergence with the international true-and-fair-view-dictate according to IFRS, German commercial law has still not given up its traditional values in the form of the prudence principle and thus the principles of proper accounting.[589] International accounting standards are forging ahead in a sensible fashion. However, despite these sensible and welcome efforts towards harmonisation, the author cannot conceive - and does not believe it is desirable either - that

[585] Cf. Theile, Carsten, Der neue Jahresabschluss nach dem BilMoG, Beihefter zu Heft 18/2009, in: DStR 2009, 2.5.2009, p.35.
[586] Cf. Ibid.
[587] Schildbach, Thomas, Systemvergleich IFRS und HGB, in: DStR, 50/2011, p.XIV.
[588] Cf. Kirsch, Hanno, Einführung in die internationale Rechnungslegung nach IFRS, 7.Aufl., Herne 2010, p.9.
[589] Cf. Förschle, Gerhart and Rainer Usinger, Comments on § 243 (Kommentierung §243), in: Beck Bil.-Komm., p. 69-92, published by Gerhart Förschle and others, 9th edition, Munich 2014, point no. 130ff.

the German legislator would give up his basic principles of prudent commercial valuation.[590]

These basic principles of commercial prudent valuation are complied with by valuing notional acquisition costs at fair value and avoiding hidden reserves, providing a high level of information on the balance sheet and adhering to creditor protection, as the utility analysis carried out has shown. Then, the aim of the dissertation is about finding a solution to a non-monetary selection problem in the context of decision theory. Only through the systematic analysis of the facts of the problem, can goals be recognised, priorities set and the total values of action alternatives be accurately evaluated; the utility analysis according to Zangemeister is such a scientific model of decision theory. The scientific principles of the utility analysis model must therefore be specifically applied step-by-step to determine the solution to the aim of the dissertation. The aim of the dissertation concerning the answer to the question as to whether there should be a uniform valuation of non-cash contributions on company start-up in Germany and to suggest an ideal valuation method, can - on the basis of the utility analysis carried out - therefore be answered as follows:

1. Yes, there should be a uniform valuation of non-cash contributions on company start-up in Germany. Because the alternative of no standard value or interim values was ranked last in the author's utility analysis.

2. The valuation of notional acquisition costs using the fair value can be recommended as an ideal valuation method. Because the alternative with the highest valuation was ranked first in the utility analysis.

The author's conclusion recommending that non-cash contributions be valued with the "attributable market value" (fair value) in the German start-up balance sheet is convincing because firstly it was derived by applying the scientific model of utility analysis, secondly because it is consistent with the aims of German accounting which state that there should be no hidden reserves in the start-up balance sheet and thirdly it is a convincing argument because it conforms to Austrian and IFRS accounting standards. Nevertheless,

[590] same view Zwirner, Christian, Neue Rechnungslegungsvorschriften ab 2016, in: DStR, 28.02.2014, p.445, Munich 2014.

the German legislator continues to allow all the alternatives shown despite the current international adjustments leading to harmonisation with the IFRS. The conclusion to this dissertation must therefore be that on the basis of the term attributable market value that has been introduced in § 255 IV HGB, the German loophole is to be closed by a regulation corresponding to § 202 UGB. The German legislator has already taken the first step by introducing the term attributable market value, he should now take the second step and extend the application of this term to non-cash contributions in line with § 202 UGB.

Article 6 I letter i) of the valid EU accounting guideline 2013/34 for financial statement reporting from 2016 admittedly still provides for valuation according to the acquisition costs principle, however it allows Article 8 I letter b) companies in the member states to permit or dictate that certain types of assets are to be valued on the basis of the attributable market value.[591] It is unlikely that the legislator will turn away from the basic valuation of acquisition costs however this opportunity to codify the valuation of non-cash contributions at the attributable market value should be seized.

[591] Cf. guideline 2013/34/EU of European Parliament and the Council dated 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings amending Directive 2006/43/EC of the European Parliament and the Council and repealing Council Directives 78/660/EEC and 83/349/EEC, Official Journal of the European Union L 182/19 dated 29 June 2013, p.12f.

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