# Сравнительный анализ компании

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### Аннотация

В статье описываются теоретические основы оценки бизнеса - формулируются понятия и основные цели оценки бизнеса, а также определяются принципы сравнительного анализа компании, его преимущества и недостатки по сравнению с другими методами оценки компании. Кроме того, раскрываются теоретические аспекты и сущность оценки и финансовых показателей, которые используются при расчете мультипликаторов.

Ключевые слова: оценка бизнеса, сравнительный анализ, анализ компании, мультипликаторы, финансовые показатели компании

## **Comparable Company Analysis**

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#### Abstract

The article describes the theoretical basis for the valuation of business - formulates concepts and main goals of business valuation, also defines the principles of comparable company analysis, its advantages and disadvantages against other methods of company valuation. Moreover, it's reveals theoretical aspects and essence of valuation and financial metrics, which are used in calculating multipliers.

**Keywords**: business valuation, comparative analysis, company analysis, multipliers, financial indicators of a company

Appointment of a valuation process means receiving an exact representation of the fair market value of the given object or the value of the share of assets belonged to the owner during a particular period of time.

The definition of the concept of market value is given in international valuation standards: "market value is the estimated amount - the amount of money for which the property can be transferred from hand to hand on the valuation date between a voluntary buyer and a voluntary seller as a result of a commercial transaction after adequate marketing, and it is assumed that each of the parties acted competently, prudently and without compulsion."

The Federal Law On appraisal activity in the Russian Federation [13, p. 2] gives the following formulation of appraisal activity: "valuation activity is understood as the professional activity of valuation entities aimed at establishing in relation to objects of valuation of market or other value."

Valuation of company is a multi-stage and complex analytical process of determining the fair market value of its capital, which is based on the performance of a certain system of calculations and the necessary logical procedures [10, p. 15].

After the defining the essence of the process of company valuation, it is necessary to establish the core purposes for which the valuation is made [8, p. 23]:

- increasing the efficiency of the current management of the enterprise (firm);
- purchase and sale of shares, bonds of the company on the stock market;
- making an informed investment decision;
- purchase and sale of the company by its owner in whole or in part;
- restructuring of the enterprise (liquidation, merger, acquisition or spin-off of independent companies from the holding);
- development of a development plan for the company (in this case it is necessary to calculate and estimate future revenues of the company, etc.);

- determination of the creditworthiness of the enterprise and the value of collateral in lending (in this case, the valuation is necessary because the value of the assets value in accounting reports can dramatically differ from their actual market value);
- establishment of the share of co-owners in case of signing or termination of the contract or death of one of the partners;
- insurance (in this process there is necessarily a need to identify the exact value of assets in case of losses);
- taxation (determining the taxable base requires an objective assessment of the company's income and its assets);
- investment design of business development (it is necessary to know the initial value of the enterprise in general).

Next step is to define the main types of company valuation:

- Precedent transactions method;
- Comparable company analysis (CCA);
- Discounted Cash Flow method DCF Model;
- Leverage Buyout (LBO) Model;
- Net Asset Value NAV Model;
- Replacement method.

Precedent transaction valuation method is a type of analysis in which the price paid for similar companies in the past is considered an indicator of a company's value. This method makes a value of what a share of stock would be worth in the case of an acquisition of this company.

Comparable company analysis is based on the market valuation of comparable firms, correlated with profit, cash flows, book value or sales volume, to estimate a company's equity.

Discounted cash flow (DCF) is a valuation method used to estimate the investment attractiveness of a company. DCF method contains of the usage of future free cash flow forecasts and discounts of them, using a required annual rate, to arrive at present value estimates. A present value estimate is further used to evaluate the investment potential. If the value arrived by DCF analysis is higher than the current cost of the investment, the opportunity of investing into this company is quite high.

NAV method is based on the idea that Net asset value is value per share of a mutual fund on a specific date or time, and with both security types, the per-share dollar amount of the fund is based on the total value of all the securities in company portfolio, any liabilities the fund has and the number of fund shares outstanding.

A leveraged buyout model shows the consequences after a private firm decides to acquire a company using a combination of equity (cash) and debt and then sell it in 3-5 years.

Replacement value method uses the amount of funds which are required to replace the existing company as the valuation of a company. In other words, if one is to create a similar company in the same industry; all costs required to do so will form part of the value of the firm.

However, in this article, only CCA is deeply examined, consequently, it is necessary to define the essence of CCA and the way to make this kind of valuation, to study the advantages and disadvantages of comparable company analysis and the cases of its usage.

Comparably Company Analyses, or "Comps", are a relative method used to define the value of a company by comparing that company's valuation multiples to those of its peers. Obviously, the multiples are a ratio of some valuation metric (such as equity Market Capitalization or Enterprise Value) to some financial performance metric (such as Earnings/Earnings Per Share (EPS), Sales, or EBITDA. The basic condition of CCA is that companies with similar characteristics should trade at similar multiples, all other things being equal.

Comps are quite comfortable to use in practice, as the data for CCA is usually relatively widely available (provided that the comparable companies are public ones). Moreover, assuming that the market efficiently prices the securities of all other companies, CCA should give a reasonable valuation range, while other valuation methods such as DCF are dependent upon an entire array of assumptions.

These features make Comps one of the most widely-used valuation techniques in practice among investment bankers, sell-side research analysts, private equity investors and other market analysts. Nevertheless, as any other valuation method, comparable company analysis has its disadvantages. Comps is only usable for public companies, in particular, those that have many competitors of similar size and with similar geographies of doing business. So, the first problem arises precisely from the fact that there are many more private companies in the world than public ones. Moreover, it is almost impossible to get access to securities of a private company if you do not work within it or with it (for example, as an external consultant - but there is already a question of trust). The second problem with this valuation method is related to the fact the companies are too different to put everyone on the same scale. There is another hitch in this disadvantage of CCA: companies from different countries have different systematic risks, consequently, fact further complicates the interpretation of the data and, as a consequence, the conclusion about the valuation of the company.

The plan of define the value of a company using Comps is presented below:

- 1. Confirm relevant peer universe.
- 2. Validate key fundamental metrics.

## 3. Select appropriate multiple for valuation.

The appropriate selection of a relevant peer universe is strictly important for CCA because it plays a significant role in the valuation of the target company. For instance, a company could sometimes be compared in terms of two different industries due to the nature of the business (e.g. an internet retail company). Moreover, there is a case when some comparable companies might need to be ruled out of their industries because they own businesses across several different industry groups. Therefore, the choice of the precise peer universe is very critical and subjective step of the comparable company analysis.

While making a Comps valuation, the analyst can choose to use either historical performance metrics or future (forecast) performance metrics. In general, future metrics are preferred, but it is necessary to be careful with selecting this metrics type. The second paragraph will present the deep analysis of every kind of metrics, which are used in different types of comparable multipliers.

The third part of CCA plan will be studied in the third paragraph of the article, it includes the different types of multipliers classification, their features and cases (industries) of the usage. At this moment, it is strictly necessary to admit that the important to us choice of the most effective for our valuation multipliers depends on the method of CCA that we select and the industry of the valuation company.

Nevertheless, before deeply analyzing the metrics and key multipliers in the next paragraphs, it is important to provide us with the detailed list of steps of how to build CCA table, as it is created by any specialists in investment banking, equity research, corporate development, or private equity.

The first and the most subjective step in performing a comps analysis of public companies is review the company in terms of its detailed historical and today description, industry classification of all its businesses and its position in the market.

The next step is to search companies that operate in the same industry with similar characteristics. The closer the match, the better and more precise valuation our CCA analysis provide us with. The key factors of selecting the group of comparable companies in comps valuation are the following ones:

- industry classification;
- geography;
- size (revenue, assets, employees);
- growth rate, margins and profitability.

The third step includes the processes of gathering information about each company, setting the comps table and making the calculations of selected comparable multipliers.

It is also necessary to mention another role of multipliers in terms of company valuation: multiples pay a significant role in financial modeling, for instance, as a terminal value assumption in a Discounted Cash Flow model – e.g. an EV/EBTIDA multiple is based on currently observable prices in the market.

After completed calculations of multipliers, it is necessary to interpret the results. One way to use the received information is to search companies that are overvalued or undervalued.

Now it is important to highlight the spheres of applications of comparable company analysis:

- Initial Public Offerings (IPOs);
- Follow-on offerings;
- M&A advisory;
- Fairness opinions;
- Restructuring;
- Share buybacks;
- Terminal value in a DCF model.

In comparable company analysis there are two types of metrics, which are used in calculation of multipliers: valuation and financial ones. Valuation metrics of a company are market capitalization and enterprise value.

Market Capitalization represents the total equity value of a company, and does not reflect management's allocation of capital structure among all forms of financing (such as equity, debt, preferred stock, etc.). It is a useful representation of valuation for common stock investors because they typically do not purchase a majority-owned stake in the company, and therefore only have access to the earnings available to common shareholders.

The formula for calculating Market Capitalization is:

Market Capitalization = Stock Price × Shares Outstanding

Stock price is the price per common share. It is obtained using any financial software (Thomson, Bloomberg, CapIQ) or reliable Internet pricing service (Yahoo Finance, Google Finance).

There are two types of Shares Outstanding: Basic and Diluted. Basic shares outstanding can be obtained from the first page of a company's 10-K or 10-Q. Diluted shares outstanding account for the conversion of options, warrants and convertible preferred stock and prevents a possible underestimate of valuation caused by using basic shares outstanding. Diluted shares outstanding can be obtained from the EPS footnotes of a company's financials, and can also be calculated directly using footnotes to the financials that list management stock options as well as warrants and convertible preferred stock.

Thus, market capitalization is a value of equity, which is represented in the stock market, while enterprise value is a value of the total invested capital as the sum of the company's market capitalization (MC) and the market value of its long-term debt [4, p. 1008].

The financial metrics of a company are Earnings/Earnings Per Share (EPS), Sales, or EBITDA.

Earnings typically refer to after-tax net income. Earnings are the main determinant of share price, because earnings and the circumstances relating to them can indicate whether the business will be profitable and successful in the long run.

Earnings are perhaps the single most studied number in a company's financial statements, because they show a company's profitability compared to analyst estimates and company guidance.

Earnings per share is a commonly cited ratio used to show the company's profitability on a per-share basis. It is also commonly used in relative valuation measures such as the price-to-earnings ratio. The price-to-earnings ratio, calculated as price divided by earnings per share, is primarily used to find relative values for the earnings of companies in the same industry. A company with a high price compared to the earnings it makes is considered overvalued. Likewise, a company with a low price compared to the earnings it makes is undervalued.

The formula of EBITDA is:

Net profit + Income tax expense - Reimbursed income tax (+ Extraordinary expenses) (- Extraordinary income) + Interest pai - Interest received = EBIT + Depreciation charges on tangible and intangible assets - Revaluation of assets = EBITDA.

EBITDA is actually the cash flow before taxes and loan payments plus depreciation. That is, this is the maximum amount of funds that can be squeezed out of business. Relying on this figure, it is possible to count how much to offer shareholders, what is the cost of debt in the teeth and what will be the profitability of the transaction for him.

For example, future metrics of EBITDA and Earnings/EPS are able to meet all kinds of potential risks associated with forecasting, this fact can make the forecast numbers sharply decrease.

Supporters of EBITDA say that this indicator helps to avoid distortions due to the capital structure and the difference in accounting for depreciation.

One of the opponents of this indicator is the legendary Warren Buffett. He explained the whole problem of using this indicator in one question: "Do managers really think that a fairy will incur capital costs?" This means that the company will not be able to spend the funds written off for amortization for at least a long time. You'll have to spend money. Business does not work without capital costs.

It is necessary to compare only companies from one industry. The horizontal axis shows the high cost of the company. The more the EV / EBITDA indicator, the more expensive the company.

The vertical axis of graph we want to build shows the level of credit. The more it is (more than the industry average), the worse the given situation is. Ideally, you need to choose the cheapest companies with the lowest level of debt. But it is necessary to understand why this company is cheaper than others. And then it is important to determine the probability of the disappearance of this cause and find changes driver.

In the conclusion of the second paragraph of this article, it is important to highlight that the clear understanding of above listed and detailed analyzed core metrics help construct the comparable multipliers not only on mathematical, but in economic and analytical sense, too. The complex classification, which is explored in the next paragraph, is caused by these various valuation and financial metrics.

#### Список использованных источников

- 1. Абдулаев Н.А., Колайко Н.А. Оценка стоимости предприятия (бизнеса): учебное пособие. М.: Экмос, 2013. 352 с.
- 2. Балашов А.П. Теоретические основы реструктуризации организаций: учебное пособие, 2-е изд. М.: ИНФРА-М, 2017. 254 с.
- 3. Бланк С., Дорф Б. Руководство для начинающего владельца: пошаговое руководство по созданию великой компании. Перевод: Альпина Паблишерз, 2013. 485 с.
- 4. Брайли Р., Майерс С. Принципы корпоративных финансов. McGraw-Hill, Irwin, 2011. 1008 с.
- 5. Брюсов П.Н., Филатова Т.В. Финансовая математика: учебное пособие. М.: ИНФРА-М, 2014.-480 с.
- 6. Гоган П. Слияния, поглощения и корпоративные реструктуризации. М.: Альпина-Паблишерз, 2014. 741 с.
- 8. Дамодаран А. Инвестиционная оценка. М.: Альпина Бизнес Букс, 2008. 1152 с.
  - 9. Иващенко Н.П. Экономика инноваций. М.: МАКС-ПРЕСС, 2014. 269 с.
- 10. Коллер Т., Гёдхарт М., Вессельс Д. Оценка: оценка и управление стоимостью компаний (издание для университета). John Wiley & Sons, Inc., 2011. 130 с.

- 11. Коупленд Т., Коллер Т., Муррин Дж. Оценка. Измерение и управление стоимостью компаний. М.: OLIMP-BIZNES, 2015. 115 с.
- 12. Федеральный закон № 157-ФЗ «О внесении изменений в Федеральный закон «Об оценочной деятельности в Российской Федерации» от 17.09.1998 г.
- 13. Федеральный закон от 29.07.1998 № 135-ФЗ «Об оценочной деятельности в Российской Федерации».
- 14. Чеботарев Н.Ф. Оценка стоимостей предприятия: учебник. М.: Дашков и К, 2014-352 с.

### References

- 1. Abdulaev N.A., Kolayko N.A. Otsenka stoimosti predpriyatiya (biznesa): uchebnoe posobie. M.: Ekmos, 2013, 352 p.
- 2. Balashov A.P. Teoreticheskie osnovy restrukturizatsii organizatsiy: uchebnoe posobie, 2-e izd, M.: INFRA-M, 2017, 254 p.
- 3. Blank S., Dorf B. Rukovodstvo dlya nachinayushchego vladel'tsa: poshagovoe rukovodstvo po sozdaniyu velikoy kompanii. Perevod: Al'pina Pablisherz, 2013, 485 p.
- 4. Brayli R., Mayers S. Printsipy korporativnykh finansov, McGraw-Hill, Irwin, 2011, 1008 p.
- 5. Bryusov P.N., Filatova T.V. Finansovaya matematika: uchebnoe posobie, M.: INFRA-M, 2014, 480 p.
- 6. Gogan P. Sliyaniya, pogloshcheniya i korporativnye restrukturizatsii, M.: Al'pina-Pablisherz, 2014, 741 p.
- 7. Gryaznova A.G., Fedotova M.A. Otsenka biznesa: uchebnoe posobie, M.: Finansy i statistika, 2014, 736 p.
  - 8. Damodaran A. Investitsionnaya otsenka, M.: Al'pina Biznes Buks, 2008, 1152 p.
  - 9. Ivashchenko N.P. Ekonomika innovatsiy, M.: MAKS-PRESS, 2014, 269 p.
- 10. Koller T., Gedkhart M., Vessel's D. Otsenka: otsenka i upravlenie stoimost'yu kompaniy (izdanie dlya universiteta), John Wiley & Sons, Inc., 2011, 130 p.
- 11. Kouplend T., Koller T., Murrin Dzh. Otsenka. Izmerenie i upravlenie stoimost'yu kompaniy, M.: OLIMP-BIZNES, 2015, 115 p.
- 12. Federal'nyy zakon № 157-FZ «O vnesenii izmeneniy v Federal'nyy zakon «Ob otsenochnoy deyatel'nosti v Rossiyskoy Federatsii» ot 17.09.1998 g.
- 13. Federal'nyy zakon ot 29.07.1998 № 135-FZ «Ob otsenochnoy deyatel'nosti v Rossiyskoy Federatsii».

14. Chebotarev N.F. Otsenka stoimostey predpriyatiya: uchebnik, M.: Dashkov i K, 2014 – 352 s.