**Convenience translation from German into English**

**<u>Professional Guidelines</u>**

of the **Expert Committee on Business Administration** of the Institute for Business Economics, Tax Law and Organization of the **Austrian Chamber of Public Accountants** for the

# Valuation of Businesses

*(adopted on March 26, 2014 as KFS/BW 1)*

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# 1. Preliminary remarks

(1) On March 26, 2014, following detailed consultations, the Expert Committee on Business Administration of the Institute for Business Economics, Tax Law and Organization of the Austrian Chamber of Public Accountants (Fachsenat für Betriebswirtschaft des Instituts für Betriebswirtschaft, Steuerrecht und Organisation der Kammer der Wirtschaftstreuhänder) adopted these professional guidelines which replace the professional guidelines KFS/BW 1 dated February 27, 2006. These professional guidelines are to be applied for valuations performed as of June 30, 2014 and afterwards. Earlier application is permitted.

(2) These professional guidelines set out the principles for the valuation of businesses by public accountants (Wirtschaftstreuhänder) on the basis of the various points of view developed both in theory and in practice as well as in court decisions. The Expert Committee tries to reflect current internationally accepted methods and to take into account the peculiarities arising from the valuation of small and medium-sized businesses.

(3) The Expert Committee draws attention to the fact that these professional guidelines represent general principles for the determination of the enterprise value. The principles can only establish the overall framework within which the process of solving the problems of valuation in individual cases in accordance with professional standards is to take place. The decision to select and use a particular method, or to depart from the established principles, can only be made by the public accountant and only he is responsible for that decision.

(4) These professional guidelines do not apply to cases where a value is established on the basis of different valuation procedures prescribed within the terms of a contract or an assignment.

(5) The working group 'Business Valuation' of the Expert Committee on Business Administration and Organization issues general recommendations on relevant valuation issues.

# 2. Basic principles

## 2.1. Entity being valued

(6) The entity being valued (object of the business valuation) is a business. A business is understood to be an economic unit that should be considered an entity in its own right. In most cases that will be a separate legal entity, but it may also be a number of associated businesses, a single operating facility, a part of an operation or a strategic business unit.

(7) The economic unit must be capable of being managed separately, i.e. it must not need to be integrated into another operation to maintain its business relations in its buying and selling markets and to produce its goods or deliver its services. Subdivisions of the economic unit (e.g. purchasing, procurement, sales, research or organization) that do not generate financial cash flows in their own right are not entities capable of being valued. The value of the economic unit is therefore derived not from the value of its individual components but from the combined operation of all the components.

(8) The entity being valued also includes any non-operating assets.

## 2.2. Investors

(9) Businesses are always to be valued from the perspective of one or more parties. These parties are referred to as the investors.

## 2.3. Valuation Approaches

(10) The valuation approaches described later assume that the business value has to be determined assuming purely financial objectives only.

(11) Income approaches derive the business value from the present value of cash flows from running the business and disposing of any non-operating assets. The present value is calculated using a discount rate that reflects the required rate of return of the investors. The income approaches include the discounted cash flow (DCF) method (see ref (34) ff) and the capitalized earnings method (see ref (48) ff).

(12) Market approaches (multiplier methods) derive the business value as potential market prices by using multipliers which are based on stock prices or transaction prices of comparable businesses or are based on experience (see ref (118) ff).

(13) The lower limit for the business value is determined by its value on liquidation (see ref (132) f) as long as there are no legal or factual obligations opposing liquidation.

## 2.4. Reasons for the valuation

(14) There are many reasons for carrying out a business valuation. Valuations may be conducted due to legal requirements or contractual agreements, or for other reasons. The following examples may be cited:

Acquisition and sale of businesses and shares in businesses, entry and exit of shareholders into and out of a business, reorganizations (mergers, conversions, contributions into the business, business combinations, divisions of business assets and business splits), settlement payments, initial public offerings, privatizations, distributions of estates, determination of claims to a statutory share of inheritances, expropriations, assessments of creditworthiness, restructurings, value-based compensation of management.

## 2.5. Purposes of the valuation and the role of the public accountant

### 2.5.1. Purpose of the valuation

(15) Out of the total number of reasons for valuing businesses that occur in practice, the following can be identified as the most significant purposes for the public accountant in practice:

a) Determination of objectified business values
b) Determination of subjective business values
c) Determination of arbitration values

### 2.5.2. Determination of objectified business values

(16) An objectified business value is determined by standardizing assumptions and using an income approach. It assumes that the business will continue to be managed on the basis of the existing strategy, and takes into account realistic future expectations with respect to market opportunities and risks, financial options available to the business and other contributing factors. If there is a legal requirement for the value to be determined, the valuation approach and the extent of the standardizations and objective assessments required will be based on the purpose of the legal provisions relevant for the determination of the value.

(17) The plausibility of a business value determined on basis of an income approach must be assessed. This can – among others – be done by applying a multiplier method. In case shares of the business being valued are stock-listed or information on realized transaction prices close to the valuation date is available, the plausibility of the business value has to be assessed by analysing these stock prices or transaction prices. In case the assessment of the plausibility leads to significant differences to the result of the income approach, these differences have to be analysed and the plausibility of the valuation result has to be assessed.

(18) For very small companies the objectified business value can simplifying be derived through multipliers based on experience if these values are well-established and commonly accepted and the use of these values are a reliable basis for the valuation in the view of the public accountant. Very small businesses are defined as companies not legally obliged to keep records as stated in § 189 Abs. 1 Z 2 UGB (Austrian company law).

### 2.5.3. Determination of subjective business values

(19) A subjective business value is a decision value and is derived by use of an income approach. It incorporates the subjective ideas, personal circumstances, and other considerations (e.g. synergy effects) of the investor. For a potential buyer or seller, this value is intended to define the relevant upper or lower price limit. The plausibility of the results of the income approach has to be assessed by applying principles laid out in ref (17). Ref (18) has to be applied accordingly.

### 2.5.4. Determination of arbitration values

(20) Arbitration values are established or suggested in a conflict situation solely on the basis of factual considerations, taking account of the different expectations of the parties with respect to the value. Arbitration values represent a fair and appropriate balance between the interests of the investors because such values take into account alternative investments and the personal circumstances of the investors to an appropriate extent.

### 2.5.5. Functions of the public accountant

(21) The public accountant may assume the role of a neutral expert, an adviser to one of the parties, or an expert arbitrator or mediator.

# 3. Business valuation principles

## 3.1. Relevance of the valuation purpose

(22) Since valuations may be undertaken for quite different purposes, the schedule of work to be carried out for a business valuation is designed solely with reference to the purpose associated with that valuation. The purpose determines the procedures to be followed in carrying out the valuation, in particular the selection of the most suitable valuation method and the assumptions with respect to the projection and discounting of future cash flows. It is therefore a pre-requisite for the correct determination of the business value that the purpose of the valuation and the role of the public accountant are made clear at the time the assignment is awarded.

## 3.2. The valuation date principle

(23) Business values are to be determined at a particular point in time. The valuation date is the date at which the business value is determined; it is defined under the terms of the assignment itself or by contractual or legal provisions. The financial cash flows are to be incorporated in the business valuation as of this date.

(24) When valuing a business all significant information that could have been obtained with due care up to the valuation date has to be taken into account. Changes in the factors influencing the value between the valuation date and the conclusion of the valuation are only taken into account if these changes result from factors originating from before the valuation date.

## 3.3. Operating assets

(25) Operating assets comprise all tangible and intangible assets and liabilities that are available to the business and necessary for the production and sale of goods and services.

(26) The net asset value, interpreted as the replacement value (assets less liabilities) of the net assets necessary for operations, is not significant in itself for the purpose of determining the business value.

## 3.4. Non-operating assets

(27) Non-operating assets are those elements of the assets that are not necessary for the entity being valued to continue operations (e.g. land and buildings not used for operating purposes or excess cash).

(28) The valuation of the non-operating assets is generally based on the present value of the future cash flows they generate. The lower limit for the valuation is the value on liquidation.

## 3.5. Treatment of transaction costs and transaction related income tax effects

(29) Transaction costs and transaction related income tax effects are generally not to be considered when determining an objectified business value. Items of this nature are only to be included if required by any legal provisions giving reason to the valuation

or the scope of the assignment itself like for example in a subjective business valuation.

(30) Transaction costs are costs arising in connection with the acquisition or sale of the business, such as transaction taxes on the acquisition of land. Income tax effects resulting from transactions are in particular income tax savings due to higher depreciation potential resulting from the realization of hidden reserves or elements of goodwill, or income tax liabilities arising from gains on disposal.

# 4. Business valuation using the income approach

## 4.1. Fundamentals

### 4.1.1. Application of the capitalized earnings method or DCF methods

(31) The capitalized earnings method and the DCF methods (Discounting Cash Flow methods) are based on the same underlying concept to the extent that they determine the business value as the present value of future cash flows (Net present value method). These methods are called income approach. They are suitable for determining both objectified as well as subjective business values.

### 4.1.2. Entity or Equity method

(32) The Entity approach in a first step, derives the value of the total capital from the perspective of equity and debt holders together. In a second step, the value of the equity is determined by deducting the market value of interest-bearing debt. Entity methods include the weighted average cost of capital (WACC) method and the adjusted present value (APV) method as variations of the DCF method.

(33) With the Equity method, the business value is calculated directly by discounting the future cash flows to the equity-(share)holders (Flows to Equity). Equity methods include the capitalized earnings method and the equity approach as a variation of the DCF methods.

## 4.2. DCF methods

### 4.2.1. Fundamentals

(34) DCF methods calculate the business value by discounting cash flows, which are defined differently depending on the specific method used. They are generally used for the valuation of corporations. The following paragraphs therefore deal with the valuation of corporations. In this case it is regarded as permissible to simplify the procedure by disregarding personal income tax, both as a component of the cash flows to be discounted and in the discount rate itself (see ref (84)).

(35) DCF methods require information or assumptions on the rate of return required by the equity providers (cost of equity) as well as the financing policy of the entity being valued.

### 4.2.2. Entity methods

#### 4.2.2.1. Determination of free cash flows

(36) The Entity methods determine the market value of total capital (enterprise value) by discounting the future free cash flows. The free cash flows are calculated on basis of

the assumption that the business is wholly financed by equity. On basis of an integrated business plan which contains explicit assumptions on the development of interest-bearing debt, the free cash flows can be determined indirectly as follows:

| | |
|---|---|
| | Net profit for the year |
| + | interest payments on debt |
| - | tax saving from deductibility of interest payments |
| = | Net operating profit less adjusted taxes (NOPLAT) |
| +/- | Gains/losses from disposals of fixed assets |
| +/- | depreciation/reversals of depreciation |
| +/- | additions/release of non-current provisions and other non-cash expenses and income |
| -/+ | increase/decrease in net working capital (excluding current interest-bearing liabilities) |
| -/+ | cash-flows from capital expenditures |
| = | Free Cash Flow (FCF) |

(37) Since the free cash flows are calculated on the assumption that the business is wholly equity-financed – starting from the net profit of the year - the debt interest is added back and the tax saving associated with the deductibility of the interest payments on debt for tax purposes (tax shield) is deducted.

#### 4.2.2.2. WACC method

(38) Applying the WACC method the market value of total capital (enterprise value) is calculated by discounting the free cash flows with the WACC. The market value of equity (equity value) is derived by deducting the market value of interest bearing debt from the market value of total capital.

(39) The WACC is the weighted average of the cost of equity (required rate of return of equity holders) and the cost of debt (required rate of return of debt holders). For the weighting the market values of debt and equity capital are employed. The cost of debt has to be reduced by savings through tax deductibility, as these are not accounted for in the free cash flow calculation. For deriving the cost of equity in accordance with the gearing see ref (107).

(40) The market value of interest-bearing debt is equal to its face value, provided that its interest costs are at market levels. If the debt capital pays interest at a higher or lower rate than the market level, the market value of the debt is calculated by discounting the debt payments at the market rate of interest.

(41) If the free cash flows are determined on the basis of an integrated business plan the planning or requirements for the amount of debt capital in the financial projections (autonomous financing policy) generally result in changes in gearing from period to period, with the result that the WACC does not remain constant over time and periodic adjustments of the cost of equity respectively the beta factor (see ref (103) ff) became necessary due to changes in the financing risk.

(42) A simplification of the WACC method is to assume a stable capital structure over time (target capital structure) on the basis of market values resulting in a constant WACC over time. The assumption of a constant capital structure over time implies that the

amount of interest bearing debt will be adjusted to changes in the market value of total capital over time (value-oriented financing policy). To assess the plausibility of this financing policy the public accountant must determine and disclose the implicit adjustments of the interest bearing debt and the associated cash flows to equity for every period in his report. Based on these facts the plausibility of the financing policy has to be evaluated by the public accountant.

### 4.2.2.3. Adjusted present value (APV) method

(43) With the APV method, the market value of the (theoretically) unlevered business is calculated on the assumption that it is entirely financed by equity. This is done by discounting the free cash flows at the cost of equity of the unlevered business. The market value of the unlevered business is increased by the present value of the tax saving arising from debt interest (tax shield) as a result of its leverage. The sum of the market value of the unlevered business and the tax shield results in the market value of the total capital. The remainder after subtracting the market value of the total capital. The remainder after subtracting the market value of debt is the market value of the equity capital (equity value).

| | |
|---|---|
| | present value of free cash flows discounted using r(Equ)u* |
| + | market value of non-operating assets |
| = | market value of the unlevered business |
| + | increase in market value from debt financing (value of tax shield) |
| = | market value of total capital of the leveraged business |
| - | market value of interest-bearing debt |
| = | market value of equity (business value) |

r(Equ)u = cost of equity for the unlevered business

(44) The increase in the market value from debt financing (value of tax shield) is determined by the sum of the discounted tax savings from the tax deductibility of interest payments on debt in every period (tax shields). For discounting the tax shield of every period a risk adequate discount factor has to be applied. The assumptions applied in this context have to be explained in the expert opinion.

(45) With the APV method, the free cash flows are discounted with the cost of equity for the unlevered business regardless of its capital structure, meaning that the requirement to use specific discount rates for each period does not apply. However, the cost of equity of the unlevered business has still to be known or to be derived by adjusting the cost of equity for the leveraged business obtained from the market.

### 4.2.3. Equity-approach

(46) With the equity approach, the net cash flows to the shareholders of the business (flows to equity) are discounted at the cost of equity for the leveraged business.

(47) Starting from the free cash flow, the flow to equity is calculated as stated in the following:

| | |
|---|---|
| | Free Cash-Flow (FCF) |
| - | interest payments on debt |
| + | tax saving from deductibility of interest payments (Tax Shield) |
| +/- | increase/decrease in interest bearing debt |
| = | Flow to Equity (FTE) |

The flow to equity equals the cash flow from the entity being valued to the equity holders as calculated in the integrated business planning.

## 4.3. Capitalized earnings method

(48) The capitalized earnings method calculates the business value by discounting the net cash flow to the shareholders of the business.

(49) When using identical assumptions regarding cash flows and rates of returns of equity holders, the capitalized earnings approach equals the equity approach of the DCF methods.

(50) In contrast to DCF methods, where required rates of returns of equity holders are always derived from the capital markets, the discount rate used for the capitalized earnings approach can also be determined by incorporating the individual circumstances or requirements of the relevant investor. The determination of the discount rate based on individual circumstances or requirements in the capitalized earning approach leads to a subjective business value (see ref (113)).

## 4.4. Determination of future cash flows

### 4.4.1. Projection of future cash flows

#### 4.4.1.1. Overview

(51) Planning the financial cash flows is a central element of every business valuation. It requires an extensive information-gathering exercise which forms the basis of further analyses of the business in the past, at the valuation date, and in the future. Those analyses are then tested on the basis of plausibility considerations for reasonableness and checked for consistency.

#### 4.4.1.2. Information gathering

(52) In principle, all information should be obtained that is significant for estimating the financial cash flows generated by the business. This mainly includes information about the business and its markets in the future. Information about the business comprises in particular internal estimated data as well as analyses of the strengths and weaknesses of the business and the goods and services it offers. Information about the markets in which the business operates includes, among other things, data on the development of the sector, the competitive situation, and the sales markets, but also long-term estimated trends for the economy as a whole and for individual countries and sectors.

(53) Information relating to the past and to the valuation date serves as the point of reference for the projection of future developments and is used for plausibility checks.

(54) The public accountant is to assess the completeness and reliability of the documents used.

### 4.4.1.3. Analysis of past performance

(55) The analysis of past performance is intended to provide a solid foundation for the estimation of future earnings of the business based on the annual financial statements, the cash flow statements, and the internal income statements. The historical data should be corrected or normalized for one-time, aperiodic or extraordinary effects. Factors contributing to earnings in the past should be analyzed in particular to determine whether they will continue to apply in future (see also ref (147) f) and whether they relate to non-operating assets.

(56) The information relating to the business should be supported by an analysis of the operating environment of the business in the (recent) past. This includes the development of its market position and other developments affecting the market and the operating environment (e.g. developments of political, legal, economic, technological, environmental, or social nature).

### 4.4.1.4. Planning (phase method)

(57) The projections of future cash flows may be drawn up in nominal terms or in real terms, which means adjusted for changes in the purchasing power. The application of the nominal method, which discounts nominal cash flows at nominal discount rates, is generally preferred, both in theory and in practice.

(58) The essential foundation of a business valuation is an integrated business plan prepared by management on a as comprehensive as possible basis, which is summarized in integrated projected balance sheets and income statements and cash flow statements. The plan is to present the estimated operating and financial performance of the entity in the context of the expected conditions in the market and the business environment. The future financial cash flows are derived from this business plan in light of the information gathered and the findings of the analysis of the business in the past and at the valuation date. Financial cash flows retained and the purposes for which they are applied should be considered in the business plan.

(59) The cash flows of the company being valued are generally planned in several phases (phase method). The phases may be of different lengths, depending on the size, structure, and industry sector of the business being valued. In most cases, the planning is divided into two or three phases.

(60) The detailed planning phase, where cash flow projections can be made for each individual period, is generally limited to three to five years, depending on the size, structure, and sector of the business (phase I).

(61) The detailed planning period should be followed by a more simplified planning period (phase II) if the assumption that the company immediately reaches the state of equilibrium or steady-state directly after the detailed forecast period does not seem reasonable. This can be due to the nature of the investment cycles; also longer term product life cycles, above average growth rates, tax or other special effects may require an extension of the planning horizon.

(62) As a general rule the simplified planning period can focus on specific periodic developments in the key value drivers of the business being valued.

(63) For the period after the planning horizon, when implying an indefinite life, only global or uniform assumptions can be made. In most cases, based on assumptions on the distribution policy and profitability levels, it is determined that the business will generate cash flows at a constant level or at a constant growth rate (terminal year or phase III). Reasons for a continuous growth assumption could be price or capacity increases.

(64) On the expected long-term development of the profitability of the business being valued reasonable assumptions have to be made regarding the company's ability to resist the decrease in excess returns (convergence process). A valid assumption is that the return after tax from the reinvestment of cash flows equals the cost of capital (convergence assumption). If the assumptions imply a return in excess of the cost of capital the reasons must be explained. In general the assumptions regarding expected returns, growth rates and reinvestment plans have to be consistent.

(65) As the terminal year normally accounts for a large portion of the value in the business valuation, a critical view on the assumptions made is necessary. In this context it can be suitable to extend the integrated business plan to see in how far assumptions on growth rates and reinvestment plans are consistent.

(66) The planned cash flows to be discounted represent expected values. These expected values can also be derived from scenarios where each scenario has a specific probability. The most probable value (the mode) of cash flows can differ from the expected value.

(67) When estimating the expected values, it has to be assessed in how far the company being valued is exposed to insolvency risk. The consideration of insolvency risks relevant for the business valuation can be implemented through insolvency probabilities, which can be drawn e.g. from ratings of the business being valued.

#### 4.4.1.5. Plausibility assessment of the plans and projections

(68) The planning of the financial cash flows is to be assessed with respect to its reasonableness. In this context the formal and material plausibility have to be distinguished.

(69) In the course of assessment of the formal plausibility, the public accountant has to analyse first the documentation and procedure of the planning process. Here, he especially has to address the question of the planning date, the purpose and the person in charge as well as the approval of the plan by the boards and its commitment. Additionally, one has to consider whether the planning was set up for valuation purposes only or in the course of the standardized, e.g. annual planning process of the company being valued.

(70) From a formal point of view it has further to be assessed whether the planning is mathematically comprehensible and correct and whether it meets the methodical requirements of an integrated business plan Here, the analysis should explicitly address the completeness and consistency of the separate parts of the business plan (balance sheet statement, income statement and cash flow statement as well as sales schedules, personnel data, and capital expenditure).

(71) In the course of the assessment of the material plausibility the public accountant has to scrutinize the underlying assumptions of the business plan. Here, it is preferable to first identify the main drivers and assumptions influencing the business value. In the following the proofs and arguments for these assumptions have to be analysed. Finally, the public accountant has to evaluate the conclusiveness and consistency of

the plans based on the assumptions made and check, if all consequences of the assumptions are taken into account.

(72) Fundamentals for the assessment of the material plausibility can be drawn from an analysis of the historic performance, which covers company specific information as well as an analysis of the economic background of the (recent) past (see ref (55) ff.). The public accountant has to analyse whether the assumptions for the planning periods are in conflict with the results of the analysis of historical data. For the assessment of the plausibility of the planning of the cash flows it is also useful to analyse the variance of actuals versus plans in the past.

(73) Obtaining a letter of representation (see ref (154)) does not release the public accountant from making his own judgement on the plausibility of the financial cash flow projections.

#### 4.4.1.6. Absent or insufficient business plan

(74) If the public accountant detects insufficiencies in the course of the formal plausibility check (see ref (69) f), the management should first be asked to complete or to revise the business plan. The involvement of the public account in completing and revising the business plan is permitted as long as the involvement is limited to computational and methodical correctness of the integrated planning model.

(75) If the public accountant states an insufficiencies in the course of the material plausibility check (see ref (71) f) the management should first be asked to revise the business plan. If the demonstrated insufficiencies cannot be resolved, the public accountant has to make adjustments by himself. The adjustments or assumptions made by the public accountant have to be explicitly explained in the expert opinion. Additionally, the public accountant has to point out the insufficiencies of the business plan and state a possible limited reliability of the result of the valuation in the expert opinion.

(76) If a sufficiently well documented business plan is not available, the management of the business should be asked to prepare income statement, cash flow statement and balance sheet on the basis of their view on future development of the business. In addition to the information available externally (e.g. sector analysis, market reports), the estimation of future earnings should also be based on extrapolations of the likely development of the business derived from an analysis of historical data (see ref (55)).

(77) If a sufficient business plan for valuation purposes cannot be obtained from management at all the public accountant may draw up projections for the future cash flows based on the information derived from the analysis of historical data, the trends analyzed and other information available (see ref (52) ff) meeting the requirements set forth in ref (58) (integrated business plan). The statements in ref (147) have to be obeyed. A scenario analysis is recommended. The assumptions made by the public accountant have to be described explicitly in the expert opinion. Additionally, the public accountant has to point out the absence of a business plan and the possible limited reliability of the valuation results in the expert opinion.

(78) No allowance may be made in the valuation for uncertainties arising solely due to deficiencies in the business plan or the absence of any such plan by means of deductions from the financial cash flows to be discounted or by adding a premium to the discount rate.

### 4.4.2. Cash flows in the determination of an objectified business value

#### 4.4.2.1. Business Strategy

(79) It should be borne in mind that the business plan and the resulting estimates of future earnings are based on the current business strategy at the valuation date. This means that measures intended to result in structural changes to the business may only be included if they have already been in effect or have been set out in a sufficiently concrete form on that date.

#### 4.4.2.2. Financing and distribution assumptions

(80) For the detailed planning phase it should be assumed that future cash flows that are available for distribution according to the business plan, taking into account the projected capital expenditures, debt repayments and any legal restrictions, will be distributed. In the simplified planning period (phase II) and the terminal year (phase III) attention should be paid on the consistency of assumptions regarding expected returns, growth rates, and reinvestment policy.

#### 4.4.2.3. Management factors

(81) For the purpose of an objectified business valuation, it should generally be assumed that the management remains unchanged or, if there is a change, that management performance stays on average over the period of the business plan (standardized management factors).

(82) In the case of owner-managed businesses, future earnings attributable directly to the shareholder (or shareholders) in person that can no longer be realized are not to be taken into account in the estimation of cash flows. Consequently, inflows derived from a group of associated businesses or from other relations of personal or family nature between management and third party businesses that would not be transferred in a change of ownership are to be eliminated.

#### 4.4.2.4. Consideration of taxes on income

(83) For the purpose of calculating future cash flows, both corporate taxes and taxes on the income of the shareholder (personal income taxes) arising as a result of ownership of the business are to be taken into account. Which kind of income tax have to be considered in the process of the estimation of cash flows depends on the actual circumstances at the valuation date, which result from the legal form of the valuation object and the legal form of the investor. Changes of the legal form have to be considered if these changes are expected or actions towards them have already been taken at the valuation date.

(84) In the context of valuing corporations, the cash flows generated by the business are reduced by corporation tax. When valuing a corporation it can be assumed that a valuation before personal taxes will lead to approximately the same valuation result than a valuation after personal taxes. Therefore, the consideration of personal taxes on the cash flows to equity investors can be ignored for simplicity reasons. In this case the cash flows have to be discounted at a discount rate before personal taxes. If in contrast the valuation is assuming a payout of non-operating assets (e.g. surplus cash) to the shareholders the simplifying assumption for neglecting personal taxes does not hold.

(85) For the purpose of valuing sole owners or partnerships from the perspective of natural persons, the financial cash flows are reduced by the tax liability of the particular investor that arises as a result of the taxable income from the entity being valued.

(86) The valuation of sole owners or partnerships may be simplified in respect to income taxes by valuing them as if they were corporations. In this case the income tax of a corporation can be assumed for the valuation and it is permitted to simplify the valuation by neglecting personal taxes (see ref (84)) holds true.

#### 4.4.2.5. Synergy-effects

(87) Synergy effects are understood to be changes in the cash flows, which result from the economic combination of two or more companies and which lead to the effect that the combined cash flows differ from the sum of the individual cash flows of each entity.

(88) To the extent not stated differently in the legal requirements for the specific reason of the valuation, synergy effects may only be considered for the objectified valuation if they are already realized or documented in the business strategy (realized synergy effects). Synergy effects cannot be considered if they can only be realized when undertaking the measures underlying the reason for the valuation (non-realized synergy effects).

### 4.4.3. Cash flows in the determination of a subjective business value

#### 4.4.3.1. Business strategy

(89) For the purpose of determining a subjective business value (decision value), the standardized assumptions required to establish objectified business values are replaced by specific concepts and assumptions relevant for the scope of the particular assignment. For that reason, measures intended to result in structural changes to the business, such as investments in expansion, divestments, streamlining of the product range or changes to the strategic business areas that are planned but that have not yet been introduced or have not yet been documented in the business strategy at the valuation date can also be included.

#### 4.4.3.2. Financing and distribution assumptions

(90) Assumptions about the future financing and distribution policy (capital structure) should be made on the basis of the requirements or intentions of the investor in light of any legal restrictions (e.g. statutory or contractual limitations on distributions).

#### 4.4.3.3. Management factors

(91) From a buyer’s perspective, the valuation should be based on those cash flows that can be expected with the intended management (specific management factors).

(92) The lower price limit for a potential seller is based not just on the transferable earnings power of the entity being valued but also, for example, on personal management factors.

#### 4.4.3.4. Consideration of taxes on income

(93) The income tax expense associated with the financial cash flows should be determined on the basis of the legal form of the entity being valued in light of the particular tax circumstances (e.g. tax rates, tax loss carry forwards) of the investor. Changes of legal form should be included in line with the requirements or intentions of the investor.

Simplifications (see ref (84) and (86)) are permitted depending on the underlying engagement.

#### 4.4.3.5. Synergy-Effects

(94) Non-realized synergy effects (see ref (88)) can be included in the valuation according to the specific situation of the investor ("valuation subject") (buyer / seller).

## 4.5. Discounting of future financial cash flows

### 4.5.1. Basic principles

(95) The business value is essentially derived by discounting the future net cash flows to the shareholders of the business using a discount rate appropriate to the valuation method employed (see ref (31) ff).

(96) If the projection of future cash flows is based on nominal values the discount rate employed has to be in nominal terms, too (see ref (57)). The following statements refer to the estimation of nominal discount rates.

(97) If it is assumed that the business is a going concern, its value is equal in principle to the present value of the future financial cash flows flowing to the shareholders for an indefinite period.

(98) If it is assumed that the business has a finite life its value is calculated as the present value of future net inflows until the termination of the business plus the present value of the cash flows arising from the termination of the business (e.g. liquidation).

### 4.5.2. Expected rate of return of equity investors in the determination of an objectified business value

#### 4.5.2.1. Consideration of risk

(99) Any investment in a business carries the risk that future cash flows will not be as high as expected, meaning that they may be higher or lower than expected.

(100) The risk can either be considered in the form of the certainty equivalent method by reductions to the expected values of future cash or in the form of the risk-adjusted discount rate method, applying a risk premium to the risk free rate (base rate) in the discount rate. As both nationally and internationally, the risk-adjusted discount rate method is seen as the preferred option, the following sections assume its application.

(101) If the risk premium is derived from capital market data it is called a market-oriented risk premium. Generally, it is derived using the Capital Asset Pricing Model (CAPM). The risk premium based on the CAPM only considers systematic risk because it is assumed that unsystematic risks are eliminated in general through full diversification of the investor.

(102) A potential risk premium for investments in less liquid assets (discount for lack of marketability) can only be considered if the investment holding period is limited.

#### 4.5.2.2. Expected rate of return of equity investors

(103) The discount rate according to the CAPM is determined based on a risk free rate (base rate) plus a market-oriented risk premium, which is defined as the market risk premium multiplied by the beta factor.

(104) The base rate is derived from a risk-free investment in the capital markets. It has to be derived from the yield curve at the valuation date using an equivalent maturity to that employed for the valuation of the business.

(105) For the market risk premium reference is made to the relevant recommendations of the Working Group on Business Valuation of the Expert Committee on Business Administration and Organization.

(106) For the valuation of stock listed companies individual beta factors can be computed through stock market prices of the company being valued. Beta factors are also collected by financial services providers or are published in various relevant publications. If the individual beta factor is not significant the beta factor of comparable companies can be employed (Peer Group-Beta). For the selection of the peer-group, the comparability of the business risk is crucial (see ref (126)). In the case of the valuation of unlisted businesses, beta factors for comparable businesses (Peer Group-Betas) or for sectors may be used for simplification purposes.

(107) Within the CAPM, risk premiums reflect operating risk and financial risk. The beta coefficient for a leveraged business is higher than for a debt-free business because it also takes into account the risk associated with the capital structure. Changes in the capital structure therefore require an adjustment to the risk premium. Formulas have been developed to adjust beta factors to capital structures. These formulas also partially account for the beta of the debt capital (Debt Beta). The consideration of a debt beta is necessary if the maturity adjusted cost of debt significantly differs from the base rate.

(108) During the detailed estimation period, the estimates or requirements for the amount of debt in the financial projections generally result in changes in the capital structure from one period to the next. The resulting change in the risk associated with the capital structure means in principle that the cost of equity is to be adjusted for each specific period (see ref (107) for adjustments of costs of equity or beta factors). If the changes in the capital structure over time are insignificant, the adjustment of the cost of equity for each specific period is not necessary.

(109) The required rate of return or risk premium derived by the CAPM account for corporate taxes but not for personal income taxes. These rates of return are used to discount cash flows after corporate taxes but before personal income taxes. This approach is applicable if the valuation is simplified and does not account for personal taxes (see ref (84)).

(110) If the valuation approach is based on cash flows after personal income taxes, the discount rate employed for discounting has to be an after-tax rate. In this case the cost of equity capital can be computed using the tax-CAPM. The tax-CAPM extends the standard-CAPM by considering personal income taxes.

(111) Although the assumptions of the CAPM are very restrictive it is the primary method for computing cost of capital for objectified business valuations. However, if the circumstances of the specific valuation case suggest another method for deriving the

cost of equity, this is possible if the method used for deriving the cost of equity is commonly used and accepted.

(112) The public accountant has to justify the selected method of deriving the cost of equity, comprehensibly construe the cost of capital itself and state the relevant underlying assumptions.

#### 4.5.3. Expected rate of return of equity investors in the determination of a subjective business value

(113) The discount rate used for the purpose of calculating a subjective business value is determined by the particular circumstances or requirements of the relevant investor. The discount rate may be based on specific requirements with respect to the return, the expected return on the best alternative, or returns derived from capital market data (see ref (103) ff).

#### 4.5.4. Expected rate of return of debt investors

(114) The expected rate of return of debt investors may contain a risk premium, which also may have to be considered in the expected rate of return of equity investors in the form of a debt beta (see ref (107)).

#### 4.5.5. Growth in the terminal value period

(115) If sustainable growth of the cash flows to equity investors in the terminal value period can be assumed based on the assumptions about the profitability level and payout policy in the particular valuation it has to be recognized by subtracting the growth rate from the discounting rate. However, the terminal value has to be then discounted to the valuation date at the discount rate before deducting the growth rate.

### 4.6. Application of different discounting methods

(116) When applying a particular discounting method appropriate assumptions concerning the financing policy (e.g. value-oriented or independent, see ref (41) f) and the risk of tax savings through debt costs (tax shields) have to be made. These assumptions have to be described and substantiated in the valuation report.

(117) When applying the same assumptions for the different parameters of the valuation, in particular for the financing policy, the risk of the tax shields as well as when applying appropriate formulas for the adjustment of the beta factors to the specific capital structure, the choice of a certain discounting valuation method should not influence the result of the business valuation.

## 5. Plausibility assessment with multiplier methods

### 5.1. Concept

(118) Multiplier methods determine the business value as a potential market price by multiplying a market multiple with a reference value (earnings number). The resulting value is either the potential market price of the equity or the potential market price of the total capital. Subtracting the net debt from the potential market price of the total capital results in the potential market price of the equity.

## 5.2. Selecting a reference value

(119) The following reference values can be considered:

a) Revenue
b) Earnings before interest and taxes (EBIT)
c) Earnings before interest, taxes, depreciation and amortization (EBITDA)
d) Net profit

(120) Advantages and disadvantages of the different reference values, as well as industry specific characteristics, should be considered when choosing the reference value. Using more than one reference value is recommended. Attention should be paid to the consistent computation of the reference values for both the entity being valued and the peer-group companies (ref (126)).

(121) The different reference values result either in the potential market price of total capital or in the potential market price of equity:

| Reference value | Result |
|---|---|
| | |
| Revenue | Potential market price of total capital |
| EBIT | Potential market price of total capital |
| EBITDA | Potential market price of total capital |
| Net profit | Potential market price of equity |

(122) As the capability to generate profits or returns in excess of the required costs of capital through operations is a main driver for the business value, the application of reference values based on total capital (especially EBIT and EBITDA) are recommended for production and service companies. When applying a revenue based multiplier one has to consider that this implicitly assumes a profit margin comparable to that of the peer group companies.

(123) The reference values can refer to different time periods. “Trailing multiples” use historic data, while “forward multiples” use expected future values.

(124) The applied reference values ought to be long-term achievable, which makes it necessary to adjust them for one-time or extraordinary effects. When deriving reference values from historical data ref (55) f has to be applied correspondingly. Any adjustments have to be disclosed and explained.

## 5.3. Determination and application of multiples

(125) In general a multiplier is the ratio of the market price of the equity or total capital divided by the reference value of the peer group company. The market prices are derived from the market capitalization of comparable stock listed companies (market multipliers) or from transaction prices of comparable companies (transaction multiples).

(126) The first step for the determination of the multipliers is the identification of a group of comparable companies (peer group). These companies should be comparable in their main characteristics to the valuation object. Selection criteria are often industry sector, similarity of the business model, geographic span, profitability, and growth rate.

(127) The different multipliers of comparable companies (peer group) result usually in a range, which has to be aggregated to one single reference value. For this calculation the arithmetic mean or median is recommended. Here, attention should be paid to the fact that the mean is heavily distorted by outliers with extreme values so that those should be removed before calculating the mean.

(128) If it is impossible to identify a reasonable peer group, industry sector-specific multiples can be applied. Here, the value obtained may be less conclusive if the companies in the specific sector show strong heterogeneity.

(129) Since the application of market multiples is based on prices of single shares, the result can be interpreted as a potential market price for a marketable minority stake in the company being valued. A possible majority premium and control premium is not included.

(130) When applying transaction multiples it has to be analysed, whether they are based on transactions of a minority or majority stake. Transaction multiples derived from transactions of majority lead to potential market prices of majority stakes, which already include possible control premia.

(131) For the valuation of very small businesses multiples may be derived from experience values under certain circumstances (see ref (18)). The valuation report has to document the sources of these experience values.

# 6. Liquidation value

(132) If the present value of the financial cash flows arising from the liquidation of the entire business is higher than its going concern value, then the liquidation value represents the lower limit for the business value. However, if there are legal or practical reasons why the business has to remain a going concern, the going concern value represents the lower limit instead.

(133) The liquidation value is derived as the present value of the cash flows from the disposal of the assets less the settlement of the liabilities, taking into account the costs of liquidation and the associated tax effects. The interdependency of the liquidation value and the speed and break-up intensity of the liquidation has to be considered.

# 7. Particular aspects relating to the valuation of certain businesses

## 7.1. Growth businesses

(134) Growth businesses are businesses whose revenues are expected to achieve an above-average rate of growth. They are characterized in particular by product innovations which are associated with high investments and upfront expenditure in development, production, and sales, together with a growing need for capital. In many cases businesses of this type are still at a loss-making stage at the time of valuation, meaning that an analysis of past data in order to test the reasonableness of projections of the future development of the business is generally not appropriate.

(135) The projection of the financial cash flows is subject to considerable uncertainty in such cases. As a result, it is necessary to analyze the competitiveness of the business's range of products and services over the long term, its market share, the availability of

resources, the restructuring of the business's internal organization due to the demands of growth, and the ability of the business to finance its growth. Particular attention should be paid to the assessment of risk.

(136) For the purpose of projecting the financial cash flows, it will probably make sense to separate the projections into several different phases (start-up phase, a phase with above-average growth in revenues and earnings, and a normal growth phase) and to calculate earnings ranges (see ref (59) ff). Applying scenario techniques considering the likelihood of an insolvency is recommended.

## 7.2. Businesses with poor earnings

(137) The low profitability of a business is shown by the fact that the return it generates over the long term is lower than the discount rate.

(138) When valuing low-profitability businesses, an assessment of breakup scenarios is to be made in addition to valuations based on continuing operations. If the best breakup scenario results in a higher present value for the financial cash flows than the best scenario for continuing operations, the business value is generally equal to its liquidation value (see ref (132) f). Where it appears preferable to continue the business's operations because measures have been planned with the aim of improving its profitability, the public accountant is to conduct a critical review of these measures with respect to their reasonableness and feasibility.

## 7.3. Not-for-profit organizations

(139) The activities of non-profit businesses are determined either by the institutions responsible for them (e.g. particular municipal bodies, welfare organizations, cooperatives or charitable associations) or by a body providing grants or subsidies (e.g. local or regional authorities).

(140) For businesses of this type, the principle of covering costs takes precedence over the (limited) aim of generating profit in order to ensure that the required activities are carried out. Given that the prevailing objectives are non-financial, the business value is based not on future earnings but on the replacement value of the net assets, including an analysis of whether the activities could be performed more cost effectively if necessary with different assets or a different business structure. In view of the primary importance of performing the stipulated activities, liquidation cannot be considered an alternative to continuing operations if the business is insufficiently profitable, unless it is no longer certain that the business will have the necessary ability to cover its costs in future (taking into account all grants and subsidies).

## 7.4. Businesses with negative cash flows

(141) If the business plan shows negative financial cash flows, the first step is to examine whether the deficits could or should be made up by raising new debt or retaining profits. For example, if the business plan in the case of power plants, mining operations or landfill businesses is projecting negative financial cash flows during the aftercare phase, the plan is usually to be revised with the aim of ensuring that adequate provisions are made and financial resources are retained during the operating phase to meet the relevant costs.

(142) If the corrected business plan (as stated in ref (141)) continues to show negative cash flows, which require capital contributions from the shareholders, a risk discount should be deducted from the base rate when discounting these capital contributions if a subjective business value is determined. However, if the valuation is based on capital market assumptions, as suggested for the determination of an objectified business value (see ref (103) ff), it should be assumed that a risk premium has to be added to the base rate both for positive and for negative cash flows.

## 7.5. Small and medium-sized businesses

### 7.5.1. Characteristics

(143) Many small and medium-sized businesses (SMEs) are characterized in particular by a limited group of owners, owners involved in running the business, members of the owner's or owners' family working in the business, no clear separation between business and private assets, a small number of business areas, and basic accounting and internal controls. These businesses are therefore exposed to risks arising especially from the business skills of the owner or owners, dependency on only a few products, services, or customers, the absence of a business plan or lack of supporting documentation, insufficient equity resources, and limited opportunities for raising finance. In view of these particular risks, the public accountant is to pay special attention to the definition of the business being valued as a separate entity, the determination of the owner's compensation included in the projections, and the reliability of the sources of information available.

### 7.5.2. Definition of the entity being valued

(144) In the case of businesses with key individuals and where the owners play a leading role, the definition of the business being valued as a separate entity requires an accurate distinction to be made between business and private affairs. For this purpose, for example, it may be helpful to draw up special (tax) balance sheets (Sonderbilanzen) in order to identify assets that are necessary to the business but not included in the financial statements. If significant components of the fixed assets (especially land and patents) are held privately, they are to be included in the assets being valued or be taken into account in some other way (e.g. by including rental, lease, or licence payments).

(145) When determining an objectified business value, standardized assumptions are to be made about the future internal and external financing of the business and its capital structure, provided there is no documented business strategy covering those matters. Where collateral is provided from the owners’ private assets appropriate guarantees commissions or debt interest, which would apply if those collateral were not provided, should be taken into account.

### 7.5.3. Determination of owner-manager remuneration

(146) In small and medium-sized businesses, the level of the financial cash flows is often primarily dependent on the personal knowledge, abilities, and connections of the owners of the business as well as on their own personal commitment. It is therefore to be ensured that appropriate compensation to the owners is included in order to reflect these contributions to the success of the business. The value of the remuneration is based on market costs that would occur to externally hire a manager on the job market. In cases where members of the owner’s or shareholders' family or other associated persons work for the business without payment, appropriate personnel expenses should be recognized.

### 7.5.4. Analysis of profitability on the basis of historical data

(147) The reliability of the available information is to be examined more closely for the purpose of valuing small and medium-sized businesses than would be the case for large businesses. Since the annual financial statements of such businesses are generally neither audited nor influenced by tax considerations, the public accountant is to satisfy himself as to the credibility of the primary underlying data when ascertaining the profitability of the business by means of an analysis of the historical results. This requires the historical results to be adjusted for extraordinary items and onetime effects that are not expected to recur in the future. It should also be noted that where there are long periods of time between major investments, the most recent income statements may not present an accurate reflection of the results.

(148) The adjusted historical results also have to be modified to reflect changes in factors that contributed effectively to earnings in the past that have already occurred or are identifiable at the time the valuation of the business is carried out. Changes of this nature can be

a) if the business's range of goods and services or its production capacity has changed significantly in the recent past or if changes of that nature are already implemented or have been adopted,
b) if the historical results were negatively affected by structural changes but the business in the meantime has adapted to the changed structural circumstances,
c) if the comparable periods in the past were affected by unusually favorable or unfavorable economic conditions, and changes in the economic situation are anticipated for the future,
d) if there have been substantial changes in the competitive environment in purchasing or sales markets compared to previous periods,
e) if significant changes to the management or workforce of the business are expected, or
f) in the comparable periods in the past, research activities were pursued with particular vigour and with the firm prospect of developing profitable innovations, or if research activities were neglected.

## 8. Valuation of shares in businesses

(149) The objectified value of a share in a business is generally derived by multiplying the objectified total value of the firm by the relevant percentage shareholding (indirect method). The inclusion of discounts or premiums for minority shareholdings is not permitted. However, differences in the rights attached to business shares (e.g. preference shares) should be taken into account for the purpose of the valuation.

(150) As part of the valuation of the shares of listed businesses, it should be considered to what extent the quoted price represents a lower limit for the valuation.

(151) A subjective value for a share is determined on the basis of the specific opportunities open to the (potential) shareholder for exercising influence on the business by taking into account the expected net income for the particular shareholder (direct method). The application of the indirect method is problematic because in this case it is generally necessary to add or subtract subjective premiums and discounts to or from the value of a particular percentage shareholding.

# 9. Documentation and Reporting

## 9.1. Documentation of the engagement

(152) At the start of the business valuation, the public accountant should obtain a written letter of assignment containing at least the following details:

name of client, name of appraiser, terms of the assignment, entity being valued, investor, reason for the valuation, purpose of the valuation, role of the public accountant, valuation date, any restrictions on distribution of the valuation report, reference to the requirement for a management representation letter prior to issue of the valuation report.

## 9.2. Working papers

(153) The customary professional principles relating to the presentation of working papers should also be applied in business valuation. The role of the working papers is to document the extent of the work carried out and also to enable a knowledgeable third party to follow the steps taken in performing the valuation and to derive the results of the valuation.

## 9.3. Management representation letter

(154) The public accountant has to obtain a management representation letter from the business (entity being valued) (See the attached sample letter). This letter has to state that the information in the plans and projections represent the current expectations of the management and has been derived in a reasonable manner, and that all identifiable risks and opportunities have been included.

## 9.4. Valuation report

(155) The valuation report is to include information on the following matters:

a) nature of the engagement (see ref (152)),
b) description of the entity being valued, particularly from an economic, legal, and tax perspective,
c) documents received and used (including valuation reports from third parties) and other information used,
d) development of the entity being valued in the past and an analysis of historical data,
e) business plan,
f) reasonable test of the business plan,
g) valuation method adopted and the reasons for its use,
h) steps taken in the performing the valuation,
i) presentation and valuation of non-operating assets,
j) result of the valuation.
k) assessment of the plausibility of the valuation result

(156) Where it is necessary to protect confidential business data, the valuation report may be presented in verbal form. Such a verbal presentation will only include the results of the valuation, with the data subject to confidentiality requirements being contained in a separate appendix.

**Attachment:** Sample management representation letter