

# **Emerging Markets**

A Research Publication by DZ BANK AG

# Methodological approach to credit research on emerging market sovereigns

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- The term "emerging markets" refers to actual or former developing countries on the threshold of becoming (fully) industrialized and the companies based in these countries. DZ BANK Credit-Research Emerging Markets currently follows and analyses 10 countries (sovereigns) and five companies (corporates) from developing countries, whereby we only make an investment recommendation for the bonds of the five corporates.
- In this context and also in this publication, the term "bonds" always refers to euro-denominated fixed-income senior unsecured bonds of the respective issuer. Provided that the issuer is a sovereign, Emerging Markets Research also uses the term "bonds" for USD-denominated fixed-income senior unsecured bonds of the respective issuer.
- This methodological study relates solely to the consideration of emerging market sovereigns. For an analysis of emerging market corporates, we make reference to the methodological study on corporates.
- The presentation of the emerging market sovereigns is made without any assessment of the issuer and bond ("light coverage"), in other words facts are just compiled together. In this study the factors are presented which are relevant for the presentation of the emerging market sovereigns and on which the compiled facts are based.
- The studies do not include a credit rating within the meaning of Regulation (EU) 1060/2009 of 16 September 2009 regarding rating agencies.

#### **BONDS**

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#### THEORETICAL BASIS

The presentation of the bonds of the respective issuers is based on the following credit spreads.

#### Government spread (bund spread; US Treasury spread)

Owing to the enormous economic power of their issuers, as reflected, *inter alia*, by top scores from rating agencies, the government bonds of the German federal government (*Bundesanleihen* or bunds) and the government bonds of the United States of America (US Treasuries) are generally regarded as quasi-risk-free bonds. Bonds from emerging economies, on the other hand, are generally seen as being risky investments because of the lower economic power and/or other political and economic country factors.

Accordingly, the yields on bunds form the basis for the spread calculation of eurodenominated emerging market bonds while the yields on US Treasuries form the basis for the spread calculation of US-dollar-denominated EM bonds. The spread is the difference between the yield on an emerging market bond and the yield on the underlying German or US government bond having the same maturity. Being the difference between a risk-free and a risky bond, the spread (also called credit spread or risk premium) is an indicator of the credit risk of a bond.

#### Asset-swap spread (ASW)

On a case-by-case basis (or similar), Emerging Markets Research uses the assetswap spread. For an asset swap, a fixed-income bond is combined with an interest rate swap, thus synthetically creating a bond that is virtually free of any interest rate risk. The yield of such a bond is represented by the spread above the relevant yield curve. This spread is the credit spread and acts as an indicator of the credit risk of this bond.

## RELEVANT FACTORS IN THE PRESENTATION OF EMERGING MARKET SOVEREIGNS

The presentation of the emerging market sovereigns is based exclusively on the compilation of facts, which in turn take account of various factors. In this context, the depth of the presentation largely depends on the information made available by the individual sovereigns. The factors listed below represent the main selection and can be taken into account in full or in part.

#### >> Presentation of political, locational and social indicators

The presentation of political, locational and social indicators is based, firstly, on the continuous perusal of country reports and country news (in daily newspapers and financial publications, for example) as well as the review of a wide range of generally accepted expert polls and publicly available rankings. This includes indices on a country's level of development, indices assessing the functioning of government and institutions, indices on the degree of personal freedom within a society, and indices assessing the local conditions. Good scores in the relevant indices and rankings would indicate comparatively positive and liberal living conditions as well as functioning political structures and institutions. This would, in turn, give rise to the expectation of a higher level of political stability and thus the sustained plannability of economic development (as the basis for investment and purchase decisions, for example).

#### Presentation of economic structures

The presentation of the economic structures is intended to provide an overview of the current prosperity level of a country as well as the possibilities of increasing this level (through economic growth, for example). In addition, it is supposed to give an indication as to the vulnerability of an economy to external and internal influences. Another important factor that plays a role in the analysis is the ability of a country to generate income in foreign currencies through the production of competitive export goods for which there is a demand in the global market. A large and broadly diversified economy with a high level of prosperity tends to display more stable growth, as such an economy can also rely on a broad domestic market with high purchasing power and on a wide spectrum of products and buyers, enabling this economy to better compensate for any downturns in exports or falling prices for certain products. A small economy, whose export is largely dependent on a specific region or product (oftentimes commodities), may be much more susceptible to volatilities if, for example, the price for this product on international markets significantly fluctuates. Moreover, a low prosperity level also indicates low production resources (not least capital) and could therefore also be an indication of growth potential being on the downside. Further factors included in the presentation are GDP per capita, growth forecasts, export structures, aspects of macroeconomic diversification, investment activities and monetary policy.

#### Presentation of the sovereign's financial condition

The presentation of a sovereign's financial condition centres around the key financial indicators for indebtedness and budgetary policy as well as the sovereign's (longer-term) debt sustainability derived therefrom. Moderate deficits (or surpluses) in the state budget as well as a comparatively low level of government debt, expressed as a ratio in relation to the gross domestic product, generally suggest higher fiscal flexibility in terms of economic policies as well as a positive perception by the market, which in turn would mean easy access to the financing markets and a lower interest burden. Higher public deficits and an already high level of government debt often entail the risk of sustained unfavourable dynamics in the level of indebtedness or give rise to the conclusion that the government must take certain measures to reduce debt, resulting in a lack of resources for other (more productive) purposes. The current level of sovereign debt along with the budget balance (in each case in relation to GDP) as well as the past performance and any available forecasts for these indicators is often presented. Derived key figures, such as public debt in relation to public revenue, round out the picture. As far as possible, the structures of public revenue and public expenditure along with the amount of any contingent liabilities that may exist (under guarantees, for example) are also included.

#### >> Presentation of external debt and liquidity situation

The presentation of the external debt and liquidity situation centres around the amount and structure of foreign debt as well as the ratio between external assets and external liabilities. Generally, the amount of foreign debt (relative to GDP), the structure of foreign debt (to the extent possible by maturities, currency composition and intended use) as well as the ability to generate export revenues in foreign currencies (usually USD) is presented. The external liquidity position of the country is also examined, whereby there are generally a number of different delimitation approaches. We usually consider foreign currency reserves to be external assets and contrast these with the external funding needs, which consist of the short-term portion of foreign debt and the funding needs that result from any current account deficit. To put it simply, current account deficits arise if

a country's revenues from the international exchange of goods, services and factor income are less than its expenditure from this exchange. A presentation of the current account structures usually rounds out the picture.

The above components often relate to historical data. Furthermore, the presentation is also based on forecasts for a large number of relevant key ratios, such as the development of economic growth or public debt. As the areas analysed illustrate, as outlined above, a given country's fundamental situation is shaped by a multitude of political and economic input factors. While these factors usually apply to all issuers, the individual significance of a specific factor for a given country may differ and also vary over the course of time.

In addition, a range of additional factors also have a major impact on the fundamental development of a given country and are therefore also included in the presentation. This concerns a variety of factors that are, only to a limited extent, within the scope of control of the individual country. Generally speaking, these are factors such as the geographical location and size of the country and, to some extent, its history. More specifically, political aspects of a national or global nature, such as trade and economic policies as well as security policy and political uncertainties, war or problems in individual countries should be mentioned. Finally, the global price trends for commodities, the influence of the central banks' monetary policies in the big industrial countries along with the major political events in the dominating economic blocs (EU, USA and also China and Japan) have an impact as well.

#### SOURCES: DATA, STUDIES, INFORMATION

- A broad range of data and information is utilised in the presentation of EM states. The framework is based on the economic forecasts of DZ BANK Research, such as growth rates of gross domestic product (GDP) and its components, inflation rates, data on the global economy and similar values. Moreover, the fundamental presentation is based on original data, i.e. the reports and figures published by the relevant country (e.g. by its central bank, government or statistical office). In addition, country reports and country data published by international organisations (e.g. IMF, World Bank, OECD, Eurostat) are also used. Moreover, the analyst will resort to further information sources, including the reports of the rating agencies Moody's, S&P and Fitch as well as Bloomberg news and other media.
- As the assessment of the expected fundamental development of a country primarily depends on the future economic development of the core markets whose economic momentum strongly influences global growth, analysts also draw on the respective forecasts and expectations of the relevant analysts at DZ BANK as well as other sources.

Analysts currently obtain their data on market indicators (mainly bond and index data) predominantly from Bloomberg, Reuters, Markit and Dealogic.

#### I. IMPRINT

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

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- his compensation depends neither in full nor in part, neither directly nor indirectly, on an opinion expressed in this Research Publication.

### 4. Definitions of the Categories for Investment Recommendations in Financial Analyses

The categories for investment recommendations in Financial Analyses of DZ BANK are defined as follows:

#### 4.1 Shares:

#### - Fundamental Analysis:

**"Buy"** means that the absolute appreciation expected in the next twelve months is greater than 10%.

"Sell" means that the absolute depreciation expected in the next twelve months is greater than 10%.

"Hold" means that the absolute *price* volatility expected in the next twelve months lies between +10% and -10%.

#### 4.2 Fixed Income Instruments:

The terms "outperformer", "market performer" and "underperformer" are used in the assessment of individual issuers. These are relative estimates, i.e. they are independent of their respective peer groups and therefore independent of any overriding allocation recommendations for market segments (cf. mandatory disclosures on other research information).

The basis for the assessment is the expectation of the credit return/total return of an issuer's bonds - defined differently depending on the segment - over the next six months (cf. DZ BANK method studies at

www.dzbank.com/disclosures). As a rule, the analyst's main scenario is assumed. In cases where an issuer is exposed to high idiosyncratic risks, alternative spread scenarios are also taken into account when calculating the expected credit turn/total return. Since issuers have generally issued a large number of bonds, the expected credit return/total return cannot naturally be quantified.

The expected credit return/total return is compared with the expected credit return/total return of a relevant peer group, usually the respective coverage/peer group. If it is significantly higher than that of the peer group, the assessment is "outperformer". Normally, a higher weighting in the portfolio than in the benchmark should be applied here.

If the credit return/total return is significantly lower than that of the peer group, the assessment is "underperformer". Normally, a lower portfolio weighting should be applied here than in the benchmark.

If the expected credit return/total return essentially corresponds to that of the peer group or if the risk profile includes strong fluctuations in both directions so that no active positioning against the benchmark should be taken, the assessment is "market performer".

#### 1. Government bonds

The issuer-specific investment recommendation for government bonds of a country in the covered peer group is based on whether DZ BANK estimates that the performance resulting from the total return will be better, worse or similar to the peer group of the relevant segment in the following six months.

The basis for the assessment is the expectation of the total return of the issuer's bonds on the basis of national law in the coming six months (cf. DZ BANK method studies at www.dzbank.com/disclosures).

#### 2. Financials (senior unsecured)

The issuer-specific investment recommendation for an issuer's eurodenominated unsecured senior bonds relative to its peer group (iBoxx Banks Senior Index) is based on whether DZ BANK estimates that the performance resulting from the credit return will be better, worse or similar to the peer group in the following six months.

The basis for the assessment is the expected credit return on the issuer's bonds over the next six months (see DZ BANK methodological studies at www.dzbank.com/disclosures).

#### 3. Corporate Bonds (senior unsecured)

The issuer-specific investment recommendation for the euro-denominated unsecured senior bonds of an issuer relative to its peer group (sector/rating class) is based on whether DZ BANK estimates that the performance resulting from the credit return will be better, worse or similar to that of the peer group over the next six months.

The basis for the assessment is the expected credit return of the issuer's bonds over the next six months (see DZ BANK method studies at www.dzbank.com/disclosures).

#### 4. Covered Bonds

The investment recommendation for a covered bond programme of an issuer is based on DZ BANK's assessment as to whether the covered bonds can move better, worse or in step with bonds of comparable covered bond programmes in the following six months. The recommendation categories relate to covered bonds ("collateralised bank bonds" or "covered bonds") denominated in euros and apply only to the publication date.

The basis for the assessment is the expectation of the credit return of the

The basis for the assessment is the expectation of the credit return of the bonds from an issuer's covered bond programme over the next six months (validity of the recommendation: one trading day) (cf. DZ BANK Methodologies at www.dzbank.com/disclosures).

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- 5.1 The frequency of updates of Financial Analyses 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 updated investment recommendation may be expected.
- 5.2 No obligation exists to update an investment recommendation. If an investment recommendation is updated, this update replaces the previous investment recommendation 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 and
- 5.3 The validity periods for investment recommendations (financial analyses) are as follows:

at the time the investment recommendation is completed.

#### Shares:

Fundamental analysis six months

Fixed income instruments:

Government bonds six months

Financials (senior unsecured) six months

Corporate Bonds (senior unsecured) six months

Covered Bonds one trading day

5.4 Evaluations of isolated aspects without investment recommendation have the following validity periods:

Sustainability analyses: one month Analyses according to the value approach: one month Asset allocation analyses (DZ BANK Sample Portfolio): one month Euro Stoxx sector strategy (DZ BANK Sector Favorites): one month Dividends (DZ BANK Dividend Aristocrats): three months **Credit Trend Issuers** twelve 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

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#### 10. FIXED INCOME RESEARCH: RECOMMENDATION CHANGES WITHIN THE LAST 12 MONTHS

| 10. FIXED INCOME RESEARC                       | ,n. KECUI                | MINIENDATION                       | CHANGES WITHIN THE LAST                                   | 12 WONT                  | 13                                 |  |
|--|--------------------------|------------------------------------|---|--------------------------|------------------------------------|--|
| ABN AMRO Bank                                  | 18.09.2019               | Underperformer                     | Germany   | 29.08.2019               | Underperformer                     | Sparebank 1 SR-Bank                      |
| Achmea Bank<br>Adolf Würth GmbH & Co. KG       | 02.12.2019               | Underperformer                     | Germany   | 25.06.2019               | Marketperformer                    | Sparebank 1 Østlande                     |
| Aegon  | 02.12.2019<br>07.10.2019 | Marketperformer<br>Marketperformer | GlaxoSmithKline<br>Goldman Sachs Group                    | 09.09.2019<br>25.06.2019 | Marketperformer<br>Marketperformer | Sparebank 1 Østlande<br>Sparebanken Vest |
| AIB Group                                      | 13.12.2019               | Marketperformer                    | Greece  | 29.08.2019               | Outperformer                       | Standard Chartered                       |
| AIB Group                                      | 18.09.2019               | Underperformer                     | Greece  | 25.06.2019               | Marketperformer                    | Svenska Handelsbank                      |
| AIB Group<br>AIB Group                         | 11.09.2019<br>23.05.2019 | Marketperformer<br>Underperformer  | GRENKE<br>Hamburg Commercial Bank                         | 03.09.2019<br>02.12.2019 | Marketperformer<br>Outperformer    | Svenska Handelsbank<br>Swedbank          |
| AIB Group                                      | 07.05.2019               | Marketperformer                    | Hannover Rück   | 21.11.2019               | Underperformer                     | Swiss Re                                 |
| Airbus   | 02.12.2019               | Marketperformer                    | HeidelbergCement  | 21.01.2020               | Outperformer                       | Telefónica                               |
| Akzo Nobel<br>Allianz                          | 24.04.2019<br>30.10.2019 | Underperformer<br>Underperformer   | Henkel<br>Hochtief  | 02.12.2019<br>23.01.2020 | Underperformer<br>Marketperformer  | Telefónica<br>Telia Company              |
| America Movil                                  | 17.07.2019               | Outperformer                       | Hochtief  | 09.09.2019               | Outperformer                       | Telstra Corp                             |
| Amgen  | 28.11.2019               | Marketperformer                    | HSBC Holdings   | 18.09.2019               | Marketperformer                    | Tesco                                    |
| Amgen<br>Anglo American PLC                    | 25.11.2019<br>22.02.2019 | n.a.<br>Underperformer             | HSBC Holdings<br>HSBC Holdings                            | 23.05.2019<br>03.05.2019 | Underperformer<br>Marketperformer  | Tesco<br>thyssenkrupp                    |
| Apple  | 04.02.2020               | Outperformer                       | Hungary   | 12.04.2019               | NR                                 | Total                                    |
| Apple<br>AT&T                                  | 20.12.2019<br>02.12.2019 | n.a.<br>Marketperformer            | HYPO NOE<br>Iberdrola                                     | 02.12.2019               | Underperformer                     | Toyota Motor                             |
| Australia and New Zealand Banking Group        | 18.09.2019               | Marketperformer<br>Marketperformer | IBM   | 25.04.2019<br>02.12.2019 | Underperformer<br>Outperformer     | Turkey<br>UBS Group                      |
| Austria  | 29.08.2019               | Underperformer                     | IBM   | 24.07.2019               | NR                                 | UBS Group                                |
| Austria<br>AXA                                 | 25.06.2019<br>02.12.2019 | Marketperformer<br>Marketperformer | Indonesia   | 12.04.2019<br>18.09.2019 | NR<br>Underporfermer               | Unicredit<br>Unicredit                   |
| Bank of America                                | 18.09.2019               | Marketperformer                    | ING Groep<br>Intesa Sanpaolo                              | 30.08.2019               | Underperformer<br>Outperformer     | Unicredit                                |
| Bank of America                                | 25.06.2019               | Outperformer                       | Intesa Sanpaolo   | 03.06.2019               | Underperformer                     | Vale                                     |
| Bank of Ireland Group<br>Bank of Ireland Group | 13.12.2019<br>18.09.2019 | Marketperformer<br>Underperformer  | Intesa Sanpaolo<br>Israel                                 | 27.03.2019<br>12.04.2019 | Marketperformer<br>NR              | Vattenfall<br>Veolia Environnement       |
| Bank of Ireland Group                          | 11.09.2019               | Marketperformer                    | Italy   | 29.08.2019               | Outperformer                       | Vodafone Group                           |
| Bank of Ireland Group                          | 23.05.2019               | Underperformer                     | Italy   | 03.06.2019               | Underperformer                     | Vodafone Group                           |
| Bank of Ireland Group<br>Bank of Nova Scotia   | 08.05.2019<br>02.12.2019 | Marketperformer<br>Underperformer  | Italy<br>Jefferies Group LLC                              | 27.03.2019<br>02.12.2019 | Marketperformer<br>n.a.            | Wells Fargo<br>Westpac Banking Cor       |
| Barclays PLC                                   | 13.12.2019               | Marketperformer                    | Jefferies Group LLC                                       | 12.02.2019               | NR                                 | Zurich Insurance Grou                    |
| Barclays PLC                                   | 23.05.2019               | Underperformer                     | JPMorgan Chase & Co.                                      | 18.09.2019               | Marketperformer                    |  |
| Barclays PLC<br>BASF                           | 25.04.2019<br>27.02.2019 | Marketperformer<br>Underperformer  | JPMorgan Chase & Co.                                      | 25.06.2019               | Outperformer<br>Underperformer     |  |
| Bayerische Landesbank                          | 02.12.2019               | Marketperformer                    | KBC Groep<br>KBC Groep                                    | 18.09.2019<br>25.06.2019 | Outperformer                       |  |
| BayWa  | 02.12.2019               | Marketperformer                    | Koninklijke KPN   | 24.07.2019               | Marketperformer                    |  |
| BayWa<br>Belfius Bank                          | 06.05.2019<br>18.09.2019 | NR<br>Underperformer               | Landesb. Baden-Württemberg<br>Landesbank Hessen-Thüringen | 02.12.2019<br>02.12.2019 | Underperformer<br>Underperformer   |  |
| Belfius Bank                                   | 25.06.2019               | Outperformer                       | Linde PLC   | 06.05.2019               | Underperformer                     |  |
| Belgium  | 19.11.2019               | Marketperformer                    | Lloyds Banking Group                                      | 13.12.2019               | Marketperformer                    |  |
| Belgium<br>Belgium                             | 29.08.2019<br>25.06.2019 | Underperformer<br>Outperformer     | Lloyds Banking Group                                      | 23.05.2019<br>02.05.2019 | Underperformer<br>Marketperformer  |  |
| Berlin Hyp                                     | 25.06.2019               | Marketperformer                    | Lloyds Banking Group<br>Merck KGaA                        | 28.02.2019               | Underperformer                     |  |
| BNP Paribas                                    | 02.05.2019               | Underperformer                     | Mexico  | 12.04.2019               | NR .                               |  |
| BP<br>BPCE                                     | 06.02.2019<br>25.06.2019 | Outperformer<br>Marketperformer    | Mondelez International<br>Munich Re                       | 31.07.2019<br>02.12.2019 | Marketperformer<br>Underperformer  |  |
| Brazil   | 12.04.2019               | NR                                 | National Australia Bank                                   | 18.09.2019               | Marketperformer                    |  |
| BT Group                                       | 11.09.2019               | Underperformer                     | Nationwide Building Society                               | 13.12.2019               | Marketperformer                    |  |
| Bulgaria<br>Carrefour                          | 12.04.2019<br>29.10.2019 | NR<br>Marketperformer              | Nationwide Building Society<br>Nestlé                     | 22.11.2019<br>02.12.2019 | Underperformer<br>Marketperformer  |  |
| Carrefour                                      | 11.09.2019               | Outperformer                       | Netherlands   | 29.08.2019               | Underperformer                     |  |
| Carrefour                                      | 18.07.2019               | Marketperformer                    | Netherlands   | 25.06.2019               | Marketperformer                    |  |
| Carrefour<br>Caterpillar                       | 27.05.2019<br>02.12.2019 | Outperformer<br>Marketperformer    | NORD/LB Girozentrale<br>Nordea Bank Abp                   | 02.12.2019<br>18.09.2019 | Marketperformer<br>Underperformer  |  |
| Chile  | 12.04.2019               | NR                                 | Nordea Bank Abp   | 25.06.2019               | Outperformer                       |  |
| Citigroup                                      | 02.12.2019               | Marketperformer                    | Novartis  | 02.12.2019               | Marketperformer                    |  |
| Colombia<br>Commonwealth Bk of Australia       | 12.04.2019<br>18.09.2019 | NR<br>Marketperformer              | Nykredit Realkredit<br>OMV                                | 02.12.2019<br>02.12.2019 | Underperformer<br>Underperformer   |  |
| Cooperatieve Rabobank UA                       | 18.09.2019               | Underperformer                     | OP Corporate Bank   | 18.09.2019               | Underperformer                     |  |
| Cooperatieve Rabobank UA                       | 25.06.2019               | Outperformer                       | OP Corporate Bank   | 25.06.2019               | Outperformer                       |  |
| Crédit Agricole<br>Crédit Mutuel Arkéa SACC    | 25.06.2019<br>25.06.2019 | Marketperformer<br>Outperformer    | Orange<br>Peru  | 21.02.2019<br>12.04.2019 | Marketperformer<br>NR              |  |
| Credit Suisse Group                            | 18.09.2019               | Underperformer                     | Petrobras   | 02.08.2019               | Marketperformer                    |  |
| Credit Suisse Group                            | 25.06.2019<br>12.04.2019 | Outperformer                       | Peugeot SA  | 30.10.2019               | Marketperformer                    |  |
| Croatia<br>Czech Republic                      | 12.04.2019               | NR<br>NR                           | Pfizer<br>Philippines                                     | 18.10.2019<br>12.04.2019 | Marketperformer<br>NR              |  |
| Danone   | 25.07.2019               | Underperformer                     | Poland  | 12.04.2019               | NR                                 |  |
| Danske Bank<br>DekaBank                        | 28.11.2019<br>02.12.2019 | Underperformer<br>Marketperformer  | Portugal<br>Procter & Gamble                              | 25.06.2019<br>30.09.2019 | Marketperformer<br>Marketperformer |  |
| Deutsche Bahn                                  | 01.04.2019               | Outperformer                       | Renault   | 21.10.2019               | Underperformer                     |  |
| Deutsche Bank                                  | 08.07.2019               | Outperformer                       | Renault   | 15.02.2019               | Marketperformer                    |  |
| Deutsche Bank<br>Deutsche Pfandbriefbank       | 25.06.2019<br>25.06.2019 | Marketperformer<br>Marketperformer | Repsol<br>Rio Tinto Ltd.                                  | 20.11.2019<br>02.12.2019 | Marketperformer<br>Outperformer    |  |
| Deutsche Pfandbriefbank                        | 13.05.2019               | Outperformer                       | RLB Niederösterreich                                      | 02.12.2019               | Marketperformer                    |  |
| De Volksbank                                   | 18.09.2019               | Underperformer                     | RLB Oberösterreich  | 23.10.2019               | Marketperformer                    |  |
| De Volksbank<br>Dexia Group                    | 25.06.2019<br>02.12.2019 | Outperformer<br>Underperformer     | Robert Bosch GmbH<br>Roche                                | 02.12.2019<br>02.12.2019 | Underperformer<br>Outperformer     |  |
| DNB Bank                                       | 18.09.2019               | Underperformer                     | Romania   | 12.04.2019               | NR                                 |  |
| DNB Bank                                       | 25.06.2019               | Outperformer                       | Romania   | 19.03.2019               | Marketperformer                    |  |
| E.ON<br>Enel                                   | 17.09.2019<br>03.06.2019 | Marketperformer<br>Underperformer  | Royal Bank of Canada<br>Royal Bank of Scotland Group      | 02.12.2019<br>13.12.2019 | Underperformer<br>Marketperformer  |  |
| ENGIE  | 02.12.2019               | Marketperformer                    | Royal Bank of Scotland Group                              | 23.05.2019               | Underperformer                     |  |
| ENI  | 03.06.2019               | Underperformer                     | Royal Bank of Scotland Group                              | 26.04.2019               | Marketperformer                    |  |
| ENI<br>ENI                                     | 25.04.2019<br>15.02.2019 | Marketperformer<br>Outperformer    | Royal Dutch Shell<br>Russia                               | 29.11.2019<br>12.04.2019 | Marketperformer<br>NR              |  |
| Equinor  | 26.09.2019               | Marketperformer                    | RWE   | 02.12.2019               | Marketperformer                    |  |
| Erste Group Bank                               | 18.09.2019               | Underperformer<br>Marketperformer  | Saint-Gobain  | 01.10.2019               | Marketperformer                    |  |
| EWE<br>Féd. des caisses Desjardins             | 02.12.2019<br>02.12.2019 | Marketperformer<br>Marketperformer | Sanofi<br>SBAB Bank                                       | 02.12.2019<br>02.12.2019 | Marketperformer<br>Underperformer  |  |
| Finland  | 19.11.2019               | Underperformer                     | Schlumberger  | 28.01.2020               | Marketperformer                    |  |
| Finland<br>France                              | 25.06.2019<br>29.08.2019 | Marketperformer<br>Marketperformer | Schlumberger<br>SER                                       | 23.01.2020               | n.a.<br>Underperformer             |  |
| France<br>France                               | 25.06.2019               | Outperformer                       | SEB<br>SEB  | 18.09.2019<br>25.06.2019 | Outperformer                       |  |
| Fresenius SE & Co. KGaA                        | 31.07.2019               | Marketperformer                    | Siemens   | 01.08.2019               | Marketperformer                    |  |
| Fresenius SE & Co. KGaA<br>General Electric    | 20.02.2019<br>11.11.2019 | Outperformer<br>Marketperformer    | Siemens<br>Société Générale                               | 10.05.2019<br>18.09.2019 | Outperformer<br>Marketperformer    |  |
| General Electric                               | 16.08.2019               | Underperformer                     | South Africa  | 12.04.2019               | NR                                 |  |
| General Electric                               | 25.02.2019               | Outperformer                       | Sparebank 1 SMN   | 02.12.2019               | Underperformer                     |  |
|  |                          |                                    |   |                          |                                    |  |

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