

A. DZ BANK AG – Financial analyses

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DZ BANK AG Deutsche Zentral-Genossenschaftsbank (“DZ BANK”) prepares its financial analyses in accordance with the statutory provisions pursuant to the German Securities Trading Act and the German Analysis of Financial Instruments Regulation. The explanations that follow are designed to inform investors about statutory requirements that are to be observed when preparing financial analyses.

Disclosure requirements pursuant to Section 34 b of the German Securities Trading Act

Sources of information

Material sources of information used to prepare financial analyses are foreign and domestic publications such as information services (such as Reuters, Bloomberg, VWD (Vereinigte Wirtschaftsdienste)), economic journals and newspapers (such as Börsen-Zeitung, Handelsblatt, FAZ (Frankfurter Allgemeine Zeitung), FTD (Financial Times Germany)), industry publications (such as Chemical Week, Biocentury, CHEManager), statistics, rating agencies and business reports.

Summary of valuation material and methods

Equity research

Valuations and the resulting investment assessment are prepared with great care taking into consideration all relevant factors known at the time. Analysts possess a high degree of business and industry competence, which also allows them to make qualified judgments using unquantifiable factors. Equity analyses are based on models. For the majority of companies, income statements, balance sheets and cash flows are expressly evaluated and projected over several years into the future. In order to evaluate companies and to estimate future equity price development, a combination of methods are used.

Discounted cash flow method, DCF

DCF is used to determine an absolute value of an enterprise by discounting all expected cash flows that the enterprise will generate in the future. The DCF method is a standard method that is used. A DCF calculation is an integral part of the balance sheet models.

Transaction value method

This method is used if similar types of enterprises or portions thereof have been sold around the approximate time of the valuation and a transaction price is known. This price can be used as a benchmark taking into consideration certain modifications.

Sum-of-the-Parts-method

The total value of an enterprise is derived from the sum of the individual parts of the enterprise or rather from the subsidiaries and affiliated companies. The most appropriate valuation method can be used for each separate company.

Peer group comparative analyses

This is the practice of comparing key company figures with comparable enterprises in order to recognize an overvaluation or an undervaluation. The standard figures of measurement include P/E ratio, price/cash flow ratio, EV/EBIT, EV/EBITDA and etc. In addition thereto analysts use other valuation methods that are suitable for the specific situation or industry. Analysts are encouraged to always use a combination of various valuation methods. By using different methods, the theoretical value of a company, the so-called fair

value, can be determined. Taking into consideration broader factors such as anticipated information impulses and the situation of supply and demand in the market, an assessment of future share development can be made.

Sustainability analysis

The sustainability analysis, which is based on 170 sustainability factors encompassing the dimensions of the economy, ecology, social and corporate governance, is produced with the greatest care and takes account of all identifiable factors pertaining at the corresponding point in time. Raw data for the dimensions ecology (E), social (S) and corporate governance (G) are provided by the firm Sustainalytics GmbH. DZ BANK AG carries out the selection, definition and weighting of the sustainability factors. In order to integrate the economic dimension, the resultant ESG scoring, which varies between 0 and 80 points, is multiplied by a factor between 0.75 and 1.25, which expresses an economic discount or an economic premium. This factor is determined with the help of DZ BANK AG's sector analysts, who have greater expertise in the analysis of the relevant sectors and companies and which also allows them to make a qualified assessment of the factors influencing sustainability. The result of the analysis is an integrative sustainability rating between 0 and 100 points, which forms the basis for the categorisation of the individual stocks into sustainable and non-sustainable stocks. This classification takes account of sectoral and cross-sectoral sustainability limits as well as hard and soft exclusion criteria. Sustainable stocks are assigned a sustainability kite mark.

A distinction is made between:

1. Sustainable stocks

Stocks that exceed the cross-sectoral AND the sectoral sustainability limit AND violate none of the above-mentioned exclusion criteria.

2. Non-sustainable stocks

Stocks that fall below the sectoral sustainability limit AND/OR the cross-sectoral sustainability limit regardless of whether they violate the above-mentioned exclusion criteria or not.

Stocks that exceed the sectoral AND the cross-sectoral sustainability limit AND violate one or more of the above-mentioned exclusion criteria.

Fixed income and currency research

Recommendations regarding individual issuers, bonds, currencies or derivatives can be prepared using different methods of analysis. It is possible that particular recommendations are only based on one method of analysis, but it may very well be that various methods impact the recommendations.

Fundamental analysis

Based on developed econometric models and under consideration of broader qualitative factors, financial credit rating forecasts are prepared for an issuer (and the resulting market price development of the debt instrument issued) or the changes to exchange rates and interest rates. These are then compared to current market rates and market expectations, where applicable, in order to make trading recommendations for various types of investors.

Relative value analysis

The relative value analysis refers to a mathematical statistical method upon which a bond is analyzed in comparison to its historical value or to a group of comparable bonds and classified as being less expensive or more expensive. From the comparative analysis of expensive and inexpensive bonds, recommendations regarding sale, purchase or exchange can be made.

Technical analysis

From the development of historical prices, price developments in the future are forecast using various methods (technical chart analysis, performance indicators, Elliot Wave Principle, relative strength index). Trading recommendations are developed from the comparison between current prices and forecasts.

Date and time of reported prices/rates

The equity prices/rates in financial analyses are taken from Datastream and are based on Datastream abbreviations as reported in the financial analyses. Information about rates always refer to closing rates according to the Datastream system.

Sensitivity of valuation parameters

The respective expectations about the future performance of a financial instrument are the results of a snapshot in time and can change at any time. The assessment of the underlying parameters is carried out with the greatest care and under inclusion of all recognizable and relevant eventualities. The result of the analysis nevertheless always describes only one of many possible future developments. It is the development to which we attach the greatest probability of occurrence at the time of the analysis. Many of the valuation bases can change unexpectedly. The demand for the products of an enterprise can diminish, competition can increase (dropping sales prices), wages or purchase prices can go up (increasing costs), technological innovations by the competition are possible, problems with the use of the products can occur (e.g. medicinal side effects). In addition, external influences can unforeseeably impact the position of an enterprise. Increasing interest rates can reduce the present value in DCF valuations, fluctuating exchange rates and changes in tax law directly affect profits, state regulatory measures can alter prices and costs. Shifting risk preferences in the stock market can lead to changes in evaluations. And last but not least the analyst is only an external observer who according to law may only have access to company information made available to the public. The analyst is not always able to detect mistakes or incorrect information contained in corporate reports. There are also a conceivable number of other unforeseeable influences that can impact the evaluation and the development of the equity price.

Temporal conditions of scheduled updates

Equity analyses

DZ BANK maintains a list of enterprises for which company-specific finance analyses are published (“master list”). The criterion for inclusion or elimination of a company into the list is first and foremost whether the company is listed on an index (DAX and Euro Stoxx 50). In addition, selected enterprises are considered from the mid and small-cap segment. DZ BANK alone may decide at any time whether to include or delete a company from the master list in its equitable discretion. Generally, the master list is prepared weekly with an up-to-date short comment for each company. Events related to price developments are commented upon for each company in the master list. It remains within the scope of DZ BANK’s equitable discretion whether or why such publications are made. Furthermore, extensive analyses are carried out for values in the master list. DZ BANK may alone decide for which companies such publications are made in its equitable discretion. In order to comply with the provisions of the German Securities Trading Act, it could happen at any time that the publication of financial analyses for specific companies maintained in the master list will be blocked without any prior notice.

Bond analyses (“corporate bonds and emerging markets”)

DZ BANK maintains a list of bond issuers for which recommendations are published (“cover list currency and bond analyses”). The criterion for inclusion or elimination of an issuer is primarily the tradability and good market liquidity of the bonds from the issuer. DZ BANK alone may decide at any time whether to include or delete an issuer from the cover list in its equitable discretion. Generally, for the companies and countries maintained in the cover list bond analyses, a brief commentary or a summary valuation (recommendation overview) will be prepared weekly. In order to comply with the provisions of the German Securities Trading Act, it could happen at any time that the publication of financial analyses for certain issuers maintained in the cover list currency and bond analyses will be blocked without any prior notice.

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Investment horizon/Investment assessment

Equity analyses

The investment horizon for all analyses is 12 months.

Valuations refer to the absolute price development of a share.

An equity investment is regarded as worth purchasing if the price potential as assessed by the analyst is larger than 5% within the next 12 months.

An equity investment is regarded as worth selling if the anticipated price decline by the analyst is larger than 5% within the next 12 months.

Price changes within this range are considered worth holding.

Buy or sell investment assessments do not automatically indicate an especially large anticipated price fluctuation. It is merely an indication that the analyst assesses the future price development to be more positive or more negative. The strength of a buy or sell recommendation is to be gleaned from the content of the analysis.

Stock market and commodities forecasts can also have another forecast horizon, which will then be appropriately indicated.

For technical equity analysis see Bond analyses/Technical analysis.

Bond analyses/Technical analysis

The time horizon for these analyses can be different. For relative value assessments and recommendations based on the technical analysis, the time horizon can as a rule be anywhere between a few days and several weeks. For recommendations based primarily on fundamental analyses, the time horizon can as a rule be anywhere between six and 12 months.

Our investment decisions for industry and country evaluations are: attractive, neutral and unattractive.

Supervisory authority

Bundesanstalt für Finanzdienstleistungsaufsicht, (German Federal Financial Services Supervisory Authority)
Lurgiallee 12, 60439 Frankfurt/Main, Germany.

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Hold: price changes between +5% and -5%

Sell: more than 5% decrease in share price

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