

Measuring the intangible role of a Development Bank – BNDES case

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The Brazilian Development Bank - BNDES

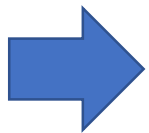
**Information and Knowledge for All:
*Towards an Inclusive Innovation***

The World Conference on Intellectual Capital for Communities

UNESCO, July 3&4 2017

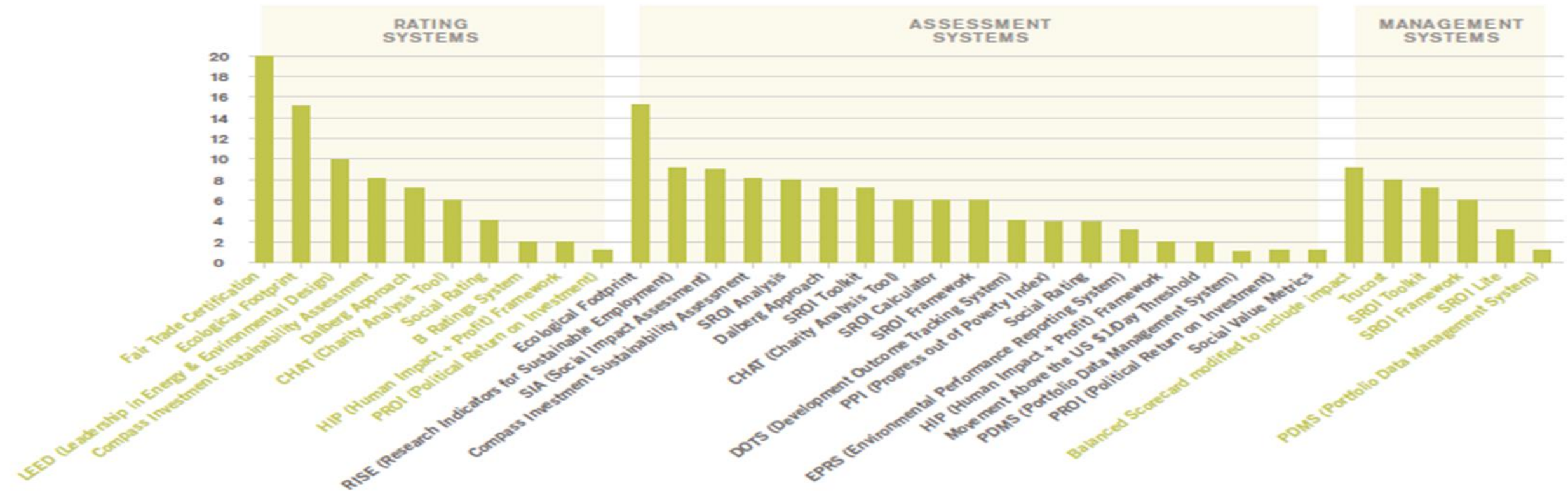
Rationale for and definition of national development banks

- “At the national level, development banks can be instrumental not only in addressing market failures, such as the lack of provision of long-term finance due to the risks and uncertainties involved, but as a critical tool in supporting a proactive development strategy”
UNCTAD 2016
- The focus should be on financing projects where the social returns are greater than private returns ; or
- projects that promote Economic Transformation.



But how to identify and measure those characteristics in a project?

Different approaches to Impact Measurement



Olsen & Galimidi (2008) – Catalog of Approaches to Impact Measurement (Rockefeller Foundation)

International References



Ex Post-Evaluation Brief

Brazil: Natural Resources Policy Project (NRPP)



Sector	41010 Environmental policy and administrative management	
Project/Client	Natural Resources Policy Project (1995 65 243)*	
Programme executing agency	Ministerio do Meio Ambiente (MMA)	
Year of sample/ex post evaluation report: 2013/2013		
	Appraisal (planned)	Ex post-evaluation (actual)
Investment expenses	EUR 64.2 million**	EUR 58.4 million
Own contribution	EUR 9.3 million	EUR 7.8 million
Third-party contributions	EUR 34.45 million	EUR 36.8 million
FC funds	EUR 20.45 million	EUR 13.8 million

* random sample 2013; **Exchange rate @ EUR 1 = USD 1.23

Short description: The Natural Resources Policy Project (NRPP) was part of the international pilot programme to conserve the tropical forests in Brazil (PPG7). It was carried out between 1996 and 2009 under the auspices of the

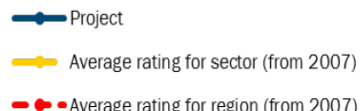
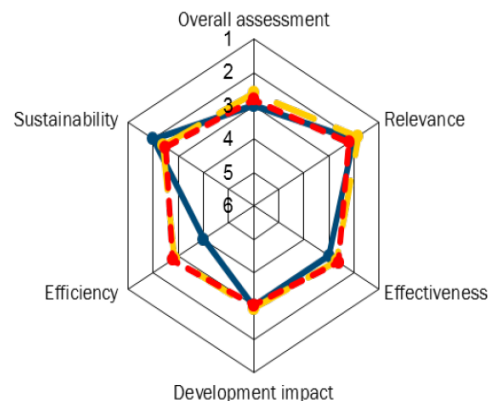
Overall rating: 3

The programme has made an important contribution to decentralising environmental policy and enhancing the capabilities of state-level environmental authorities. A particularly positive aspect of the programme is its sustained effect: virtually all the measures initiated under the scope of the programme are continued. Programme weaknesses were particularly evident in the area of efficiency.

Of note:

Almost all persons interviewed stressed the importance of the programme. The lessons learned in the programme – positive and negative – reportedly played a particularly prominent role.

Rating by DAC criteria



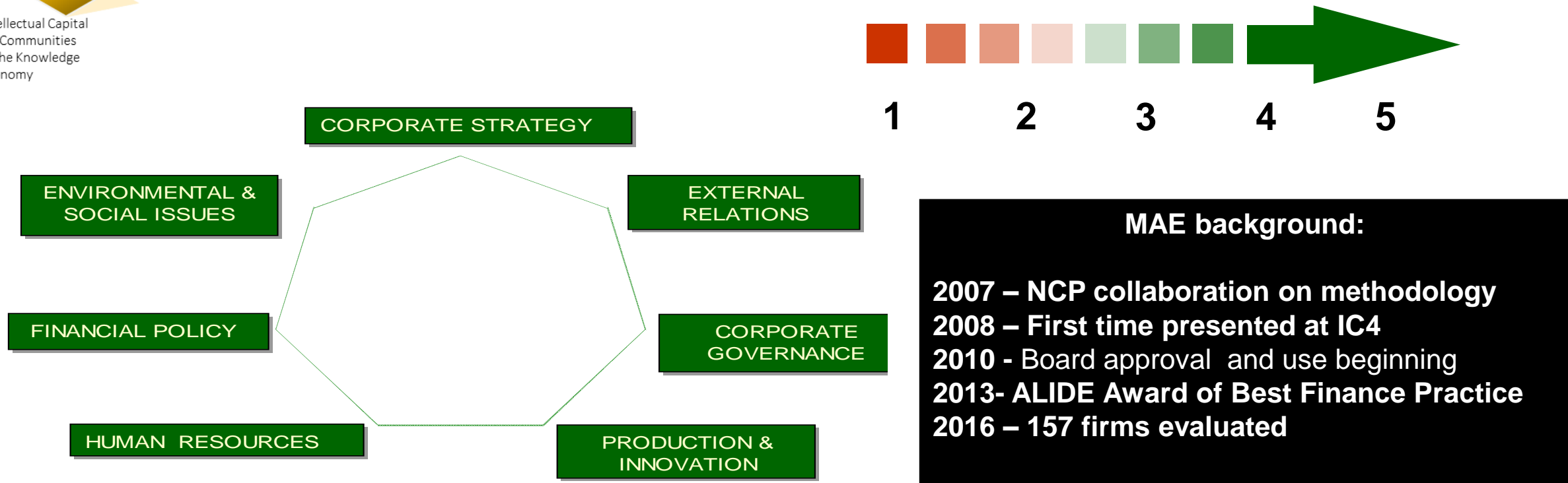
PWC - Total Impact Measurement and Management



SIAT – Sustainability Assessment Toll European Commission



An Internal Reference : BNDES' Intangible Analysis Model (MAE)



- Questions answered by bank staff, based on a collaborative process and IT support.
- Use for client's management improvement and for BNDES' credit risk

The BNDES Impact Thesis - TIIP

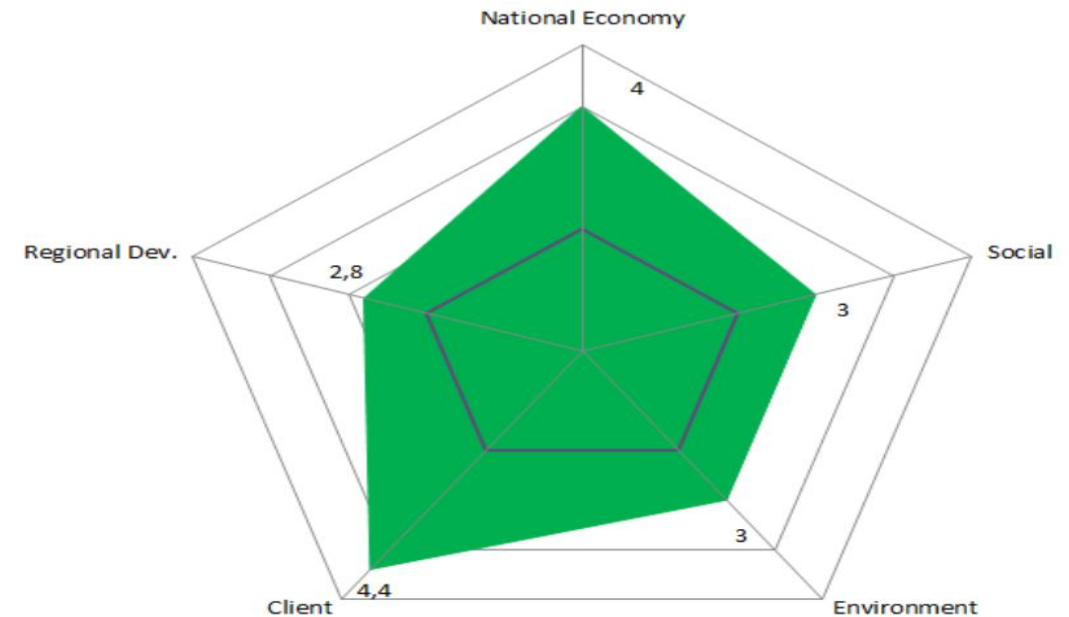
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TIIP is a multi-criteria method to evaluate the non-financial features of funded projects

- **Support Decision** → Ex-ante evaluation .
BNDES' can improve its priorities practices
- **Social Return and Benefits:** Metrics to infer it in a regular and a comparable basis
- **Internal and External Transparency:** an “Easy to Read” Tool
- **Communication:** Post the picture at the website together with the project's basic info.



Adapting JP Morgan' framework to BNDES' Procedures...

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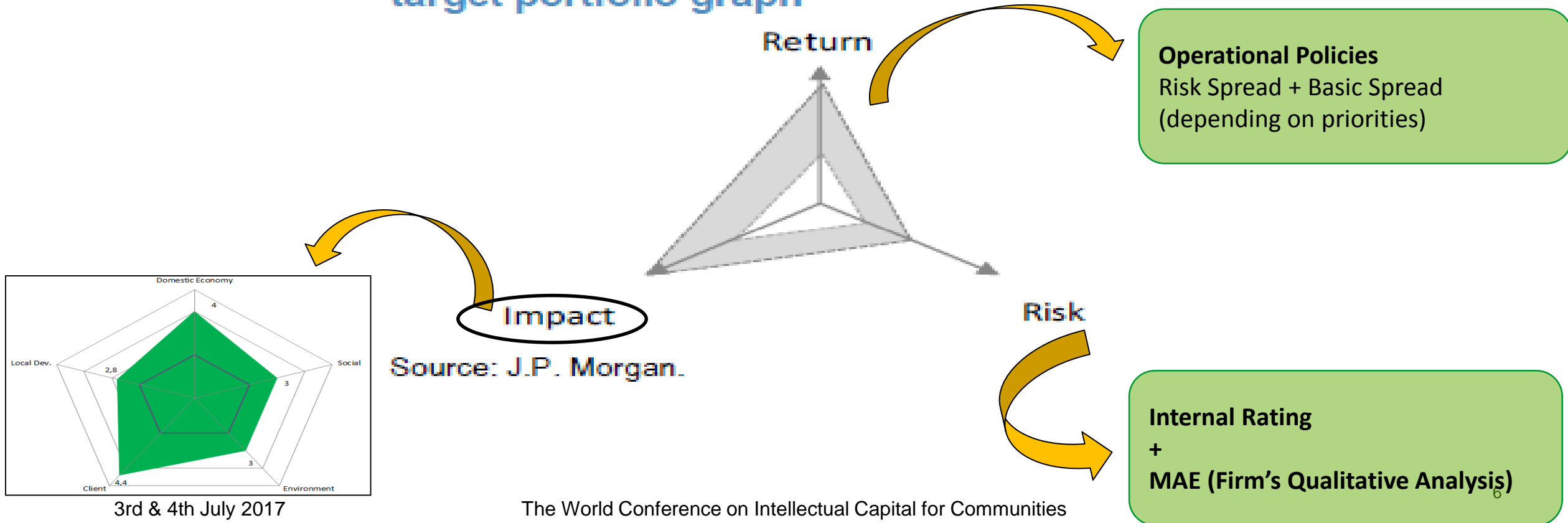
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- ✓ Expected Impact given an investment portfolio impact target

- ✓ “Impact Thesis” – Ex-ante
Evaluation: Shown by Saltuk & Idrissi
(2012) – J.P. Morgan. “A Portfolio
Approach to Impact Investment”

Figure 2: J.P. Morgan Social Finance
target portfolio graph

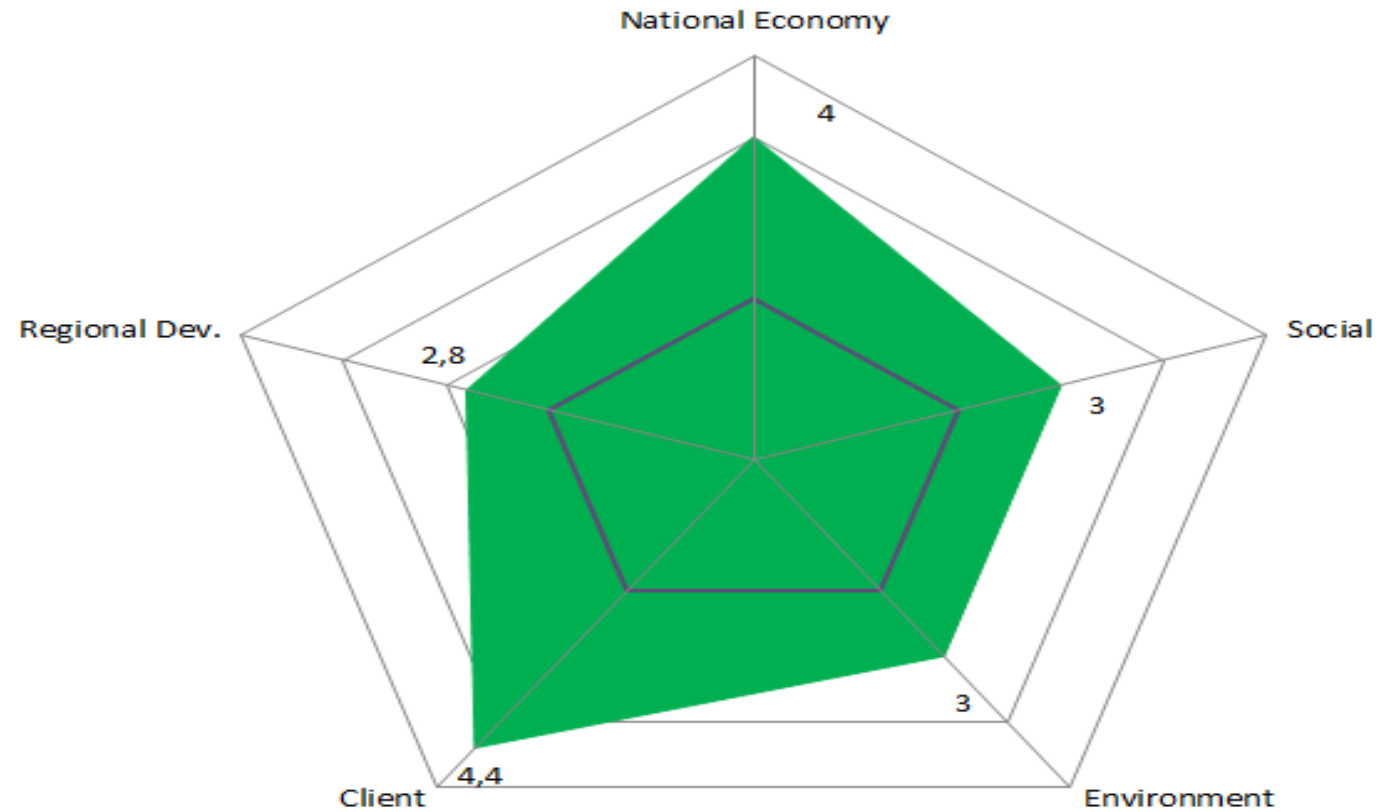
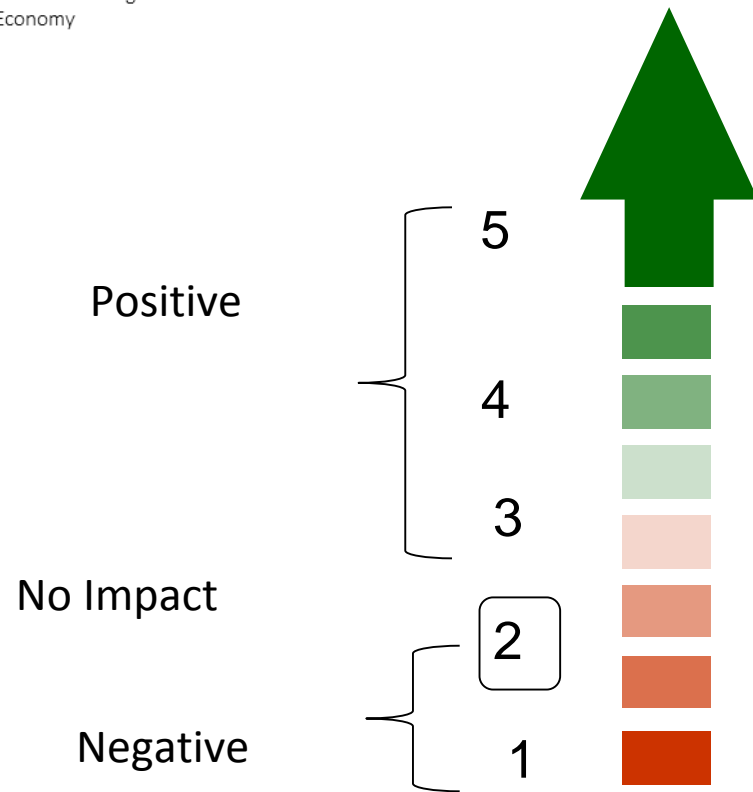


BNDES'S TIIP

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TIIP: Non-financial Evaluation Criteria

Dimensions (5)



Criteria (12)



Scorecard!



..., -1



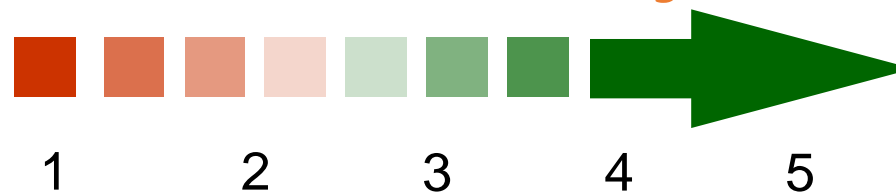
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1,2,..

✓ Each Dimension is a Composite Indicator and gets a final rate:

Dimension Final Rating



Normalization for
each criterion
evaluation
[0, 1] → 1 a 5

$(\text{Criterion 1}) * \text{Weight1}$

+

$(\text{Criterion 2}) * \text{Weight2}$

+

$(\text{Criterion N}) * \text{Weight N}$

TIIP: Type of Criteria

✓ 12 Criteria to identify expected impacts among those 5 five dimensions

Environment



1. Negative Impacts and Positive Benefits

- Use of natural resources
- Gases Emissions
- Ecosystems

Regional Development



1. Local Positive and Negative Economic Impacts
2. Local Spillovers (current development status as a proxy)

Social



1. Job creation

2. **Well-being:** Negative Impacts and Positive Benefits

- ✓ Social Infrastructure (housing, sanitation, public transport);
- ✓ Basic Services (health, education, public management, safety)
- ✓ Inequality / poverty
- ✓ Traditional Communities

TIIP: Type of Criteria



National Economy

1. Innovation: Efforts and Results
2. Exports
3. Economic Complexity, Supply and Productivity
4. Supply Chain
5. Knowledge and Education
6. Infrastructure Supply



Client

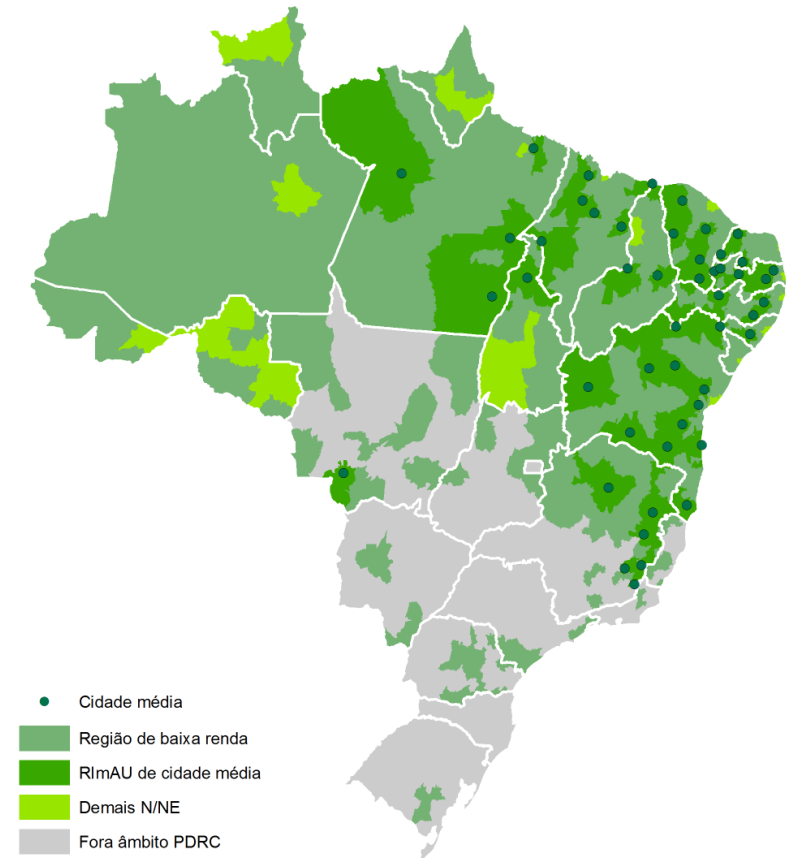
1. Competitiveness
2. Intangible Assets improvement (management)

Regional Dimension and related criteria for impact evaluation

Aim to evaluate the project impacts on the attraction and retention of people and new economic activities to the region (local spillovers) and the impact on reduction of regional inequalities (current development status as a proxy).

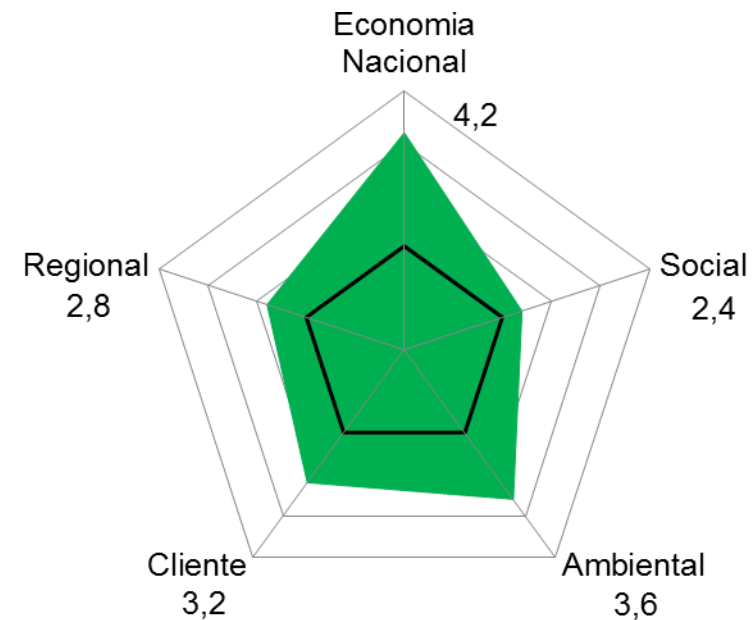
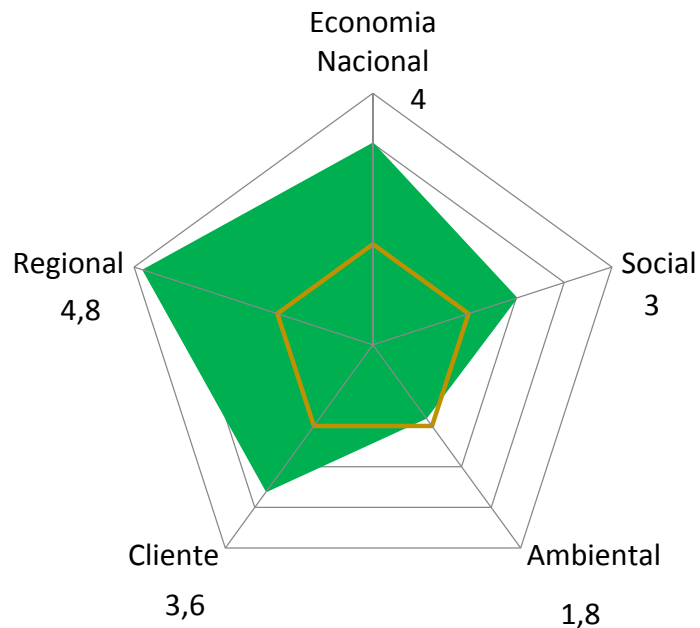
BRAZIL

- *High territorial inequality. Population and GDP are concentrate at Center-South axis.*
- *The outskirts regions represent 53% of cities, 42% of population and 22,4% of GDP.*
- *Gini Index = 51.48 (2014), 10º country with higher inequality*
- *40% of innovative companies are located in São Paulo*



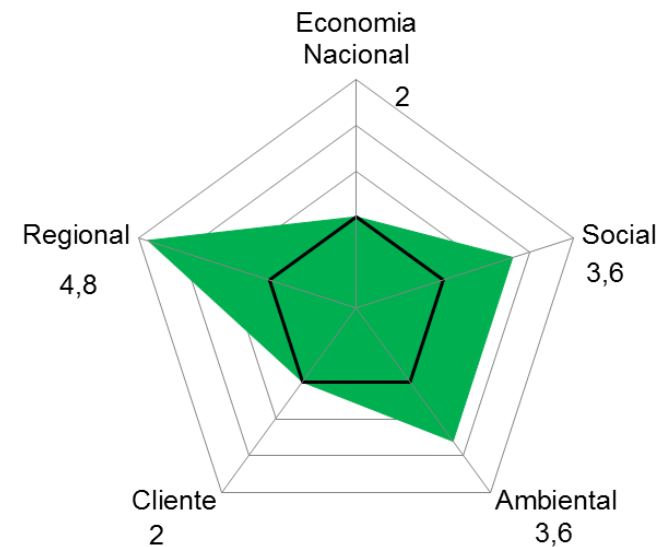
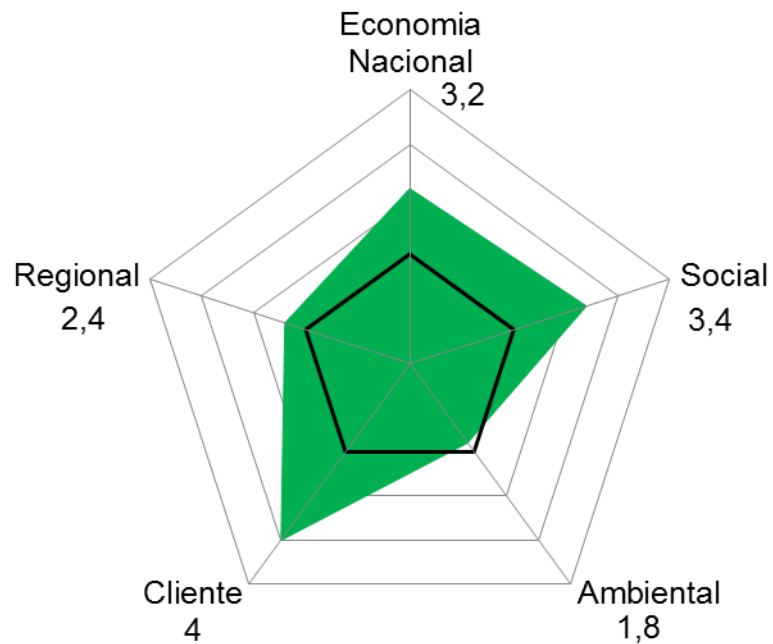
Regional Impact: examples of real projects in Northeast Region of Brazil

- Car manufacturing new plant
- Wind power plant



Regional Impact: examples of real projects in Northeast Region of Brazil

- Pharmaceutical new plant
- Sanitation facilities and services



Challenges

- ✓ **Exchange Knowledge: Finding external experiences and cases to improve the methodology and its applying process (banks, universities, governments, etc.)**
- ✓ **How to exploit this methodology to increase public transparency**
- ✓ **Finding statistics and sectorial indicators to support the scorecard analysis (eg.: job creation, productivity, etc.)**
- ✓ **Turning the TIIP into a qualitative, but less subjective, project selection analysis tool.**