

Sustainable Investments

A Research Publication by DZ BANK AG

Methodological approach to sustainability research

- » DZ BANK's Sustainability Research is aimed at local cooperative banks, institutional clients in Germany and abroad as well as central banks. Any such research must not be disclosed or made available in any way to natural or legal persons or other institutions domiciled or resident in the United States of America (USA). Any such disclosure or making available is prohibited. This research is generally not suitable for retail customers.
- » DZ BANK's Sustainability Research centres around an analysis method to assess countries, companies and banks (including SSAs) in respect of ESG criteria. ESG stands for Environmental, Social and Governance and thus for the three conventional dimensions of sustainability. Sustainability can be defined as long-term, responsible, beneficial and resource-preserving action, although this definition is not conclusive.
- » The main objective of the DZ BANK sustainability assessment is to identify a sustainable investable universe of issuers. In the DZ BANK Research approach, this is generally carried out in three steps for each issuer. In a first step, the three conventional sustainability dimensions namely Environmental (E), Social (S) and Governance (G) are examined and combined into a so-called ESG score.
- » In a second step, the ESG assessment in the DZ BANK Research approach is supplemented by an economic component from the traditional - more financial, business and economic - analysis of countries, companies and banks. This is intended to extend the definition of sustainability outlined above to include economic aspects. This economic perspective (E) is combined with the conventional ESG perspective for the countries, companies and banks concerned. The result is the four-dimensional "EESG analysis model", which integrates the three conventional ESG dimensions as well as an economic dimension (E).
- » In a third step, the issuers under review are classified into the categories "sustainable" and "non-sustainable" (corporates and banks, including SSAs) and "sustainable countries", "transformation countries" and "non-sustainable countries" respectively. In this way, consideration is given to dynamic sustainability thresholds, hard and soft exclusion criteria as well as current controversies.
- » Sustainable companies and banks are awarded the DZ BANK Seal of Quality for Sustainability.

SECURITIES

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CONCEPT OF DZ BANK SUSTAINABILITY ASSESSMENT

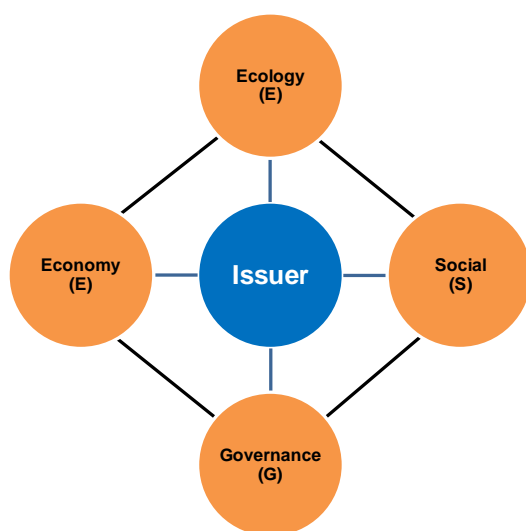
DZ BANK's Sustainability Research centres around an analysis method to assess countries, companies and banks (including SSAs) in respect of ESG criteria. ESG stands for Environmental, Social and Governance and thus for the three conventional dimensions of sustainability. Sustainability can be defined as long-term, responsible, beneficial and resource-preserving action, although this definition is not conclusive. ESG approaches in the issuer perspective generally look at the concepts, activities and problem areas of security issuers with regard to ecology, social commitment and social responsibility, as well as (corporate) governance in the broader sense.

The main objective of the DZ BANK sustainability assessment is to identify a sustainable investable universe of issuers. In the DZ BANK Research approach, this is generally carried out in three steps for each issuer. In a first step, the three conventional sustainability dimensions namely Environmental (E), Social (S) and Governance (G) are examined and combined into a so-called ESG score.

In a second step, this ESG assessment is supplemented by a component from the traditional - more financial, business and economic - analysis of countries, companies and banks. This is intended to extend the definition of sustainability outlined above to include economic aspects. This economic perspective (E) is combined with the conventional ESG perspective for the countries, companies and banks concerned.

The result is the four-dimensional "EESG analysis model", which integrates the three conventional ESG dimensions as well as an economic dimension (E).

DIMENSIONS OF THE DZ BANK SUSTAINABILITY ASSESSMENT



Source: DZ BANK Research

The combination of the four levels is used to generate an "EESG score" in the form of a value between 0 and 100 points. The classifications determined by this scoring procedure do not represent a rating category within the meaning of the EU Rating Regulation.

In a third step, the issuers under review are classified into the categories "**sustainable**" and "**non-sustainable**" (corporates and banks, including SSAs) and "**sustainable countries**", "**transformation countries**" and "**non-sustainable countries**" respectively.

In this way, consideration is given to dynamic sustainability thresholds, hard and soft exclusion criteria as well as current controversies.

Sustainable companies and banks are awarded the DZ BANK Seal of Quality for Sustainability, for example in Research publications.

DZ BANK Research awards this Seal of Quality for Sustainability exclusively for the issuer itself. The award of the Seal of Quality for Sustainability for the issuer does not contain a sustainability verdict on the issuer's current or past and future securities issues.

Furthermore, it should also be noted that sustainability is not a rigid construction, but rather a dynamic process. The objects being examined in the analysis develop dynamically over time, i.e. an issuer that is currently classified as sustainable might not be classified as sustainable in the next evaluation, and vice versa.

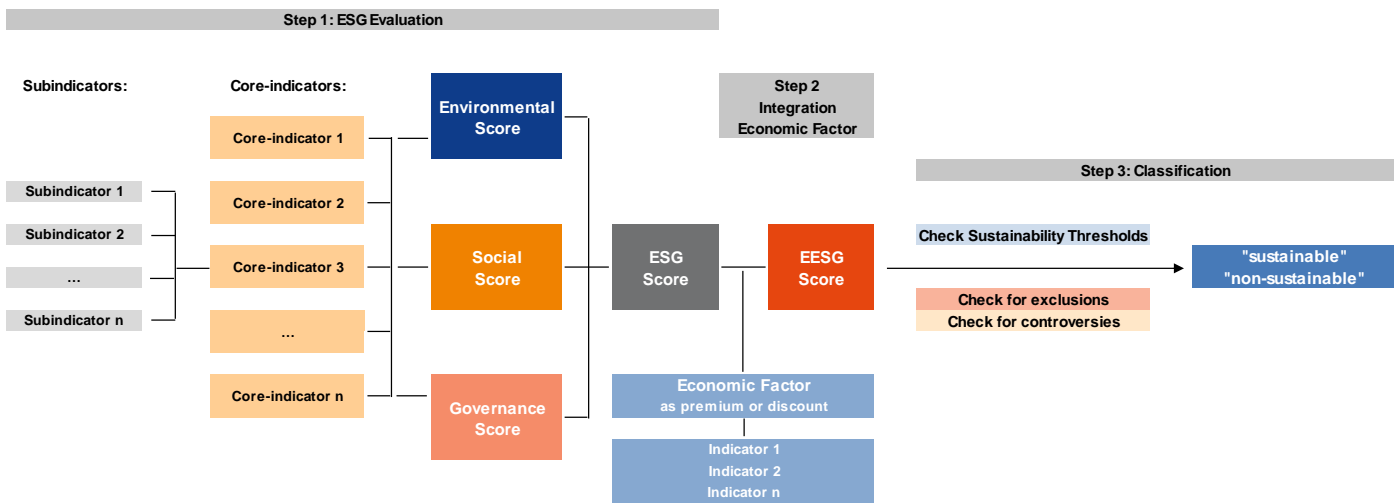
The raw data required for the classic ESG analysis are supplied by our long-standing cooperation partner Sustainalytics, an independent provider of responsible investment services with more than 20 years market experience. The Sustainalytics information also forms the basis for the hard and soft exclusion criteria as well as the controversies screening.

SYSTEMATICS OF DZ BANK SUSTAINABILITY ASSESSMENT FOR COMPANIES AND BANKS

The sustainability assessment for companies and banks is the result of a multi-stage, integrated analysis process.

The process of identifying the universe of sustainable investments consists of **three steps**.

THREE STEPS OF SUSTAINABILITY EVALUATION



Source: DZ BANK Research

Analysis of the conventional sustainability dimensions (ESG)

In a first step, the three conventional sustainability dimensions namely Environmental (E), Social (S) and Governance (G) are examined and combined into a so-called ESG score. The ESG analysis is currently based on 14 core indicators, of which 5 are in the Environmental area, 5 in the Social area and 4 in the area of Governance. These core indicators currently consist of 54 sub-indicators. The sustainability level Environmental currently comprises 17 sub-indicators, the Social level 19 sub-indicators and the Governance level 18 sub-indicators.

Step 1: ESG score

The raw data required for the classic ESG analysis are generally supplied by the cooperation partner Sustainalytics. These data are used to fill a model that is largely automated for analysis. In addition to the raw data supplied, the ESG model contains individualised indicators that allow manual processing and evaluation.

DZ BANK Research selects, defines, and weights the core and sub-indicators in the model. A distinction is made between sector-independent and sector-specific sub-indicators. The former comprise sustainability factors that are valid across all sectors (industries) under consideration. The latter are only applied in those sectors where these factors are relevant. The weighting of the sub-indicators also takes sector-specific characteristics into account, so that the E, S and G levels have different weights for the various sectors. For each sector, the E, S and G weighting is never more than 50 percent and the governance level weighting is always at least 30 percent.

The ESG score results from the weighted combination of the environmental, social and governance scoring. A raw score between 0 points (weak performance) and 100 points (top performance) is awarded for each sub-indicator according to performance. Then, taking into account the defined weightings, the raw scores of all sub-indicators of a core indicator are combined to form the raw score of this core indicator. The weighted cumulated raw scores of all the core indicators of a sustainability dimension in turn result in an E, S and G score. Finally, these three individual scores are weighted and combined to produce the ESG score for an issuer. The ESG score can lie between 0 and 80 points.

Integration of the economic factor

In a second step, the economic (E) sustainability dimension is integrated into the model. An economic (sustainability) factor is determined using economic indicators and key data. This factor varies between 0.75 and 1.25, with a value of 0.75 suggesting weak economic sustainability and a value of 1.25 suggesting robust economic sustainability. The economic factor is multiplied by the ESG score determined. Thereby the EESG score is calculated. Provided that the economic factor is not neutral ($E = 1$), this represents either a premium ($E > 1.0$) or a discount ($E < 1.0$) on the ESG score.

Step 2: EESG score

The economic factor is determined on the basis of largely automated analysis models. The knowledge of other groups from DZ BANK Research was also drawn upon for the development of the models. The data basis for the models is regularly Bloomberg, although key figures from DZ BANK Research are also used occasionally. Due to the specific indicators in the various categories of issuers, four models - for the industry, banking, insurance and real estate sectors - are applied. In each of the four sector models, the three core indicators - namely economic strength, balance sheet quality and profitability - are assessed with the help of various sub-indicators. The evaluation is based on the absolute or relative values of the characteristics defined in the sub-indicators. The weighting of the core indicators in relation to each other is different for the four sectors. The selection and weighting of the sub-indicators for each of the four sector models is also subject to certain variations.

The sustainability score (EESG score) of a company or a bank is calculated by multiplying the ESG score by the economic factor determined. The EESG score can therefore vary between 0 and 100 points.

Classification of the issuers

In a final analysis step, the companies and banks under review are classified into the categories "sustainable" and "non-sustainable", with consideration given here to two dynamic sustainability thresholds, exclusion criteria and current (serious) controversies.

Step 3: Classification using sustainability thresholds, exclusion criteria and screening of controversies

Based on the "best-in-class concept", the companies and banks are classified in the analysis model using two sustainability thresholds (sectoral and cross-sectoral). Both thresholds are not rigid, but flexible over time. The calculation of the sustainability thresholds is based on the EESG scores.

The sectoral sustainability threshold is derived from the average of the sustainability scores (EESG scores) of all analysed issuers in a specific sector. Issuers that fall below the sectoral sustainability threshold with regards to their EESG score are classified as non-sustainable and are not part of the sustainability universe.

The cross-sectoral sustainability threshold is a sustainability threshold that is independent of the sector and is derived from the average value of the EESG scores of all the issuers in question from all sectors. Issuers that fall below the cross-sectoral sustainability

threshold are classified as non-sustainable. This also applies if the issuers concerned show an EESG score above the sectoral sustainability threshold.

Exclusion criteria describe negatively formulated characteristics that result in issuers that exhibit one or more of these characteristics being classified as non-sustainable. A distinction is made between hard and soft exclusion criteria. Hard criteria (e.g. violation of fundamental human rights) are generally classified as non-sustainable. In the case of soft criteria, the classification is only made if a previously defined limit is exceeded (e.g. share of sales from the production of alcoholic beverages for a food company).

In addition to hard and soft exclusion criteria, the analysis model also takes sustainability controversies into account. Depending on the intensity of the controversy, an issuer may be classified as non-sustainable. The screening of companies and banks generally includes environmental, social and governance controversies. The application of the exclusion criteria and the controversies screening are based on information and data from Systainalytics.

As a result, an issuer is classified as either sustainable or non-sustainable:

Sustainable issuers: Issuers that exceed the cross-sectoral and sectoral sustainability threshold and, in addition, do not violate any of the defined exclusion criteria and do not exhibit any serious current controversies. The companies and banks that are classified as sustainable are (in Research publications for example) awarded the DZ BANK Seal of Quality for Sustainability.

Non-sustainable issuers: Issuers that fall below the sectoral sustainability threshold and/or the cross-sectoral sustainability threshold. Also, issuers that exceed the sectoral and cross-sectoral sustainability threshold but violate one or more of the defined exclusion criteria and/or exhibit serious current controversies.

SYSTEMATICS OF DZ BANK SUSTAINABILITY ASSESSMENT FOR COUNTRIES

The sustainability assessment for countries in DZ BANK's sustainability research is the result of a multi-stage, integrated analysis process.

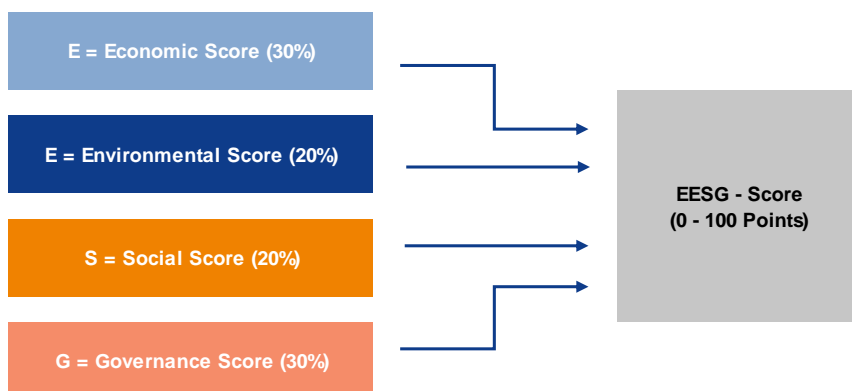
The process of identifying the universe of sustainable investments consists of **three steps**, whereby steps 1 and 2 are closely linked.

Analysis of the conventional sustainability dimensions (ESG)

In a first step, the three conventional sustainability dimensions namely Environmental (E), Social (S) and Governance (G) are integrated into the model based on the raw data and information from Systainalytics. Within the framework of the country model, DZ BANK Research has decided to apply the following weighting due to the high importance of the governance factor (institutional capacity): Environmental (E) = 20%, Social (S) = 20% and Governance (G) = 30%. The classic ESG score results from the combination of the weighted environmental, social and governance scoring. The value of the ESG score can lie between 0 and 70 points.

Step 1: ESG score

COMBINING THE SUSTAINABILITY DIMENSIONS TO FORM THE EESG-SCORE FOR COUNTRIES



Source: DZ BANK Research

Integration of the economic factor

In a second step, the economic (E) sustainability dimension is integrated into the model through the weighted addition of the ESG score to the economic (sustainability) factor. The economic factor is determined using economic indicators and indices. This factor can vary between 0 points (rather weak economic sustainability) and 30 points (rather strong economic sustainability). The economic factor is currently based on 4 core indicators, which are made up of 11 sub-indicators. The evaluation results from a relative consideration of the issuers to each other. DZ BANK Research selects and weights the core and sub-indicators. The data for the economic factor come from Bloomberg or from institutional institutions (e.g. World Bank).

Step 2: EESG score

The sustainability score for a country (EESG score) is calculated by adding the calculated ESG score and the calculated economic factor (E). The EESG score can vary between 0 and 100 points.

Classification of the issuers

In a final analysis step, the countries under review are classified into the three categories "sustainable", "transformation countries" and "non-sustainable". Consideration is given here to dynamic sustainability thresholds, hard exclusion criteria and current controversies.

Based on the consideration that the sustainability of different issuers is a relative concept, the countries are classified in the analysis model using two sustainability thresholds (transformation threshold and sustainable leader threshold). Both thresholds are not rigid, but flexible over time.

The transformation threshold is derived from the average of the EESG scores of all the countries analysed. Countries that fall below the transformation threshold are classified as non-sustainable.

The sustainable leader threshold is derived from the average of the EESG scores of those countries whose score is above the transformation threshold. Issuers that fall below the sustainable leader threshold and exceed the transformation threshold are assigned to the transformation countries, provided they do not violate exclusion criteria and/or current controversies do not exist.

Exclusion criteria describe negatively formulated characteristics that result in issuers that exhibit one or more of these characteristics being classified as non-sustainable. The analysis model currently applies four hard exclusion criteria. These relate above all to the violation of fundamental human and civil rights.

In addition to the hard exclusion criteria, the country model also takes account of sustainability controversies - especially those arising from international agreements, conventions and standards. Depending on the intensity of the controversy, exclusion from the sustainability universe or from the universe of transition countries may occur. The application of the exclusion criteria and the controversy screening are based on information and data from Systainalytics, whereby DZ BANK Research makes certain selections and groupings.

Sustainable countries: Countries that exceed the transformation threshold and the sustainable leader threshold and do not violate any of the exclusion criteria and/or do not currently exhibit any serious controversies.

Transformation countries: Countries that exceed the transformation threshold (but not the sustainable leader threshold) and do not violate any of the exclusion criteria and/or do not currently exhibit any serious controversies.

Non-sustainable countries: Firstly, countries that fall below the transformation threshold and (thus) the sustainable leader threshold. In addition, countries that exceed the transformation threshold and/or the sustainable leader threshold but which violate one or more of the exclusion criteria and/or currently exhibit serious controversies.

Step 3: Classification using sustainability thresholds, exclusion criteria and screening of controversies

I. IMPRINT

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Other Research Information is independent client information which **does not contain any investment recommendations for specific issuers or specific financial instruments**. Such information **makes no allowance** for any individual investment criteria.

1.2 The **mandatory disclosures for Research Publications** (Financial Analyses and Other Research Information) as well as **further remarks, especially regarding the Conflicts of Interest Policy of DZ BANK Research, used methods, procedures and statistics**, can be **read and downloaded free-of-charge** under www.dzbank.com/disclosures.

2. Competent Supervisory Authorities

DZ BANK is supervised as a credit institution and as an investment firm by:

– **European Central Bank** - www.ecb.europa.eu

Sonnemannstraße 20 in 60314 Frankfurt / Main and

– **Federal Financial Supervisory Authority (BaFin)** - www.bafin.de

Marie-Curie-Straße 24 - 28 in 60439 Frankfurt / Main

3. Independent Analysts

3.1 The **Research Publications** (Financial Analyses and Other Research Information) of DZ BANK are independently prepared by its employed analysts or by competent analysts commissioned in a given case on the basis of the binding **Conflicts of Interest Policy**.

3.2 Each analyst involved in the preparation of the contents of this Research Publication confirms that

- this Research Publication represents his independent specialist evaluation of the analysed object in compliance with the Conflicts of Interest Policy of DZ BANK and
- his compensation depends neither in full nor in part, neither directly nor indirectly, on an opinion expressed in this Research Publication.

4. Categories for Evaluations / Statements in Other Research Information

Not every item of Other Research Information contains a statement on a certain investment or a valuation of this investment. The **categories for evaluations / statements** used in **Other Research Information** of DZ BANK are defined as follows.

4.1 Statements on Isolated Aspects of an Investment Decision

Statements on the **isolated evaluation of specific aspects that precede an investment recommendation** on a financial instrument and / or an issuer - **especially** according to the **sustainability criteria** defined by DZ BANK, its defined **value approach**, its defined **asset allocation** (DZ BANK Sample Portfolio), its defined sector strategy Euro-Stoxx (**DZ BANK Sector Favorites**), its defined valuation of payments to beneficiaries (**DZ BANK Dividend Aristocrats**), their **weighting recommendations for market segments** or otherwise defined groups of different issuers, i.e. their **weighting recommendations in the overall market strategy Fixed Income**, in the **sector strategy Corporates** and their **weighting recommendations for covered bond jurisdictions** - are **not investment categories** and therefore **do not contain any investment recommendations**. These isolated statements **alone** are **not sufficient** to form the basis of an investment decision. Reference is made to the explanation of the used relevant methods.

4.2 Sustainability Analysis

Issuers of shares and bonds are analysed on the basis of predefined **sustainability factors** and classified in isolation as '**sustainable**' or '**non sustainable**'. For sovereigns, a classification as '**transformation state**' can be made that lies between these two classifications.

4.3 Share Indices

For defined share indices, share price forecasts are made at regular intervals. From the comparison between the current prices and the prepared forecasts on the development of such equity indices, **investment recommendations that are not generally definable and that cannot be defined in advance** may be developed.

4.4 Currency Areas

The assessment of an investment in a **currency area** is based on the total return that can be expected from an investment in the corresponding **currency area**. As a rule, this total return results primarily from the forecast exchange rate change. In addition, the general interest rate level and a possible change in the yield level of the bonds on the corresponding bond market to be taken into account are included in the assessment. A Sharpe ratio, which adjusts the expected yield using the average standard deviation of the total return over the past two years, is used to calculate which currency areas are "attractive", which are "unattractive" and which are "neutral".

"**Attractive**" means that the risk-adjusted exposure in the currency area is expected to show an above-average and positive return over the next six to twelve months.

"**Unattractive**" means that the risk-adjusted exposure in the currency area is expected to show a below-average and negative return over the next six to twelve months.

"**Neutral**" means that the risk-adjusted exposure in the currency area is expected to show relatively low or average returns over a period of six to twelve months.

The aforementioned returns are **gross returns**. The gross return as success parameter relates to bond yields before deduction of taxes, remunerations, fees and other purchase costs. This compares with the net return of a specific investment, which is not calculated and can deliver significantly lower returns and which measures the success of an investment in consideration of / after deducting these values and charges.

4.5 Weighting recommendations for market segments

The terms "overweight", "underweight" and "neutral weight" are used for recommendations on market segments or otherwise defined groups of different issuers.

"**Overweight**" means that the above bond segment is expected to perform significantly better than the average of the other coverage bond segments over a six-month horizon.

"**Underweight**" means that the above bond segment is expected to perform significantly worse over the six-month horizon than the average of the other coverage bond segments.

"**Neutral weighting**" means that the above bond segment is expected to perform roughly as well as the average of the other bond segments in coverage over a six-month period, or that the risk profile is subject to strong

fluctuations in both directions, so that no active positioning against the benchmark should be taken.

The weighting recommendations for market segments or differently defined groups of different issuers are independent of the recommendations for individual issuers or those for higher or lower market segments. They are relative, i.e. if not all the segments mentioned are rated "neutral", at least one bond segment is rated "overweight" and one bond segment is rated "underweight". Therefore, the weighting recommendations are not an absolute statement of profit and loss.

1. Overall market strategy

The weighting recommendations in the overall Fixed Income market strategy refer to the relative comparison of the covered bond segments with each other. These are currently government bonds, covered bonds, bank bonds (senior unsecured) and corporate bonds (senior unsecured).

2. Sector strategy Corporate Bonds

The weighting recommendations in the Corporates sector strategy refer to the relative comparison of the covered sectors within the corporate bond segment.

3. Strategy Covered Bonds

Our weighting recommendations for Covered Bond jurisdictions ("country") are based on the comparison of a jurisdiction with the iBoxx € Covered Index.

4.6 Derivatives

For derivatives (**Bund futures, Bobl futures, treasury futures, Buxl futures**) the arrows (↑)(↓)(→) merely indicate the trend direction and do not contain any investment recommendation. The trend direction is derived solely from the use of generally recognised technical analysis indicators without reflecting an analyst's own assessment.

4.7 Commodities

"Upward arrow (↑)" means that the absolute price increase expected in the next twelve months is greater than 10%.

"Downward arrow (↓)" means that the absolute price decline expected in the next twelve months is greater than 10%.

"Arrow pointing to the right (→)" means that the absolute price change expected in the next twelve months will lie between +10% and -10%.

5. Updates and Validity Periods for Other Research Information

5.1 The frequency of updates of Other Investment Information depends in particular on the underlying macroeconomic conditions, current developments on the relevant markets, the current development of the analyzed companies, measures undertaken by the issuers, the behavior of trading participants, the competent supervisory authorities and the competent central banks as well as a wide range of other parameters. The periods of time named below therefore merely provide a **non-binding indication** of when an update may be expected.

5.2 **No obligation exists to update an Other Investment Information.** If an Other Research Information is updated, this update **replaces** the previous Other Research Information with immediate effect.

If no update is made, investment recommendations **end / lapse on expiry** of the **validity periods** named below. These periods **begin** on the **day** the Other Investment Information was **published**.

5.3 The **validity periods** for Other Research Information are as follows:

Sustainability analyses:	twelve months
Analyses according to the value approach:	one month
Asset allocation analyses (DZ BANK Sample Portfolio):	one month
Euro Stoxx Sector Strategy (DZ BANK Sector Favourites):	one month
Dividends (DZ BANK Dividend Aristocrats):	three months
Share indices (fundamental):	three months
Currency areas:	six to twelve months
Weighting recommendations for market segments	six months
Overall market strategy	six months
Sector strategy Corporate Bonds	six months
Strategy Covered Bonds:	six months
Derivatives	
(Bund futures, Bobl futures, treasury futures, Buxl futures):	one month
Commodities:	one month

5.4 In a given case, updates of Other Research Information may also be **temporarily suspended without prior announcement** on account of compliance with supervisory regulations.

5.5 **If no updates are to be made in the future** because the analysis of an object is to be discontinued, notification of this shall be made in the final publi-

cation or, if no final publication is made, the reasons for discontinuing the analysis shall be given in a separate notification.

6. Avoiding and Managing Conflicts of Interest

6.1 DZ BANK Research has a binding **Conflicts of Interest Policy** which ensures that the relevant conflicts of interest of DZ BANK, the DZ BANK Group, the analysts and employees of the Research and Economics Division and persons closely associated with them are avoided, or - if such interests are effectively unavoidable - are appropriately identified, managed, disclosed and monitored. Material aspects of this policy, which can be **read and downloaded free-of-charge** under www.dzbank.com/disclosures are summarized as follows.

6.2 DZ BANK organizes its Research and Economics Division as a confidentiality area and protects it against all other organizational units of DZ BANK and the DZ BANK Group by means of Chinese walls. The departments and teams of the Division that produce Financial Analyses are also protected by Chinese walls and by spatial separation, a closed doors and clean desk policy. Beyond the limits of these confidentiality areas, communication may only take place in both directions according to the need-to-know principle.

6.3 The Research and Economics Division does not disseminate Research Publications on issues of DZ BANK or on financial instruments issued by companies of the DZ BANK Group.

6.4 **In principle, employees of the Research and Economics Division and persons closely associated with them may not unrestrictedly invest in financial instruments covered by them in the form of Financial Analyses. For commodities and currencies, DZ BANK has also defined an upper limit based on the annual gross salary of each employee which, in the opinion of DZ BANK, also excludes the possibility of personal conflicts of interest among employees in the preparation of Other Research Information.**

6.5 Other theoretically feasible, information-based personal conflicts of interest among employees of the Research and Economics Division and persons closely associated with them are avoided in particular by the measures explained in **sub-paragraph 6.2** and the other measures described in the policy.

6.6 The remuneration of employees of the Research and Economics Division depends neither in whole nor in the variable part directly or materially on the earnings from investment banking, trade in financial instruments, other securities related services and / or trade in commodities, merchandise, currencies and / or on indices of DZ BANK or the companies of the DZ BANK Group.

6.7 DZ BANK and companies of the DZ BANK Group issue financial instruments for trading, hedging and other investment purposes which, as underlying instruments, may refer to financial instruments, commodities, merchandise, currencies, benchmarks, indices and / or other financial ratios also covered by DZ BANK Research. Respective conflicts of interest are primarily avoided in the Research and Economics Division by means of the aforementioned organizational measures.

7. Recipients, Sources of Information and Use

7.1 Recipients

Other Research Information of DZ BANK is directed at **eligible counterparties** as well as **professional clients**. They are therefore **not** suitable for dissemination to **retail clients unless** (i) an Other research Information has been **explicitly** labelled by DZ BANK as suitable for retail clients or (ii) is disseminated by an investment firm properly authorized in the European Economic Area (EEA) or Swiss to retail clients, who evidently have the necessary knowledge and sufficient experience in order to understand and evaluate the relevant risks of the relevant Other Research Information. Other Research Information is authorized for dissemination by DZ BANK to the aforementioned recipients in in **Member States of the European Economic Area and Switzerland**.

It is neither allowed to provide Other Research Information to customers in the United States of America (USA) nor to conclude corresponding transactions with them.

The dissemination of Other Research Information in the Republic of Singapore is in any case restricted to DZ BANK AG Singapore Branch.

7.2 Main Sources of Information

For the preparation of its Research Publications, DZ BANK uses only information sources which it considers itself to be reliable. However, it is not feasible to make own checks of all the facts and other information taken from these sources in every case. If in a specific case, however, DZ BANK has doubts over the reliability of a source or the correctness of facts and

other information, it shall make specific reference to this in the Research Publication.

The main sources of information for Research Publications are:

Information and data services (e.g. Refinitiv, Bloomberg, VWD, IHS Markit), licensed rating agencies (e.g. Standard & Poors, Moody's, Fitch, DBRS), specialist publications of the sectors, the business press, the competent supervisory authorities, information of the issuers (e.g. annual reports, securities prospectuses, ad-hoc disclosures, press and analyst conferences and other publications) as well as its own specialist, micro and macro-economic research, examinations and evaluations.

7.3 No individual investment recommendation

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