

Company valuation

Table of Contents

1	Starting position	2
2	Company valuation - perspective	3
2.1	Gray areas in ratings	3
2.2	The invisible value destroyer	4
3	Company valuation	5
3.1	Preparation seller	5
3.2	Due Diligence - Buyer	5
3.3	Correction values	6
4	Methods company valuation	7
4.1	Evaluation according to the DCF method	7
4.2	Valuation of earnings value	8
4.3	Assessment by substance	9
4.4	Practical method (Swiss model)	9
4.5	Multiples	10
4.6	Liquidation value	11
4.7	Valuation according to share ratios	12

1 Starting position

Company valuations are necessary in different phases of a company. Most of these are crucial situations in which there are great opportunities, but also major risks.

When evaluating companies or parts of companies, buyers and sellers leave nothing to chance. The company representatives (source: KPMG study) from companies with M&A experience name the following as the method used:

DCF / Earnings Value Method:	69%
Practitioner method:	39%
Multiples:	28%
Comparable transactions:	20%
Economic Value Added: (EVA®):	19%

Other methods are only used in rare cases. More than half of the companies use several methods. The most common is a combination of discounted cash flow and practitioner methods. The latter serves primarily to check the plausibility of the result. In contrast, substance value calculations are practically out of the ranks.

2 Company valuation - perspective

2.1 Gray areas in ratings

Reviews often correspond more to the desire for a high retail price than to reality. Various misunderstandings creep in, which we briefly address here. If you have any questions, call us. We are looking forward to your contact.

A lot is published about assessment methods. How the content for this is to be determined is up to the free market. It is not forbidden to set the price bar very high. It could be that the world champion in high jump is interested in the company in question. If not, you have to find an athlete who is more of a champion in the regional league.

We are often confronted with the following points when evaluation reports are presented to us.

- Increase financial results by smoothing costs and anticipating potential revenue increases.
- Trivialization of risks (example: the sales share of a customer of 30% without contractual commitment should not be a risk!).
- The company has great potential, which the successor can easily tap (question: why didn't the previous owner do it himself?).
- Calculation of hidden reserves on real estate with low interest rates (7.5 - 8.0% should be expected for commercial real estate. Less than 6% is clearly too low).
- Arithmetical upgrading of the real estate, without simultaneously burdening the profit and loss calculation costs on this basis.
- Profit capitalization with interest rates below 10%. Such approaches are usually difficult to implement in the market. 12 - 18% are realistic depending on the industry and risk profile.

2.2 The invisible value destroyer

The waste of resources often goes unnoticed along the processes. Excessive inventories waste money on storage space and interest. The inadequate training of employees causes quality problems and wastes material and personnel costs. Waiting times and internal transport routes for products extend delivery times and waste liquidity, which the company has to finance through loans. A bureaucratic corporate culture with "box thinking" wastes money through duplication, delaying or losing orders. Careless use of energy wastes ecological resources that affect the income statement, but also the environment and the climate. The examples would still be many.

The waste presses on the earnings situation and thus on the realizable sales price. Most companies do not primarily need to make more sales to make higher profits. Rather, you should structure your processes so that they are consistent with sales.

The successor has the opportunity to quickly and sustainably improve the earnings situation by working more efficiently. The profit from this belongs to him and is only rewarded to the seller in exceptional cases.

3 Company valuation

3.1 Preparation seller

In the course of a company valuation, the seller should analyze his company in depth. In the company analysis, factors such as the mission statement, evaluation, value drivers and stakeholders are considered.

The company analysis serves for:

Measures to add value before a company is sold

Risk assessment and the resulting surcharges / discounts in company valuation

Argumentation criteria for sellers / buyers

3.2 Due Diligence - Buyer

A due diligence is a check that is usually initiated by the buyer when purchasing companies or company holdings.

It serves to bring the future buyer as fully as possible to the knowledge of the seller, to obtain a confirmation for the previous information and information, to capture and evaluate as many opportunities and risks as possible, to obtain information for the improvement of the business.

Depending on the size and complexity of the company, due diligence can take on a large scope. For this purpose, the buyer selects the appropriate specialists who will examine the company to be acquired for him.

These experts, such as trustees, tax consultants, auditors and lawyers, sometimes also technical, industry and financial experts, are responsible for their assessments, so it can be assumed that all auditors exercise great caution and due diligence can therefore of course be very extensive.

The results of a due diligence are recorded in the due diligence report and influence the negotiations, in particular the guarantee catalog and the purchase price determination. A neutral third party can help with a plausible weighting of risks in the event of a dispute.

Credit institutions often want to see the due diligence report, its statements influence the financing.

Due diligence is a delicate matter for a seller because at the time of the review, employees are usually not yet aware of the intention to sell.

Nowadays, it is also common to set up virtual data rooms with all relevant documents and contract copies. A prospective buyer receives access rights against a protected password, which allow him to view the documents. Such a digital data room can be set up with the software www.KMUaudit.ch.

The provision of a virtual data room also has the not to be underestimated advantage that several prospective buyers can check at the same time without having to appear in the company or even knowing about each other.

3.3 Correction values

For SMEs, the annual financial statement is the basis of a company valuation. The annual accounts are checked in accordance with internationally recognized standards such as IFRS or Swiss GAAP FER and corrected if necessary.

- Possible corrections are:
 - assets or liabilities not required for operations
 - assets or liabilities rated too low or too high
 - expenses not required for operations
 - Non-operating income
 - Excessively booked expenses such as entrepreneurial wages, finance or rent costs ...

If you want to create an assessment in the future, the budget figures are used. You get a good overview if you compare the financial indicators with the industry average. In addition, synergy potentials can be included in the evaluation by presenting the value chains and quantifying the individual positions.

4 Methods company valuation

4.1 Evaluation according to the DCF method

In the DCF method, a company value is worth as much as it can generate in the future in the form of free cash flow, which can be used for self-financed growth or for the distribution to the owners.

As a first step, a company analysis is also created here, which shows the opportunities and risks in detail.

Based on this, the following values are recorded:

Calculation of the total cost of capital "WACC"			
Interest-bearing debt	600	60%	
Equity	400	40%	
Total	1'000		
		Factor	Weight
Interest after tax	4.00%	60%	2.40%
Equity cost rate	15.00%	40%	6.00%
Total cost of capital "WACC"			8.40%

Calculation of company value		Interst WACC	PV
Free Cash Flow year 1	140	0.9225	129
Free Cash Flow year 2	160	0.8510	136
Free Cash Flow year 3	80	0.7851	63
Free Cash Flow year 4	60	0.7242	43
Free Cash Flow year 5	160	0.6681	107
Free Cash Flow average	120		
residual value	1'429	0.6681	954
<i>residual value = CF average / WACC * interest)</i>			
Gross company value			1'433
- Interest-bearing debt			-600
DCF / Company valuation			833

4.2 Valuation of earnings value

The revised annual accounts serve as the basis. In addition, corrections according to the guidelines of recognized standards such as Swiss GAAP FER or IFRS are taken into account.

In addition to the corrections, further risk discounts can be made based on the rating and size of the company. For SMEs, the realistic capitalization rate is usually between 12% and 17%. This ensures that the successor will have amortized their investment in 5 and 7 years.

Valuation of earnings				
		2017	2018	2019
	Earnings	68'750	85'450	77'800
Correction value				
	- Revaluations	-20'000		
	+/- Depreciation	10'000	15'000	15'000
	+/- accruals		-8'000	
	+/- Future potential			15'000
Profits after corrections		58'750	92'450	107'800
Weighted profit				86'333
Basic rate (capitalization)				13.50%
Income value (capitalized profit)				639'506

4.3 Assessment by substance

The substance value procedure determines the costs if you had to rebuild the company. In the past, this value was usually included in the company valuation.

		Assets	Liabilities
Current assets			
	Debtors	458'000	
	Warehouse	55'000	
Capital assets			
	Fair value of the investments	1'580'000	
	Fair value of patents and licenses	550'000	
loan capital			
	loan capital		248'000
	short-term borrowed capital		1'400'000
Total		2'643'000	1'648'000
Assessment by substance			995'000

4.4 Practical method (Swiss model)

In the practitioner method, an attempt is made to form an average from the different results from the yield and net worth method by weighting and adding the values.

Earnings Value		Veight	Value
	2 x	947'500	66.6%
			631'035
Assessment by substance			
	1 x	995'000	33.3%
			331'335
Value Practical methode			962'370

4.5 Multiples

The multiples are a simplified, yet effective business valuation for SMEs. A multiple of sales, EBIT or EBITDA is taken to determine the value of the company.

The multiples vary according to industries:

Branch	Multiples		
	Turnover	EBITDA	EBIT
Wholesale	0.4 - 0.8	3 - 6	3 - 6
Retail	0.2 - 0.5	2 - 5	3 - 6
Medical technology	0.6 - 1.2	5 - 8	6 - 9
Machine systems	0.2 - 0.6	3 - 7	4 - 8
Crafts / construction	0.1 - 0.4	2 - 4	3 - 5
service	0.3 - 1.0	3 - 7	3 - 7

Multiples example

Ø last 3 years	Turnover 500'000	EBITDA 65'000	EBIT 50'000
factor			
0.75	375'000		
1	500'000		
1.25	625'000		
4		260'000	
5		325'000	250'000
6		390'000	300'000
7			350'000
Ø	500'000	325'000	300'000
Ø Multiples		375'000	

4.6 Liquidation value

The liquidation value assumes that the company will be abandoned.

It is now estimated what sales revenues the assets could generate if sold individually. The total of these estimated sales proceeds are offset against the outside capital and the result is the liquidation value.

		Assets	Liabilities
Current assets			
	Debtors	458'000	
	Warehouse	55'000	
Capital assets			
	Fair value of the investments	600'000	
	Fair value of patents and licenses	750'000	
loan capital			
	loan capital		248'000
	short-term borrowed capital		1'400'000
Total		1'863'000	1'648'000
Liquidation value			215'000

If a business is discontinued, significant discounts are generally required when valuing assets and surcharges apply when valuing liabilities. The liquidation value is almost always the absolute lower limit of the company valuation.

4.7 Valuation according to share ratios

Company valuation Stock ratios provide clues as to which stocks are cheap. The calculation is not entirely trivial, however.

Warren Buffett has become one of the richest people in the world with fundamental analysis. His recipe is to consistently look for stocks whose price is below their intrinsic value. On the stock exchange, he always finds bargain stocks whose price is cheap compared to what a company generates, earns or possesses in terms of value. The recipe for so-called value investing, which is about finding undervalued stocks, buying them and waiting for valuations to rise to a fair level again.

In addition to the difficulties, the stock exchange is repeatedly determined by market sentiments and trends that appear irrational and lead to apparently nonsensical valuations of stocks. Behavioral research shows that investors' decisions are often shaped by a number of prejudices. In so-called bull markets, greed plays a central role, in bear markets, on the other hand, panic. It is therefore often uncertain whether the supposed bargains will find their way back to the values that have been calculated as appropriate.

Still, if you don't just want to blindly buy stocks, it's good to find out about the state of the companies in question. You should therefore keep an eye on at least some key figures when making investment decisions.

4.7.1 Price-earnings ratio (P / E)

The P / E ratio is calculated by dividing the share price by the earnings per share. It's the most common metric that tells how many years it will take for the price of a stock to be paid for by the company's profits. For example, if the price is 100 and earnings per share are 5, the P / E ratio is 20. When making a profit, the estimated profit for the next year or the year after that is often used.

The lower the P / E ratio, the cheaper the stock is. A stock with a P / E ratio of less than 10 is considered cheap, and one with a P / E ratio of over 20 is overpriced. The level of the key figure depends heavily on the industry.

The advantage of the price / earnings ratio is that it is easy to calculate. Conversely, the KGV only offers a snapshot. It is uncertain whether a share price will develop positively because it is currently low. The informative value of the KGV is also limited because a company can influence the reported profit through accounting measures.

A share with a high P / E ratio can also offer a good buying opportunity - for example for companies that are in a strong growth phase and for which far higher profits are in the future. Conversely, a low P / E ratio can also mean that the growth prospects are bad. The P / E ratio is useless for companies that do not make a profit.

4.7.2 Price-earnings-growth-ratio

The PEEG ratio is calculated by dividing the price / earnings ratio by the company's annual earnings growth as a percentage. For example, if a company has a P / E ratio of 12 and profits have grown by an average of 15 percent per year in the last few years, the P / E ratio is 0.8. If the P / E ratio is below 1, a share is considered undervalued, if it is over 1, it is overpriced.

The price-earnings-growth ratio was introduced because there are companies that have a high P / E ratio but whose earnings are growing strongly. Such companies can therefore still offer a good buying opportunity. However, the key figure should be treated with caution. The KGWV was the fashion indicator of the new economy. Between 1999 and 2003 it almost completely replaced the P / E ratio and also made companies with a very high P / E ratio seem like bargains. When the dot-com bubble burst, many bona fide investors were punished.

4.7.3 Price-to-book ratio (PBR)

The PBR is calculated by dividing the share price by the book value per share. The book value states what the substance of a company is worth, for example its real estate, its machines and its inventory. Put simply, the book value corresponds to the value of the company in the event of liquidation. For example, if the share price is 32 and the book value per share is 8, the PBR is 4. A PBR of less than 1 means that a share is traded below its intrinsic value. That can be a buy signal. PBR of over 1 means that a stock is fairly valued or overpriced.

The advantage of the KBV is that the value is positive even if the company is making losses. A company's book value is less volatile than its profit, so the PBR tends to be more stable. In a stock market crash, in particular, a company's market capitalization can fall below its book value, and that's where investors hope to buy the relevant stock. In any case, you have to make sure that the company is not in trouble that could threaten its existence. The restriction is that the book value can be easily influenced and depends on the accounting method.

4.7.4 Dividend yield

The dividend yield is the ratio of the dividend (profit distribution) per share and the share price, in percent. For example, if the stock price is 60 and the dividend per share is 2, the dividend yield is 3.33 percent. Dividend yields over 3 percent are considered good, those over 5 percent are considered very good.

You can think of the dividend as a kind of interest on the amount you spend on a company's stock. The dividend yield then corresponds to the interest rate. Accordingly, a company with a high dividend yield is considered attractive.

A regularly high dividend not only brings the shareholder corresponding income, it also indicates a stable and profitable business development of the company. While dividend yield is not a direct indication of a company's value, it can be used to compare dividend-paying stocks.

But there are also companies that try to divert attention from internal difficulties with a high dividend. In this case, the profit distribution could affect the substance of the company. The dividend yield can also be high because the stock price is low. In this case, the reasons for the lack of interest from investors must be determined.

4.7.5 Price-to-sales ratio (PSR)

With the PSR, the share price is divided by the sales per share. For example, if the share price is 40 francs and sales per share 35, the KUV is 1.14. The PSR expresses how many years the company needs to reach its current market capitalization through its revenues alone (excluding expenses). If the PSR is less than 1, a share is usually undervalued.

The PSR offers a substitute valuation for companies that are currently not making a profit and for which the PSR ratio is therefore not defined. It can be about companies that have a cyclical course of business that are in a turnaround phase or young companies that are still making start-up losses.

Since the PSR varies greatly from sector to sector, this ratio is actually only suitable for comparing companies in the same sector.

The restriction is that the turnover alone does not mean too much. It only depicts what comes in. Expenses, expenses and costs are not taken into account. In the case of a company with an attractive KUV that is not making a profit, it is important to clarify precisely whether the company has the prospect of returning to profitability soon.

4.7.6 Acquisition value per EBITDA

The EV / EBITDA is the ratio between the acquisition value (Enterprise Value, EV) and the EBITDA, the earnings before interest, taxes, depreciation and amortization. Acquisition value is the amount it costs to acquire the company and pay all of its debts. It corresponds to the sum of market capitalization and net debt. If the acquisition value is 40 billion and the EBITDA is 2 billion, the EV / EBITDA is 20. The lower the ratio, the cheaper the corresponding share is to be had.

This key figure is a kind of extension of the P / E ratio, which is the relationship between market capitalization and profit of a company. The EV / EBITDA also includes outside capital (or debt). Both the equity providers (through dividends) and the lenders (through interest) are compensated from the EBITDA. The advantage is that the EBITDA can be less influenced by accounting measures than the profit.

Compared to the P / E ratio, the EV / EBITDA is more difficult to calculate. In addition, the market value of the debt (debt) must be estimated.

*(Source Chapter 4.8 Valuation according to share key figures:
Alex Reichmuth, Handelszeitung 6. August 2020)*