October 2017

ESG Rating Methodology

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Contents

Overview

The methodology built by Covalence for calculating ESG ratings integrates thousands of news pieces gathered online and classified according to 50 Environment, Social, Governance (ESG) criteria inspired by the Global Reporting Initiative, and to their positive or negative sentiment, regarding 3400 companies worldwide.

Covalence has developed a unique combination of automated content processing of texts in original language with qualitative assessment by an international team of analysts. The combined use of artificial intelligence and human analysis allow us to interpret large amounts of data within a short time.

While relying on universally shared values, this methodology faces the characteristics of modern society such as cultural diversity, democratic debate and scientific uncertainty, and the challenges of defining objective ethical criteria and credible information sources.

Our conviction is that a robust ESG performance translates trust and consensus of the different stakeholders in a company, and its ability to adequately factorize social and environmental concerns. It is an indicator of the quality of risk management, brand positioning, innovation capacities, and strategic vision. It is also a vector of the return on investment of Corporate Social Responsibility programs.

International norms and standards

The EthicalQuote reputation index integrates thousands of news pieces gathered online and classified according to 50 Environment, Social, Governance (ESG) criteria inspired by the Global Reporting Initiative's G3.1 sustainability reporting guidelines, as well as by the following international norms and conventions:

- Universal Declaration of Human Rights
- OECD Guidelines for Multinational Enterprises
- ILO Declaration of Principles concerning MNEs and Social Policy
- Rio Declaration on Environment and Development
- Agreements of the World Summit for Social Development
- UN Global Compact
- UN Millenium Goals
- Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework

These treaties and conventions represent the values of the international community, the principles and goals that are shared across the world.

Defining ESG criteria: the problem of subjectivity

While the general goals and principles are objects of wide consensus, there are different opinions on the means to reach these goals and to respect these principles.

The action of defining ethical and ESG criteria is highly subjective, it is influenced by the position, beliefs and experience of the subject, of the person or organization that is doing so. The ***problem of subjectivity***, the difficulty of defining ethics, comes in a modern, *open society* (Karl Popper), where there exists political pluralism, democratic debate, cultural diversity, social complexity, scientific uncertainty, and philosophical doubt (“I know that I don’t know”, Socrates).



One can think of many ethical dilemmas relating to business ethics, such as:

- GMOs: threat to nature of chance for humanity?
- Nuclear power: potential killer or clean energy source?
- Drug patents: obstacle to treating the poorest or incentive for R&D?
- Boycotting Burma: fostering or slowing democracy?
- Biofuels: green mobility vs right to food?

Beyond the general goals and principles, information is therefore needed for defining ethical criteria, for setting what an ethical behavior means in practice.

Gathering information for assessing practices: the problem of credibility

Information is also needed for assessing the policies and practices of companies against the set criteria. Such information can be sourced from the companies themselves. Originally social rating agencies tended to use companies as their main source of information.

Such quest for transparency is challenged by confidentiality and by the voluntary nature of sustainability reporting. Companies naturally tend to focus their communications on the positive aspects of their performance.



Information for assessing corporate sustainability can also be sourced from third parties such as NGOs, media, or blogs; such information can be positive or negative regarding the role of companies.



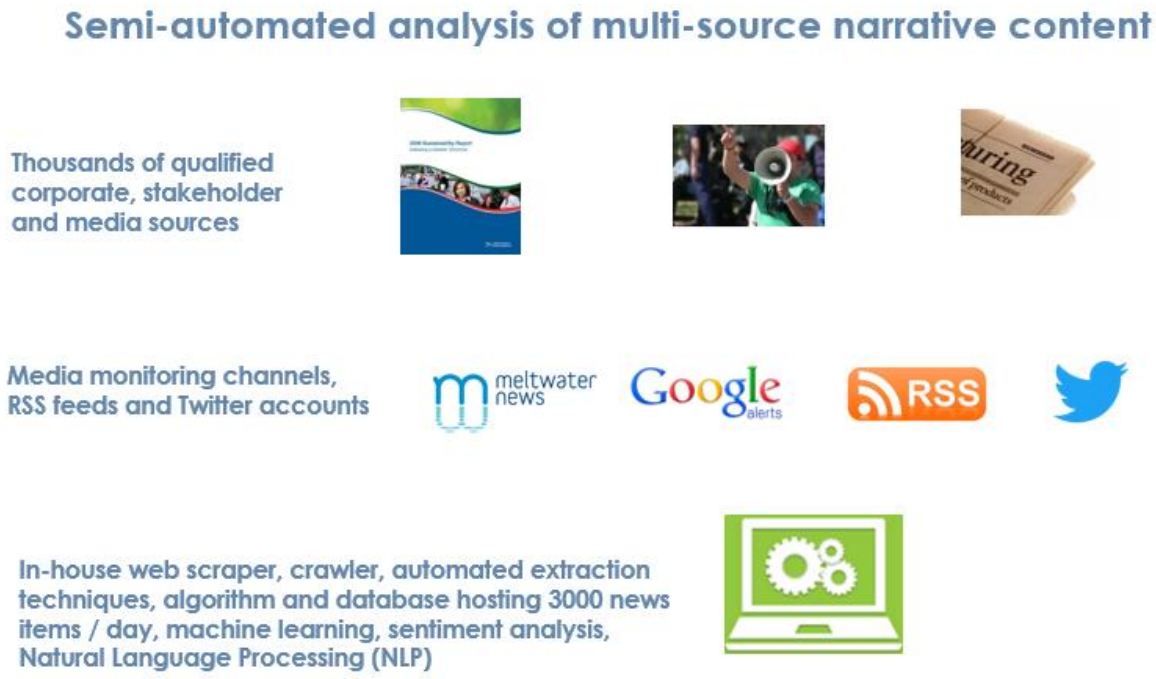
So, whom should we believe? Companies or third parties? What kind of information should we use? Positive or negative? Whether considering to use internal or external information, we have to deal with the ***problem of credibility*** of such information.

Semi-automated analysis of narrative content

Covalence has developed a methodology for the semi-automated analysis of narrative content[1] found among corporate, media, and stakeholder sources, enriched by human interventions to classify documents in terms of polarity (positive/negative) and criteria.

Corporate, stakeholder and media sources are screened to extract relevant data with search engines and web-scrapers. Covalence uses a customised set of software and machine learning techniques for data extraction and classification. On top of it, a team of analysts double checks entries proposed by the software, thus ensuring high curation standards. We use machine learning to help analysts in their decision-making and reduce redundant and copy-paste work.

Today, Covalence's database includes more than 1'000'000 classified and humanly curated documents. This database enables to leverage the use of machine learning techniques with the help of our scientific advisor Prof. Patrick Ruch, a field expert and a professor at the University of Applied Sciences, Geneva. The use of classification algorithms allows us to fully automatize the extraction and pre-classification of information, including complex information such as polarity - or sentiment - as well as multiple criteria. To classify this data Covalence uses a set of 50 criteria inspired by the GRI sustainability reporting guidelines[2].



Sentiment analysis allows us to code the *polarity* of a given text. The polarity can be positive, negative, or neutral. In Covalence's methodology only the positive and negative polarities are used; neutral information is not considered. A distinction is made between "positive news" (information on what the company does for society, compliment), and "negative news" (information on what the company should do for society, criticism). Explicit

[1] Narrative content covers different sorts of text, such as press articles, corporate press releases or NGO campaign material. It can be opposed to quantitative data such as numbers and ratios (tons of CO2, % of women in board, etc.). To analyze narrative content one needs specific data gathering and classification tools, which increasingly rely on artificial intelligence techniques (machine learning, natural language processing).

[2] http://www.ethicalquote.com/index.php/methodology/criteria/

positive or negative words have to be found in the text for demonstrating a polarity and allowing the document to be coded and accounted in the system.

Basic metrics: quantities of positive and negative news items

The basic metrics used by Covalence are quantities of news items gathered on the web (texts, web pages), that can be coded as having a positive or a negative orientation towards named companies (polarity, sentiment). More precisely, a distinction is made between “ethical offers” (“information on what the company does for society”, positive news, compliment), and “ethical demands” (“information on what the company should do for society”, negative news, criticism).

Explicit positive or negative words have to be found in the text for demonstrating a polarity and allowing the document to be coded and accounted in the system. Examples of negative words: “predator”, “undermining”. Examples of positive words: “contributing”, “helping”.

To be coded into Covalence database a text must also be related to at least of the 50 Covalence EthicalQuote Criteria. One criteria only is used if there is little information (usually a short document), and two or more criteria are used if the document provides detailed information (longer document). For the purpose of coherence and stability, 5 criteria is the maximum allowed per news item.

Here is how relevant texts are accounted and weighed:

A text receives 1, 2, 3, … points, whether it is coded with 1, 2, 3, … criteria.

- The point(s) received by a text gets a positive or a negative sign according to its orientation. Texts can therefore weigh -1, -2, -3, …, +1, +2, +3,…
- A text may be entered twice if both orientations are found: for example, the same press article can be coded once as a positive news with criteria 3 and 24 (weigh: +2), and once as a negative news with criteria 34 (weigh:-1). The cumulated weigh of the text will therefore be (+2) + (-1) = +1.

Historical erosion

A historical erosion factor is applied to the quantities of positive and negative news with recent articles weighting more than older ones. We don’t want companies scoring high to rest on their laurels and we want laggards to have a chance to improve. As a convention, each month, positive and negative articles lose 2% of their value. For example, an article published 10 years ago has lost 90% of its information value (weight).

Scoring system

Here is how we calculate scores for the 3400 companies included in the universe:

Total news = positive news + negative news

A score is given by the ratio between positive news and total news. For example, if a company has Total news = 100, Negative news = 40, Positive news = 60, the score is 60 / 100 = 60%.

Scores are calculated globally across dimensions (transversal) as well as within each dimension: Governance, Economic, Environmental, Labour Practices and Decent Work, Human Rights, Society, and Product Responsibility.

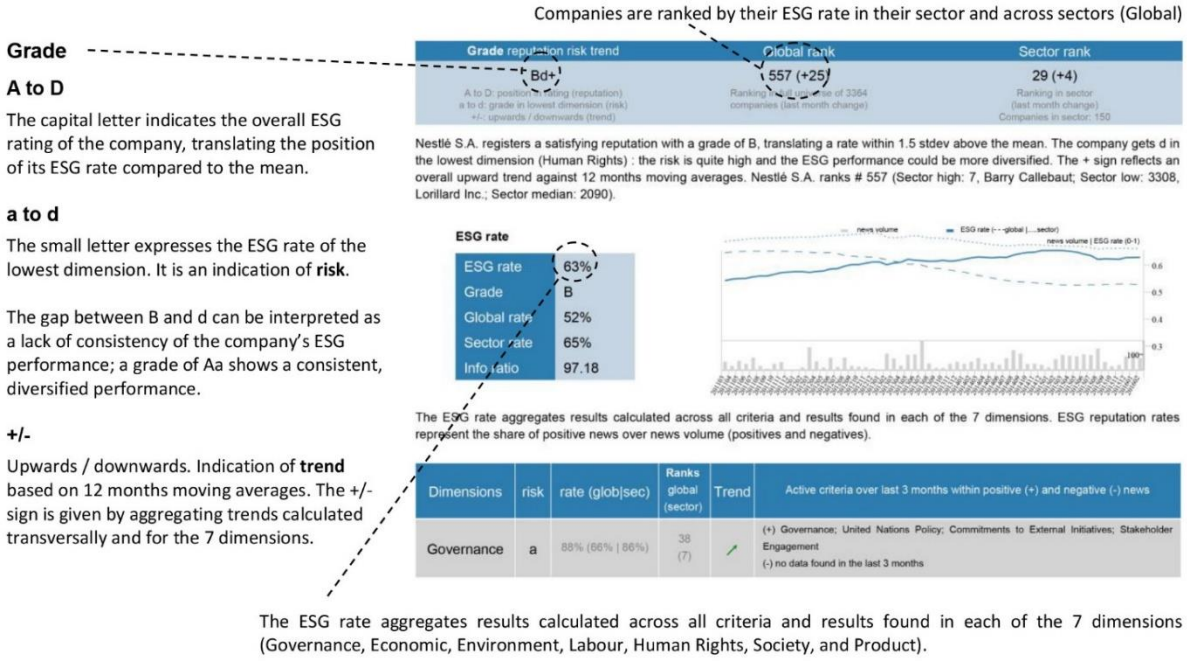
The score is given by the following formula:

Final score = (Transversal + ((Governance + Economic + Environmental + Labour Practices and Decent Work + Human Rights + Society + Product Responsibility)/7))/2.

The final score combines a transversal performance (Transversal), which can be strongly influenced by one or a few widely-shared issues, initiatives or controversies that are found across categories and criteria (for example, a major accident with human, economic and environmental consequences, or a corporate initiative aiming at improving labour conditions, supporting local communities and stimulating economic development), with the average of scores calculated in each of the seven categories, which favours companies showing a diversified performance. Therefore, in order to get a good final score, a company must demonstrate solid credentials across all, or most dimensions.

Threshold for under-documented companies

In the case of scores relying on a low volume of information, a threshold is applied to bring scores close to 50% (neutral score). This is to avoid having very high or very low scores based on a small amount of data.



Current developments

We are currently integrating ESG data provided by Thomson Reuters into our standard ESG ratings; such ESG data describing policies and commitments of companies (disclosure) is confronted to the narrative content sourced from the media and stakeholders (reputation).

Covalence ESG Rating Methodology Overview		
Level of analysis	**Disclosure**	**Reputation**
Source of information	Companies	Stakeholders, Media
Type of analysis	Analysis of ESG data self-reported by companies (acquired from external providers) Semi-automated analysis of narrative content (in-house): Corporate reports, websites & communications	Semi-automated analysis of narrative content (in-house): • Media reports • Publications by stakeholders (NGOs, trade unions, etc.)
Polarity	Positive (self-reporting and corporate communications)	Positive (third-party endorsement of companies' policies and initiatives)
		Negative (ESG controversies)
Criteria	Inspired by the Global Reporting Initiative (GRI); Sustainable Development Goals; Peacebuilding Business Criteria; other customizable metrics	

Universe

Covalence covers a universe of 3400 among the world's largest capitalizations, as well as the components of the Swiss Performance Index.

Criteria

The data is classified according to 50 criteria which are distributed in 7 categories. Covalence's criteria are inspired by the Global Reporting Initiative (GRI) G3.1 sustainability reporting guidelines. Here are the 7 categories as well as examples of criteria:

- **Governance, Commitments, and Engagement** (Governance, Commitments to External Initiatives, Stakeholder Engagement)
- **Economic** (Fiscal Contributions, Social Sponsorship, Wages, Local Sourcing, Local Hiring, Infrastructures)
- **Environmental** (Energy, Water Management, Biodiversity, Emissions, Waste Management, Pollution)
- **Labor Practices and Decent Work** (Employee Benefits, Trade Unions, Health and Safety, Training and Education, Diversity and Equal Opportunity)
- **Human Rights** (Human Rights Policy, Discrimination, Child Labor, Forced Labor, Security Practices, Indigenous Rights)
- **Society** (Local Communities, Humanitarian Action, Corruption, Lobbying Practices)
- **Product Responsibility** (Product Safety, Marketing Communications, Social Impacts of Products)

The Criteria have the following characteristics:

- Rely on the Global Reporting Initiative's sustainability reporting guidelines

- Based on widely accepted principles, not on specific ethical choices, to cope with diversity and pluralism
- Capacity to cover changing aspects of companies' operations
- Capacity to cover diverse actions led by stakeholders and media coverage

Rather than definitive moral judgments, the criteria should be seen as open boxes allowing to store and organize information on a barometer, case-by-case basis. Covalence criteria are not sector-specific. They are designed to cover any multinational company and to allow cross-sector comparisons.

Download:

- Covalence EthicalQuote Criteria (.pdf)

Additional legal references of Covalence EthicalQuote criteria are: the Universal Declaration of Human Rights, the OECD Guidelines for Multinational Enterprises, the ILO Declaration of Principles concerning MNEs and Social Policy, the Rio Declaration on Environment and Development, the agreements of the World Summit for Social Development, the UN Global Compact, and the UN Millenium Goals, and the UN Guiding Principles on Business and Human Rights.

In the process of setting its initial list of criteria, Covalence has undertaken discussions with, and used feedback from the following NGOs: ADAP (Association pour le Développement des Aires Protégées), AGSI (Association Geste Solidaire Immédiat), GRAD (Groupe de Réalisation et d'Animation pour le développement). The creation of Covalence in 2001 benefited from the support of the Graduate Institute of International and Development Studies (Geneva, Switzerland).

Sources

Covalence gathers online information using search engines, individual websites and correspondents:

Search engines

Search engines are the main providers of news aggregated by Covalence. They are used to gather information from millions of potential sources among Companies, Media, Blogs, NGOs, Consultants, Trade Unions, International Organisations, Governments and Academia.

Individual websites

Covalence follows individual websites that regularly publish relevant content.

Languages

Information is searched for in four languages: English, French, German, Spanish.

Neutrality

Covalence does not see some sources as more reliable than others. Any source is considered equally. Covalence does not validate information sources, neither the content of information. What we do is collect, confront and synthesize the maximum of relevant documents from different sources. Our policy is to put ourselves in the position of an independent newspaper in front of statements, opinions, readers letters: publish any information provided it has relevance and an identified author, without endorsing its content.

http://www.ethicalquote.com/index.php/services/methodology/sources/

Equal weighing of individual sources

Covalence follows a principle of equal weighing of individual sources. The "size" of source (audience, quantity of readers / viewers) is not taken as a weighing criteria, neither is placement in print press. Following are our arguments for applying such an equal weighing approach:

a) The modern world is characterized by social complexity, cultural diversity, ethical pluralism and scientific uncertainty: considering "small" sources at the same level as "large" ones is a way to cope with such complexity and diversity.

b) It is technically difficult to measure the size, or popularity of sources and find a weighing factor for such an heterogeneous ensemble of sources as large medias, specialized NGOs, individual correspondents and multinational companies' headquarters.

c) Western and Anglo Saxon sources are overrepresented in Covalence database, because such sources are more numerous online and are more easily accessible than others. Applying a weighing factor could amplify the already existing overrepresentation of Western and Anglo Saxon sources.

d) Some search engines email alerts used by Covalence only cover pages with the highest popularity (page rank): for a part the most popular pages are already naturally selected.

e) Echoes, repetition make weigh. Often one particular issue is covered by different sources. This produces several points in Covalence database, and this is how a weighing process is naturally working: the system measures the noise made by news, the echoes generated by a story among numerous sources. Rather than one particular document, it is the aggregation of a large number of documents that gives a significant picture of reality.

Credibility

The data gathered by Covalence is made of various pieces of narrative content, or articles, gathered online from the media, companies and their stakeholders. What is the **credibility** of such content? We are cautious and neutral regarding the credibility of all individual articles, and admit they can be biased, subjective, spinned, PR oriented, be they published by companies, NGOs, governments, or the press. This is why each individual article has a limited weight in the system and cannot have a strong influence on the rating. It is only when a story is covered by several different sources that its weight becomes important, in the spirit of democratic debate and the search for consensus.

All sources and articles have an equal weighting *a priori*. Then it is the resonance, echoes, repetition, diffusion that make the weight. We assume that if a source publishes a story lacking credibility (greenwashing), it will be either ignored by other sources, or generate contradictions which will be coded as well and accounted as negative data points so they will counterbalance the positives. On the other side, if a respected source publishes credible, interesting content, we expect this story will be picked up by other sources, which will generate additional data points in the system.

ESG rating methodologies mostly relying on corporate responses to questionnaires and corporate sustainability reporting are also facing credibility issues. ESG rating is not a direct, objective measurement of reality, it is an assessment of policies, reports, or articles that can only provide a proxy of reality. A multi-source methodology that compares corporate disclosure and stakeholder perceptions is a valuable way to approach this reality.