January 2020, Frankfurt am Main

ESG factors in RAEX-Europe's Credit Ratings

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1. Overview

According to our credit rating methodologies, Environmental, Social, and Governance (ESG) risks and opportunities are considered in the creditworthiness analysis of the rated entity, and we believe that the role of these factors will continue to increase in the near future.

We take into account ESG factors when we deem them material to the creditworthiness of the entity. I.e. if an ESG event disrupts or could disrupt any of the factors considered in our methodologies within the credit rating horizon, then the ESG risk is disclosed in our reports.

2. Practical application

In our corporate, insurance and bank credit rating methodologies, ESG factors are included as part of our systematic (or industry) risk assessment as well as part of our idiosyncratic (or company level) risk assessment.

We distinguish ESG factors in our credit rating methodologies in two categories:

1. *Inherent* factors
2. *Drivers-of-change* factors

Inherent factors are embedded in our credit rating methodologies; this means that the factor itself is an E, S or G factor. On the other hand, *drivers-of-change* factors are the ones that, even though the factor itself is not E, S or G factor, it can be driven by a development caused by an ESG-related event. We manage the *drivers-of-change* indicators by performing a qualitative analysis and adding a commentary in the press releases.

In terms of E, the classification of risks is the following:

- **Physical risks** are those that, when material, will have a direct effect derived from environmental threats.
- **Transition risks** have to do with the impact of following the environmental regulations.

2.1 *Inherent* factors

Governance factors are the most frequently seen among the three ESG elements, especially in our sovereign credit rating methodology. In this methodology, governance indicators are key and central for our model. These help us to define the ability of the government to manage the economy in a way that it can comply with its financial obligations by maintaining stability and institutional effectiveness.

In our other credit rating methodologies, we have whole sections that include governance and management factors and sub-factors.

Example of possible ***Governance*** factor:

- Factor in our corporate credit rating methodology:
    - Factor: 3. Corporate risks analysis
    - Sub-factor: 3.6 Risk management organization

2.2 *Drivers-of-change* factors

Environmental and Social factors are mostly used as *inherent* factors in our sovereign credit rating methodology. In our other methodologies, they are mainly *drivers-of-change* for many factors. Meaning that they can certainly disrupt factors which we indeed take into account in our methodologies.

Example of possible ***Environmental*** driver:

- Factor in our corporate methodology:
  - Factor: 1. Business risks analysis
  - Sub-factor: 1.2 Growth prospects and trends on key sales markets
- Possible driver:
  - **Environmental Investments**: An energy company is planning to develop windmills. Given the current demand and government support for renewable energy, we expect the company to consistently grow given that its expansion and development plans are in line with the market trends and projected demand.

Example of possible ***Social*** driver:

- Factor in our corporate methodology:
  - Factor: 2. Financial Risk Analysis
  - Sub-factor: 2.5 Profitability
- Possible driver:
  - **Health and Safety**: A manufacturing company experienced a high rate of accidents in the workplace, which resulted in higher operational costs, ultimately hurting profitability.

3. Time horizon

Certain ESG factors, especially E and S, have or may have an impact on the entity outside the time horizon covered by our models. In this case, the quantitative impact is not reflected. However, we may take into account some drivers if we deem them important to spur a change in one of our qualitative factors.

Table 1. Examples of ESG factor treatment depending on the time horizon

	Event	How we account for it?
Within the time horizon	A real estate developer had to suspend operations due to a prolonged period of heavy storms which caused flooding.	The factor can be modelled within the rating's time horizon to account for the **quantitative** financial losses.
Outside the time horizon	The government is preparing a policy to penalize companies producing GHG emissions.	Since the policy is not yet in place it is hard to measure the financial impact. However, we would make a **qualitative** assessment in order to account for this risk.

4. How do we account for ESG in our credit ratings for each asset class?

The relevance of the ESG factors depends on the rating type. Tables with descriptions below list the most significant ESG factors for each type of the credit rating methodology: sovereign, regions, banks, corporate and insurance methodologies.

4.1 Sovereign[1]

ESG factors have the highest impact on our sovereign credit ratings. The ESG-related *inherent* factors which are observed the most in our sovereign methodology are in terms of **governance**, as well as **social** and are related to the section *Institutional development of the country*. Moreover, the section *Characteristics of government policy* also includes two factors, which are related to governance. In terms of **environmental** factors, many countries, specially developing economies, are exposed to environmental and climate change risks, which are assessed in the *Geographical and geopolitical conditions* section. The *inherent* ESG factors for the aforementioned sections are listed in the following table alongside their levels of relevance for the final Sovereign credit rating:

Table 2. Sovereign ESG *inherent* factors and its relevance

	ESG *inherent* factor	Relevance[2]
Characteristics of government policy		
Quality of fiscal policy	*G*	*H*
Quality of monetary policy	*G*	*H*
Geographical and geopolitical conditions		
Natural resources	*E*	*M*
Natural and climatic threats	*E*	*M*
Environmental threats	*E*	*M*
Institutional development of the country		
Level of corruption, CPI	*G*	*M*
Government Effectiveness Index	*G*	*VH*
Quality of the business environment, position in Doing Business Ranking	*S*	*M*
Level of investment in human capital, adjusted for inequality	*S*	*M*
Rule of Law Index	*G*	*M*
Transparency of government policymaking Index	*G*	*L*
Level of information transparency of the government	*G*	*L*
Political Stability and Absence of Violence/Terrorism Index	*G*	*M*
Stress factors		
Natural disasters, constant exposure to difficult natural conditions	*E*	*VH*

Concerning the *drivers-of-change* factors, some **environmental** examples would be a rise in sea level, which would cause disruptions and could have a substantially effect on GDP developments. In the **social** indicators we could refer to the social opportunities, such as access to finance, considered during the assessment of banking system for each country. Social risks, such as legal protection of workers, civil and political rights indicators could also be *drivers-of-change* material to the assessment of credit risk.

[1] See Sovereign credit rating methodology: https://raexpert.eu/sovereign/#conf-tab-3
[2] VH – very high; H – high; M – medium; L – low; VL – very low;

4.2 Regions[3]

In the majority of cases, ESG factors pose a negligible direct risk to creditworthiness of the region. However, there are some *inherent* ESG factors which we include in our regions credit rating methodology. **Governance** factors are included in the sections *Investment attractiveness*, *Budget balance* and *Political risks*, while we account for **social** indicators in the section *Labor market features*. The *inherent* ESG factors for these sections are mentioned in the following table alongside their level of relevance for the final Region credit rating:

Table 3. Regions ESG *inherent* factors and its relevance

	ESG *inherent* factor	Relevance
Labour market features		
Average wage amount	*S*	*L*
Unemployment rate	*S*	*L*
Investment attractiveness		
Investment attractiveness rating	*G*	*VH*
Budget balance		
The quality of budget planning	*G*	*M*
Political risks		
Risks of conflict between the regional legislative and executive authorities	*G*	*M*
Risks of conflict between regional and federal authorities	*G*	*H*

In addition, the level of infrastructure development and geographical location could be affected by *drivers-of-change* factors in regard to the **environmental** analysis, such as climates change risks, which could potentially affect access to water source for a region.

4.3 Banks[4]

The overall ESG-related impact on banks' creditworthiness is moderate. However ESG factors are considered in both the *Banking Sector Risk (BSR) score*, which is the assessment of the systemic risk, and in the idiosyncratic creditworthiness assessment of the bank. **Social** opportunities, in particular access to finance, are part of the credit conditions assessment of the country, where the rated bank operates. ESG factors in our methodology for assigning credit ratings to banks are mainly related to **governance** risks: corporate structure and risk management quality. Our analysts particularly focus on the transparency, ownership and executive board structure, any kind of reputational burden coming from the board or shareholders actions. Assessment of the risk management is mostly often analyzed in the context of existing policies adequacy to mitigate operational, market, informational and other risks as well as quality of the monitoring and control of these policies compliance.

[3] See Regions credit rating methodology: https://raexpert.eu/regions/#conf-tab-3
[4] See Banks credit rating methodology: https://raexpert.eu/banks/#conf-tab-3

Table 4. Banks ESG *inherent* factors for Systemic Risk and its relevance

	ESG *inherent* factor	Relevance
Credit Conditions		
Domestic credit provided by financial sector	*S*	*H*
Institutional Framework		
Regulation of securities exchanges	*G*	*M*
Regulatory Quality Estimate	*G*	*VH*
Economic Factors		
WEF Legal rights index	*G*	*L*
Property price to income ratio	*S*	*L*

Table 5. Banks ESG *inherent* factors for Idiosyncratic Risk and its relevance

	ESG *inherent* factor	Relevance
Corporate governance and risk management		
Corporate governance, business processes and information transparency	*G*	*H*
Ownership structure	*G*	*H*
Risk management	*G*	*M*
Strategic support	*G*	*M*
Stress Factors		
Regulation and supervision risks	*G*	*M*

In terms of *drivers-of-change* factors, indicators, such as geographic diversification, could be negatively affected in case the operations of an institution are concentrated in regions where there are natural or climatic threats, which might affect the financial performance of the bank. Moreover, the risk exposure of the loan portfolio could be also affected by *drivers-of-change* factors based on **environmental** items, such as carbon tax exposure of borrowers, among others. The credit risk assessment can also be influenced by **social** factors as *drivers-of-change*. For instance, a low level of financial product responsibility could hurt the relationship management of the bank incurring in a risk of losing customers and, thus, impacting the revenues and profit.

4.4 Corporate[5]

The consideration of the ESG risks in our Corporate Credit Ratings methodology follows the same logic as in the assessment of banks, as the BSR is a part of the *Country and Industry Risk (CIR)* score assessment, and corporate structure and risk management quality have significant and direct impact on the corporate creditworthiness. In terms of *inherent* factors, all of them are related to **governance** and we assess them in our section *Corporate risk analysis*.

[5] See Corporate credit rating methodology: https://raexpert.eu/corporate/#conf-tab-3

Table 6. Corporate ESG *inherent* factors for Idiosyncratic Risk and its relevance

	ESG *inherent* factor	Relevance
Corporate risks analysis		
Owners	*G*	*VH*
Current Decision Making Practice	*G*	*M*
Efficiency of relations with subsidiaries and affiliates (S&A)	*G*	*L*
Degree of information disclosure	*G*	*H*
Quality of strategic business planning	*G*	*H*
Risk management organization	*G*	*L*
Insurance coverage	*G*	*H*

In regard to *drivers-of-change* factors, the **social** sphere might be affected by issues such as strikes, health and safety rates and standards, as well as employee treatment, could potentially affect production rates and have a direct impact on revenues, which, as a result, affect the level of creditworthiness of the corporate. From the **environmental** perspective, depending on the industry where the company operates, we analyze whether factors, such as air, soil and water pollution, water stress, carbon regulations, among many others, have a direct material impact on factors such as Market position or Growth prospects and trends in key sales markets, for instance.

However, even though adopting practices to transition to a low carbon economy will probably lead to a better market position in the future and will enhance the strength of the company, we carefully consider how this is implemented, as there could be a twofold outcome from this. Applying these de-carbonization practices with a wrong strategy or using a wrong technology could affect the company's credit rating as costs will rise and there is no guarantee of lowering emissions despite the entity's good intentions.

4.5 Insurance companies[6]

Similar to our corporate credit ratings, ESG factors are also considered in our *Industry Sector Risk (ISR)* assessment through the country score, which is a combination of our BSR score and the Country Credit Environment score. The ESG *inherent* factors in our insurance methodology are mostly related to **governance** in the sections related to corporate structure and risk management, similar to our other methodologies. However, unlike banks and corporates, we do have one *inherent* **environment** factor and one **social** factor while analyzing the idiosyncratic risk of the companies. On the one hand, the environment factor is in the *Insurance portfolio* section: Geographical diversification of the insurance portfolio. Due to the nature of non-life insurers, we take natural disasters and climate threats into consideration while evaluating the geographic regions where the company writes premiums for insurance segments, such as property. On the other hand, the social *inherent* factor is in our *Corporate management and business-processes* section along with the rest of the governance *inherent* factors. Moreover, there is an additional governance factor in the *Size factor and market position* section.

[6] See Methodology of assigning reliability ratings to insurance companies: https://raexpert.eu/insurance/#conf-tab-3

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Table 7. Insurance ESG *inherent* factors for Idiosyncratic Risk and its relevance

	ESG *inherent* factor	Relevance
Size factor and market position		
Compliance with regulation	*G*	*VH*
Corporate management and business-processes		
Owners' reputation	*G*	*VH*
Shareholding structure	*G*	*M*
Changes in the shareholding structure for the year	*G*	*L*
Strategy of the company	*G*	*M*
Level of transparency	*G*	*M*
The auditor for IFRS reports	*G*	*VH*
Human resources and management	*S*	*M*
Quality of reporting	*G*	*H*
Risk management structure	*G*	*VH*
Insurance risk management	*G*	*L*
Credit risk management	*G*	*L*
Market risk management	*G*	*L*
Liquidity risk management	*G*	*L*
Operational risk management	*G*	*L*
Insurance portfolio		
Geographical diversification of the insurance portfolio	*E*	*H*

Some of the main *drivers-of-change* factors come into place when we analyze the investment portfolio in terms of controversial assets related to both **social** and **environmental** factors.