LOCAL AND REGIONAL GOVERNMENTS RATING METHODOLOGY

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OVERVIEW AND SCOPE

The present methodology has been developed by Beyond Ratings and applies to Local and Regional Governments (LRGs). The main goal of this methodology is to define the methodological framework used by Beyond Ratings for its rating activity on above-mentioned entities. The ratings derived from this methodology apply to LRG as well as to issues from the same entities.

In the context of Beyond Ratings' credit rating activities, an LRG is defined as a government that is not considered by Beyond Ratings as a Sovereign (see Sovereign Rating Methodology).

Beyond Ratings' definition of an LRG credit default refers to the failure to service interest or principal in accordance with the original terms on debt issued or guaranteed by the entity, or a distressed debt exchange, regardless of the currency in which the debt is issued. Other events included in this definition and further details are available in "Beyond Ratings – Rating Definitions".

LOCAL AND REGIONAL GOVERNMENTS RATING METHODOLOGY

A. GENERAL FRAMEWORK

Beyond Ratings assigns ratings to Local and Regional Governments based on its quantitative and/or qualitative analyses of six main factors:

- Economic Performance (on a quantitative and qualitative basis)
- Public Finances (on a quantitative and qualitative basis)
- Environmental Performance (on a qualitative basis)
- Social Performance (on a qualitative basis)
- Governance (on a qualitative basis)
- Institutional Framework (on a qualitative basis).

The credit rating assessment of an LRG starts with the identification of risk factors through a quantitative methodology. We have put in place a quantitative and systematic approach based on multiple indicators split between the Economic Performance and Public Finances pillars. We assess – depending on data statistical availability – each indicator from the beginning of 2001 to the present day, and this on a yearly basis. Each of the indicators is the outcome of numerous transformations – systematic to a large extent – based on raw data. Thereafter, we aggregate all indicators at the level of the pillar from which they depend, in order to obtain an aggregated score by pillar. The quantitative scores of the two pillars are then combined to obtain the Quantitative Economic and Financial Profile.

Since the analysis of purely quantitative ratios does not reflect the whole range of economic and financial risks an LRG faces, we also carry out a qualitative assessment of those factors culminating in the Qualitative Economic and Financial Profile.

The inclusion of Environmental, Social and Governance criteria in a structured fashion within a specific profile for an LRG risk assessment represents another major methodological innovation. It is our view that these long-term issues, long considered distant and mostly extra-financial, increasingly prove to be financially material, likely to degrade or improve an LRG's ability and/or willingness to reimburse its debt. They are assessed on a qualitative

basis through the Sustainability Profile. Lastly, the Institutional Framework in which an LRG operates is evaluated in order to obtain the final rating (see Figure 1).
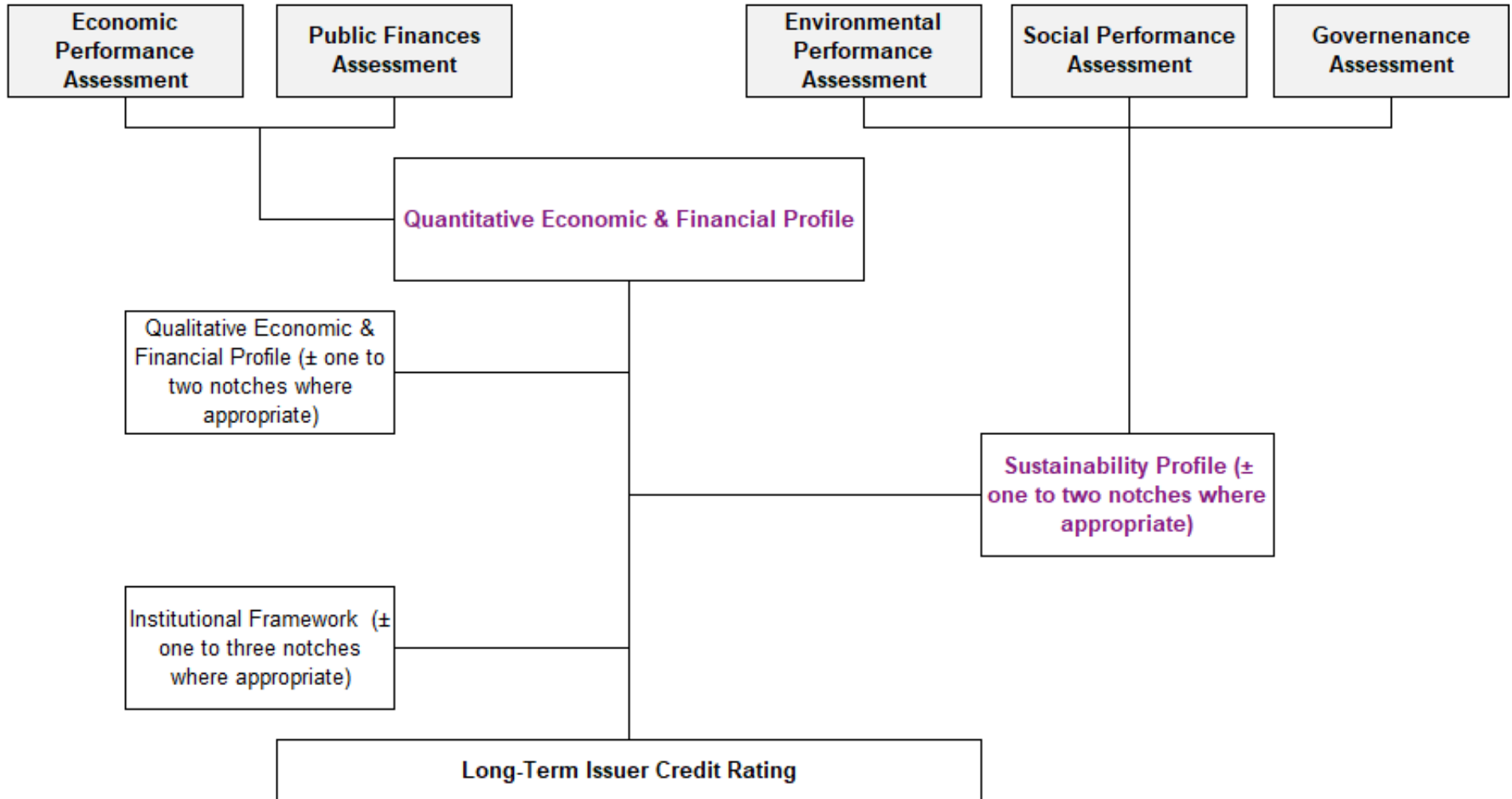
Figure 1: Methodology Overview
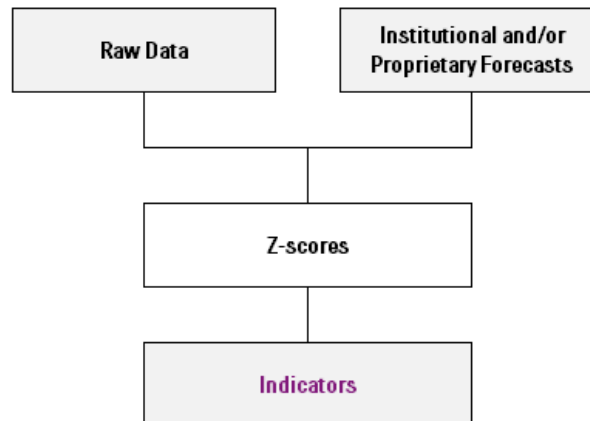
Figure 2: From Raw Data to Indicators

Figure 2 illustrates the general framework through which we transform raw data into indicators. First and in most cases, a given raw datum is transformed in "z-scores" for each LRG and each date. The "z-scores transformation" amounts to centering and reducing the raw datum for a given LRG at a given date, depending on the mean and the standard deviation for all other national LRGs at that same date. That first transformation enables us to assess the relative performance of the LRG within a country or relative risk linked to a raw datum while disconnecting it from the scale on which that same datum is recorded. Second, the z-scores are transformed into continuous scores on an interval ranging from 0 to 10 (both included) in accordance with the cumulated distribution of a standard normal distribution – 0 representing the worst score (*i.e.* the worst performing LRG within a particular country) and 10 the best (*i.e.* the best performing LRG within a particular country). That second transformation enables us, in the end, to calculate scores which we call indicators. Given the various optimums associated to raw data, one should distinguish two different cases establishing the general framework for this second transformation:

(i) The optimum for that raw datum is a maximum: the higher the value for the raw data, the higher the value for the corresponding z-score and the higher the indicator.

(ii) The optimum for that raw datum is a minimum: the lower the value for the raw data, the higher the value for the corresponding z-score and the higher the indicator.

The following rules have been defined to manage potentially missing data (unless otherwise specified in the document):

- If an indicator is not available at a specific date, we use the last known value of the indicator
- If an indicator is not available at all for a local or regional government, we use as a proxy the value of the same indicator at the higher level (*e.g.* county for a city, region for a county, etc.)

Finally, each score for each indicator for each LRG at each date corresponds to the average of the score of the current year and the scores of the two-preceding years, weighted under a rule that gives preference to the present. We call this time smoothing, or memory effect smoothing. Such smoothing enables, in particular, to keep some memory over the recent period and to smooth potential edge effects or very erratic data. As a result, a jump observed on an isolated data should not wrongly impair the stability of the rating (*i.e.*, it avoids too abrupt transitions from one notch to another in our rating scale). Nevertheless, the preference for the present rule makes possible the anticipation of turning points.

The quantitative score of the Economic Performance pillar and the quantitative score of the Public Finances pillar are combined within a matrix to obtain the Quantitative Economic and Financial Indicative Rating (see Figure 3).

Figure 3: Indicative Rating Matrix

		Economic Performance										
	Scores	[100;70]	]70;60]	]60;50]	]50;45]	]45;40]	]40;35]	]35;30]	]30;25]	]25;22.5]	]22.5;20]	]20;0]
Public Finances	[100;70]	Cap Rating	Cap Rating	Cap Rating	Cap Rating	Cap Rating	Cap Rating	-1 notch	-2 notches	-3 notches	-4 notches	-5 notches
	]70;60]	Cap Rating	Cap Rating	Cap Rating	Cap Rating	Cap Rating	-1 notch	-2 notches	-3 notches	-4 notches	-5 notches	-6 notches
	]60;50]	Cap Rating	Cap Rating	Cap Rating	Cap Rating	-1 notch	-2 notches	-3 notches	-4 notches	-5 notches	-6 notches	-7 notches
	]50;40]	Cap Rating	Cap Rating	Cap Rating	-1 notch	-2 notches	-3 notches	-4 notches	-5 notches	-6 notches	-7 notches	- 8 notches
	]40;35]	Cap Rating	Cap Rating	-1 notch	-2 notches	-3 notches	-4 notches	-5 notches	-6 notches	-7 notches	-8 notches	-9 notches
	]35;30]	Cap Rating	-1 notch	-2 notches	-3 notches	-4 notches	-5 notches	-6 notches	-7 notches	-8 notches	-9 notches	-10 notches
	]30;27.5]	-1 notch	-2 notches	-3 notches	-4 notches	-5 notches	-6 notches	-7 notches	-8 notches	-9 notches	-10 notches	-11 notches
	]27.5;25]	-2 notches	-3 notches	-4 notches	-5 notches	-6 notches	-7 notches	-8 notches	-9 notches	-10 notches	-11 notches	-12 notches
	]25;0]	-3 notches	-4 notches	-5 notches	-6 notches	-7 notches	-8 notches	-9 notches	-10 notches	-11 notches	-12 notches	-13 notches

We believe that, even in the most decentralized systems, the interdependence between a sovereign and the LRGs in the country leads to a strong correlation between sovereign and LRG credit risk. We thus use the sovereign's credit rating as a "Cap Rating" in our indicative rating matrix. LRGs' ability to repay their debts is strongly influenced by their sovereign. Even in the most decentralized systems, the interdependence between sovereigns and LRGs does not permit the rating of LRGs to be higher than that of a respective sovereign, i.e., the sovereign credit risk rating acts as a Cap Rating in our Quantitative Economic and Financial Indicative Rating. In some rare cases, the rating of an LRG could be higher than that of its respective sovereign, but such cases could occur only after the qualitative adjustments. This case could occur for example if the LRG has a high degree of autonomy over its sources of revenue and expenditures, has an outstanding level of prosperity that is resilient to adverse economic shocks, or is not in default when the sovereign is in default.

We then qualitatively assess the Local or Regional Government performance regarding economy and public finances. The Qualitative Economic and Financial Profile consists in analysing the issuer's performance using a number of generic or specific indicators. This assessment results in a score per indicator ranging from -2 to +2 (unless otherwise specified). Section B hereafter presents the framework of qualitative indicators used per pillar. The qualitative assessment per pillar is determined as the median of the assessments assigned for each of that pillar's indicators. We subsequently compute the arithmetic average of those median scores for the two pillars, which gives us the adjustment (rounded to the nearest integer) we deem necessary from a qualitative viewpoint in relation with Economic Performance and Public Finances. Such adjustment can encompass up to two notches, upwards as well as downwards.

The Sustainability Profile adjustment is obtained using the same framework as described above. Several generic or specific qualitative indicators are analysed for each one of the three pillars of the Sustainability Profile. This assessment results in a score per indicator ranging between -2 and +2 (unless otherwise specified). Section C hereafter presents the framework of qualitative indicators used per pillar. The qualitative assessment per pillar is determined as the median of the assessments assigned for each of that pillar's indicators. We subsequently compute the arithmetic mean of those median scores for the three pillars, which gives us the adjustment (rounded to the nearest integer) we deem necessary from a qualitative viewpoint in relation to Environmental, Social and Governance Performance. Such adjustment can encompass up to two notches, upwards as well as downwards (see Figure 4).

Finally, we assess the institutional framework in which the LRG operates, which could impact its operating revenues and expenditure (c.f. Section D). We specifically consider the nature of the intergovernmental arrangements that link the LRG to the central government, as well as any central government oversight, and any framework for providing extraordinary support to the LRG, including the central government's record of providing support to LRGs under stress. This analysis could lead us to adjust the final rating up to three notches, up or down.

Figure 4: Qualitative Assessment, an illustrative example
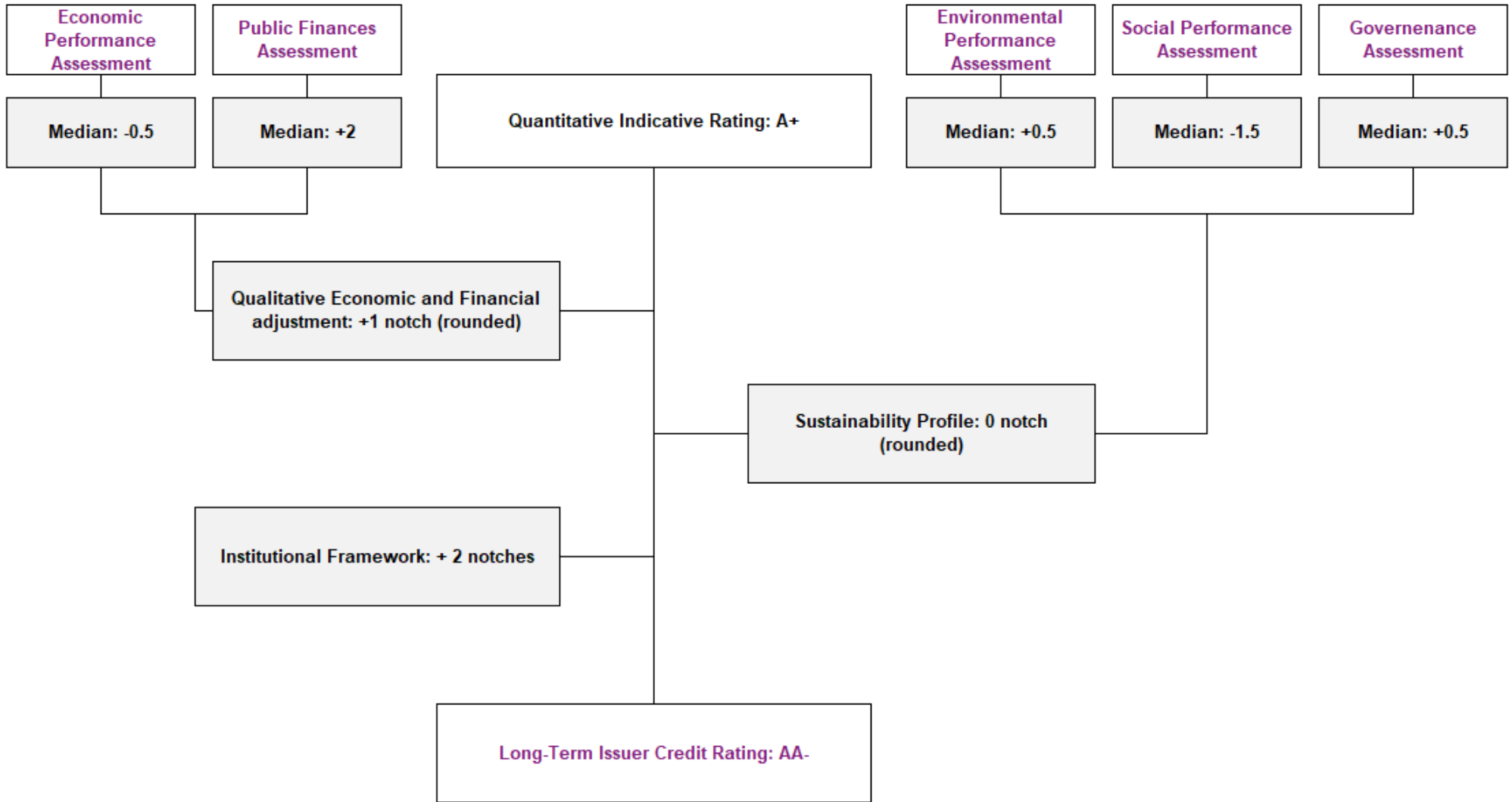
B. ECONOMIC & FINANCIAL PROFILE

Economic Performance Assessment

Quantitative Assessment

Assessment Guidelines
Our LRG Rating Methodology measures the exposure to credit risk through the LRG economic performance relative to others LRGs in the same country. We assess local or regional prosperity level, the dynamics of the economy and its performance in terms of innovation. High GDP per capita or disposable income per capita would improve the local or regional creditworthiness, as they imply that high production and income flows make the economy less vulnerable and better able to absorb adverse shocks. We include the Subnational Human Development Index as this indicator provides an interesting measure of prosperity performance. Economy dynamics are assessed through the GDP growth rate per capita and the unemployment rate. Finally, a high performance in terms of innovation (here measured through patents applications) underlines a higher capacity to generate high value-added production.

Indicator: **Local GDP Growth Rate per capita**	Optimum: **Maximum**
Local GDP growth rate per capita allows us to assess how dynamic the local or regional economy is.	

Indicator: **Local GDP per Capita**	Optimum: **Maximum**
GDP per capita is gross domestic product divided by midyear population. GDP is the gross value of goods and services produced by all resident producers in the LRG economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of assets or for depletion and degradation of natural resources.	

Indicator: **Real Disposable Household Income**	Optimum: **Maximum**
Disposable household income corresponds to the real household net disposable income defined as the sum of household final consumption expenditure and savings, minus the change in net equity of households in pension funds.	

Indicator: **Local Unemployment Rate**	Optimum**: Minimum**
The unemployment rate is the share of the labour force (15-64 years old) that is jobless, expressed as a percentage of the total labour force at a given period of time. It is a lagging indicator, meaning that it generally rises or falls in the wake of changing economic conditions, rather than anticipating them.	

Indicator: **Subnational Human Development Index**	Optimum**: Minimum**
The Human Development Index (HDI), published by the United Nation Development Programme, is a summary measure of average achievement in three key dimensions of human development: health, education and standard of living. Here we use the Subnational Human Development Index, a translation of the UNDP's official HDI to the subnational level[1].	

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[1] Based on the work of Smits & Steendijk (2018): https://hdi.globaldatalab.org/areadata/about-shdi/

Indicator: **Local Patents Applications per Million Inhabitants**	Optimum: **Maximum**

Local Patents Applications per Million Inhabitants is a simple ratio between the total number of patents applications in the LRG's territory and the number of people (in millions) living in the LRG's territory.

Qualitative Assessment

Real GDP Growth Per Capita Outlook			
Score Scale	**Positive Assessment Rationale**	**Negative Assessment Rationale**	**Score Scale**
Highly Positive +2	Real GDP growth per capita outlook for the LRG is on an upward trend and better than the national level.	Real GDP growth per capita outlook for the LRG is on a downward trend and weaker than the national level.	**Highly Negative -2**
Slightly Positive +1	Real GDP growth per capita outlook for an LRG is on an upward trend but weaker than the national level.	Real GDP growth per capita outlook for the LRG is on a downward trend but better than the national level.	**Slightly Negative -1**
Additional Assessment Rationale			

Real GDP growth per capita outlook refers to the national or local statistics forecasts for the economy and/or our own forecasts. This indicator is relevant for economic performance and for the assessment of the future trajectory of public finances.

Diversification of the Economy			
Score Scale	**Positive Assessment Rationale**	**Negative Assessment Rationale**	**Score Scale**
Highly Positive +2	The local economy is diversified, as a main part of the regional or local gross value added is generated by several sectors.	The local economy is clearly natural resources dependent, depends on a volatile sector, such as the financial sector, or is dominated by aging industries.	**Highly Negative -2**
Slightly Positive +1	The local economy is rather diversified, as a main part of the regional or local gross value added is generated by at least two different sectors.	The local economy is rather undiversified, as a main part of the regional or local gross value added is produced by one particular sector. However, this sector is not as volatile as the financial sector or natural resources sectors.	**Slightly Negative -1**
Additional Assessment Rationale			

We assess the diversification of the economy through the relative share of each economic sector in the local gross value added (subject to the availability of data).

Public Finances Performance Assessment

Quantitative Assessment

Assessment Guidelines
Our public finances assessment is based on an evaluation of budget performance, budget flexibility and debt burden. Given the difficulties in accessing some government data, we may in some cases use close proxies of indicators described below.

Indicator: Operating Balance, % Operating Revenues	Optimum: **Maximum**
Operating balance corresponds to the difference between operating revenues and operating expenditures. This indicator is a measurement of the local budget operating performance.	

Indicator: Tax Revenues on Operating Revenues Ratio	Optimum: **Maximum**
The tax revenues on operating revenues ratio is built as a measurement of budget flexibility and fiscal autonomy. Tax revenues taken into account usually includes only taxes that can be modified by the local or regional government.	

Indicator: Debt Service, % Operating revenues	Optimum: **Minimum**
Debt service corresponds to interest and principal payments. It is expressed as a share of the operating revenue. This indicator is built as a **measurement of debt burden**.	

Indicator: Debt, % Operating revenues	Optimum: **Minimum**
Debt in percentage of operating revenues. This indicator is built as a **measurement of debt sustainability**.	

Qualitative Assessment

Quality of forecasting and budgeting			
Score Scale	Positive Assessment Rationale	Negative Assessment Rationale	Score Scale
Highly Positive +2	The Local or Regional government has systematically published realistic revenue and expenditure assumptions, sets multi-year plans and experienced timely adoption of a budget.	The Local or Regional government has systematically published unrealistic revenue and expenditure assumptions and has frequently faced an untimely adoption of a budget.	**Highly Negative -2**
Slightly Positive +1	The Local or Regional government has generally published realistic revenue and expenditure assumptions, excluding exogeneous events, and timely adopted a budget.	The Local or Regional government has sometimes published unrealistic revenue and expenditure assumptions and / or faced sometimes an untimely adoption of a budget.	**Slightly Negative -1**

		Additional Assessment Rationale		
Local or Regional government's public finances management is generally more effective in case of a high quality of forecasting and budgeting. Furthermore, realistic revenues and expenditures assumptions highlight a strong government's experience in terms of fiscal policy management.				

Debt and liquidity management

Score Scale	Positive Assessment Rationale	Negative Assessment Rationale	Score Scale
Highly Positive +2	The Local or Regional government has a conservative risk-taking approach to debt instruments, adopts a prudent policy towards investing free cash and other liquid assets, and has a strong debt repayment history.	The Local or Regional government has a risky behaviour regarding debt instruments. It also fails to adopt a cautious policy towards investing free cash and other liquid assets and has a weak debt repayment history.	**Highly Negative -2**
Slightly Positive +1	The Local or Regional government has a rather conservative approach to debt instruments, despite some uses of riskier financial instruments. It also adopts a mostly prudent policy towards investing free cash and other liquid assets and has a strong debt repayment history.	The Local or Regional government has some risky behaviour regarding debt instruments. It also adopts sometimes less than cautious policy towards investing free cash and other liquid assets but has a strong debt repayment history.	**Slightly Negative -1**
		Additional Assessment Rationale		

Assessing Local or Regional government's debt and liquidity management helps to enhance the LRG risk analysis, as a mostly conservative risk-taking approach to debt instruments, prudent policy towards investing free cash and other liquid assets (especially in case of seasonality of cash inflows and outflows) and a strong debt repayment history are associated to a higher creditworthiness. Prudent policy towards increasing tax burden, particularly relative to neighbouring jurisdictions, is also valued.

Transparency and disclosure

Score Scale	Positive Assessment Rationale	Negative Assessment Rationale	Score Scale
Highly Positive +2	The Local or Regional government has disclosed information on its sources of revenues, various types of expenditures, assets and liabilities, as well as information on the entire public sector in a systematic, timely and comprehensive manner.	The Local or Regional government's disclosure of its sources of revenues and expenditures is erratic and not provided in a transparent nor detailed manner. There are also some questions	**Highly Negative -2**

Score Scale	Positive Assessment Rationale	Negative Assessment Rationale	Score Scale
		about the disclosure of assets and liabilities.	
Slightly Positive +1	The Local or Regional government has disclosed information on its sources of revenues, various types of expenditures, assets and liabilities as well as information on the entire public sector in a relatively timely and comprehensive manner.	The Local or Regional government shows little transparency in its disclosure of sources of revenues, expenditures, assets and liabilities because of publication delays, disclosure limited to basic information, etc.	**Slightly Negative -1**

Additional Assessment Rationale
Since the main source of information regarding the LRG's revenues, expenses, assets and liabilities is the LRG itself, full transparency of the LRG provides a better appreciation of the quality of its creditworthiness.

Contingent liabilities

Score Scale	Positive Assessment Rationale	Negative Assessment Rationale	Score Scale
Highly Positive +2	Positive adjustment is not applicable for contingent liabilities	The Local or Regional Government's guarantees or debt of satellite companies with ad hoc missions represent a major risk. Debt levels of major taxpayers or employers in the region are very high.	**Highly Negative -2**
Slightly Positive +1	Positive adjustment is not applicable for contingent liabilities	The Local or Regional government's guarantees or debt of public enterprises with ad hoc missions could represent a risk. Debt levels of major taxpayers or employers in the region are high.	**Slightly Negative -1**

Additional Assessment Rationale
Local or Regional Government's contingent liabilities could be a major threat for the LRG's creditworthiness in case of unsustainable debt of public enterprises or major risk on debt of major taxpayers or employers in the region. Indeed, the LRG could be forced to intervene in case of bailout, which would increase its expenditures and weaken its overall financial situation.

C. SUSTAINABILITY PROFILE

Environmental Performance Assessment

Qualitative Assessment

GHG Emissions per capita			
Score Scale	**Positive Assessment Rationale**	**Negative Assessment Rationale**	**Score Scale**
Highly Positive +2	The LRG is very well ranked in terms of GHG compared to other LRG in the country	The LRG is very poorly ranked in terms of GHG compared to other LRG in the country	**Highly Negative -2**
Slightly Positive +1	The LRG is rather well ranked in terms of GHG compared to other LRG in the country	The LRG is rather poorly ranked in terms of GHG compared to other LRG in the country	**Slightly Negative -1**
Additional Assessment Rationale			

Local GHG Emissions per capita (expressed in tons) reflect how the LRG performs in terms of climate policy. This indicator is adjusted depending on the structure of the economy. Given the availability of data, this assessment could be completed by a measure of GHG emissions by GDP unit.

Air Pollution			
Score Scale	**Positive Assessment Rationale**	**Negative Assessment Rationale**	**Score Scale**
Highly Positive +2	Air pollution well below the WHO Air Quality Guideline values	Air pollution well above the WHO Air Quality Guideline values	**Highly Negative -2**
Slightly Positive +1	Air pollution below the WHO Air Quality Guideline values	Air pollution above the WHO Air Quality Guideline values	**Slightly Negative -1**
Additional Assessment Rationale			

The air pollution corresponds to the average level of exposure of a population to concentrations of suspended particles measuring less than 2.5 microns in aerodynamic diameter, which are capable of penetrating deep into the respiratory tract and causing severe health damage. This measure is compared to the Air Quality Guidelines provided by the World Health Organization.

Natural Capital Stock			
Score Scale	**Positive Assessment Rationale**	**Negative Assessment Rationale**	**Score Scale**
Highly Positive	The LRG benefits from a very important natural capital stock	The LRG's natural capital stock is very low,	**Highly Negative**

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+2	and ranks among the country's richest regions in this category.	ranking the LRG among the country's poorest regions in this category.	-2
Slightly Positive +1	The LRG benefits from an important natural capital stock and ranks among the country's well-endowed regions in this category.	The LRG's natural capital stock is low, ranking the LRG below the national average in this category.	**Slightly Negative -1**
Additional Assessment Rationale			

Natural capital includes all types of ecological assets that provide ecosystem services to the economy. It includes natural as well as semi-natural ecosystems, and natural resources such as water resources and non-fuel minerals. The natural capital stock is a monetary estimation of this capital and includes current as well as potential capacities (if exploitable). This indicator provides an insight into a type of assets that are usually non-valuated while they represent a significant potential for sustainable growth and resilience, particularly in a resource-constrained context.

Natural Capital Trend			
Score Scale	Positive Assessment Rationale	Negative Assessment Rationale	Score Scale
Highly Positive +2	The LRG's natural capital stock shows a significant long-term growth.	The LRG's natural capital stock shows a significant long-term decline.	**Highly Negative -2**
Slightly Positive +1	The LRG's natural capital stock shows a moderate long-term growth or no growth.	The LRG's natural capital stock shows a moderate long-term decline.	**Slightly Negative -1**
Additional Assessment Rationale			

Natural capital stock, which includes different types of ecological assets, provides crucial ecosystem services to the economy and constitutes an important potential of sustainable growth and resilience, in particular in a resource-constrained context. It is therefore necessary to watch the long-term growth of this stock given that an impoverishment trend will threaten the sustainability of the country's development while an enrichment, on the contrary, will provide significant opportunities.

Natural Capital at Risk			
Score Scale	**Positive Assessment Rationale**	**Negative Assessment Rationale**	**Score Scale**
Highly Positive +2	The risk associated to the LRG's natural capital is very low.	The risk associated to the LRG's natural capital is very significant.	**Highly Negative -2**
Slightly Positive +1	The risk associated to the LRG's natural capital is low.	The risk associated to the LRG's natural capital is significant.	**Slightly Negative -1**
Additional Assessment Rationale			

The natural capital at risk distinguishes the LRG's various ecological assets and the different dangers associated. The calculated risk is a combination of four elements: (i) the economy exposure, (ii) the ecological asset exposure, (iii) the level of danger, and (iv) the LRG's resilience capacity. Categories of danger include climate and natural disaster risk, water stress, energy risk, resource depletion risk, pollution risk and external risk.

Social Performance Assessment

Qualitative Assessment

Age structure of the population			
Score Scale	**Positive Assessment Rationale**	**Negative Assessment Rationale**	**Score Scale**
Highly Positive +2	Birth rate ensures generational renewal or high attractiveness of active population from other regions; And: High participation rate of senior citizens in the workforce.	Not enough births for an adequate generational renewal or really weak attractiveness of active population from other regions; And: Where applicable, high pressure from pensions and retirements benefits.	**Highly Negative -2**
Slightly Positive +1	Generation renewal or attractiveness of new population from other regions; And: Where applicable, normal pensions pressure trend.	Not enough births for an adequate generational renewal or weak attractiveness of active population from other regions. Or: Where applicable, high pressure from pensions and retirements benefits.	**Slightly Negative -1**
Additional Assessment Rationale			

The age structure of the population in general and, especially, the ratio working-age population to total population is a relevant indicator to assess the weight of the inactive population in the potential economic growth. Two kinds of situations may occur:

    i.   Where applicable, retired (and nearly-retired) workers are disproportionately numerous in comparison with active people;

    ii.   Youth segment is abnormally large compared with the rest of the population, which means important needs in terms of education in the short-to-medium term.

We also assess the attractivity of the LRG comparatively to its neighbours, through for instance subnational migration rates.

Health access

Score Scale	Positive Assessment Rationale	Negative Assessment Rationale	Score Scale
Highly Positive +2	High access to health system and positive evolution comparatively to peers in the same country	Low access to health system and negative evolution comparatively to peers in the same country	**Highly Negative -2**
Slightly Positive +1	High access to health system or positive evolution comparatively to peers in the same country	Low access to health system or negative evolution comparatively to peers in the same country	**Slightly Negative -1**
Additional Assessment Rationale			

Health access is measured through 2 indicators:
- Number of physicians per 1,000 people
- Number of hospital beds per 10,000 people

Governance Assessment

Qualitative Assessment

Political risk

Score Scale	Positive Assessment Rationale	Negative Assessment Rationale	Score Scale
Highly Positive +2	Very low political risk and high expected capacity of the LRG to fulfil its economic and financial obligations.	Very high political risk and very weak expected capacity of the LRG to fulfil its economic and financial obligations.	**Highly Negative -2**
Slightly Positive +1	Low political risk and medium expected capacity of the LRG to fulfil its economic and financial obligations.	High political risk and low expected capacity of the LRG to fulfil its economic and financial obligations.	**Slightly Negative -1**

Additional Assessment Rationale

We consider any political element that could potentially impair the capacity of an LRG to guarantee the continuity of its debt service obligations, including for instance: the strength of the majority obtained by the local government, any change in the parties' composition that could impact the stability of the government, the ability for a government to maintain or adjust its policies as required despite the political pressure or the level of support or distrust from the citizens.

Overall assessment of governance quality through press/document review

Score Scale	Positive Assessment Rationale	Negative Assessment Rationale	Score Scale
Highly Positive +2	Significant exposure to positive events, opportunities and strengths based on a qualitative assessment of governance-related information available on the LRG. This analysis can encompass both structural issues and elements present in the news flow.	Significant exposure to negative events, risks and weaknesses based on a qualitative assessment of governance-related information available on the LRG. This analysis can encompass both structural issues and elements present in the news flow.	**Highly Negative -2**
Slightly Positive +1	Moderate exposure to positive events, opportunities and strengths based on a qualitative assessment of governance-related information available on the LRG. This analysis can encompass both structural issues and elements present in the news flow.	Moderate exposure to negative events, risks and weaknesses based on a qualitative assessment of governance-related information available on the LRG. This analysis can encompass both structural issues and elements present in the news flow.	**Slightly Negative -1**

Additional Assessment Rationale
The analysis of governance-related factors requires to go beyond quantitative data to capture some of the weaknesses and strengths of LRG, in particular those reflecting their stability, institutional resilience or exposure to specific risks (*e.g.*, local risks, national tensions, potential impacts of geopolitical risks, etc.). This requires an analysis of relevant documentary sources that can include various press or media documents, reports (*e.g.* regional or local governance indexes as for instance the European Quality of Government Index published by the University of Gothenburg), and other resources analysing both the background of LRG (*e.g.* historical, geographical, cultural, social, economic or geopolitical background) and significant recent events. This analysis should, thus, relate to all the factors of the governance analysis.

Public safety

Score Scale	Positive Assessment Rationale	Negative Assessment Rationale	Score Scale
Highly Positive +2	High level of public safety and positive trend compared to peers	Low level of public safety and negative trend compared to peers	**Highly Negative -2**
Slightly Positive +1	High level of public safety or positive trend compared to peers	Low level of public safety or negative trend compared to peers	**Slightly Negative**

Additional Assessment Rationale
The level of public safety is a key governance element as it highlights the capacity of an LRG to maintain public order within its territory. It is here measured through the homicide rate (homicides for 100 000 population).

D. INSTITUTIONAL FRAMEWORK

The institutional framework is the environment in which an LRG operates. It specifically considers the nature of the arrangements that link the LRG to the sovereign. In assessing the institutional framework of an LRG, we particularly consider:

The stability and predictability of the institutional framework: a stable and predictable institutional framework implies revenue authorities and expenditure responsibilities are roughly balanced or that any persistent shortfall is addressed though transfers, usually from a broader level of government. Reforms that could have a substantial effect on the value or distribution of an LRG's revenues and expenditures are carried out progressively and take into account all possible effects upstream. As a result, the outcomes of any change are highly predictable and allow the LRG to adapt without a negative impact on its credit standing. A stable and predictable institutional framework also implies that the LRG can easily object to a reform initiated by the central government that could impair its capacity to fulfil its debt repayment obligations in the future. Conversely, a highly-volatile legal environment or a complete dependence on decisions from the central government are likely to carry uncertainties in relation to the stability and predictability of the institutional framework, and thus will be interpreted as negative elements.

The fiscal flexibility regarding the LRG revenues and expenditures: we value positively a framework that allows the local or regional government to increase its revenues either through raising tax rates or modifying tax bases, and to cut its expenses when needed to preserve a solid budgetary position. We will also analyse the nature and the characteristics of the taxes and subsides. For instance, a strong fiscal equalization scheme (*i.e.* transfers from the central and other governments to offset differences in revenue raising capacity and expenditure needs) will be considered a positive element and could partially offset a poor tax base.

The oversight of the central government and the exceptional support that could benefit the LRG: we favourably analyse situations where oversight from the central government include controls related to the utilization of public funds, sound anti-fraud mechanisms, and prudential regulation that defines risk-limitation in relation with LRG debt-servicing (prudential ratios, limitation in the use of complex products without sufficient expertise, capital market discipline, etc.). Additionally, LRGs that could benefit from strong exceptional support from the central government in highly unusual situations will be positively scored (as well as regional support for local governments). The "strength" of the support mechanism is assessed by considering its institutionalization (clear legal framework), universality (available to all LRGs) and demonstrated track-record.

Each of the above areas is scored on a scale from +3 to -3. The assessment of the overall institutional framework is obtained by averaging the scores of each area and can result in an adjustment of the rating of up to three notches, upwards as well as downwards.

RELATED CRITERIA

- "Beyond Ratings – Sovereign Rating Methodology", March 2019.
- "Beyond Ratings – Rating Definitions", March 2019.

BEYOND RATINGS