

International Conference on Policy Mixes in Environmental and Conservation Policies

Aligning ecological fiscal transfers in national and state policy mixes

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25–27 February 2014
Leipzig • Germany



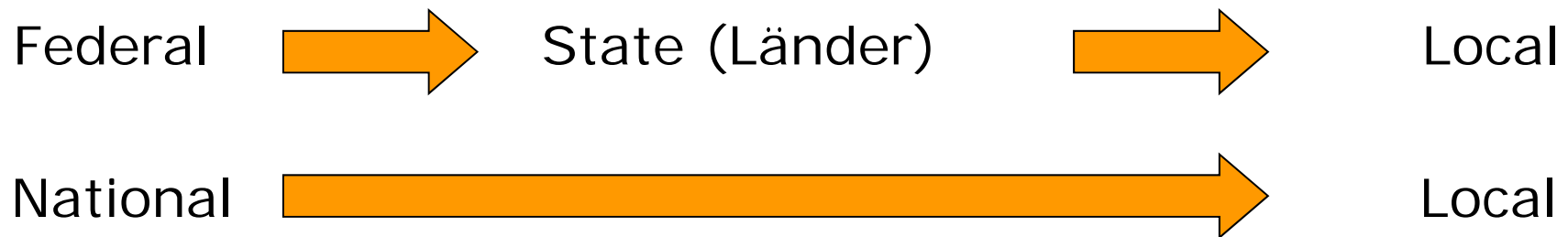
Overview

1. What are ecological fiscal transfers?
2. Ecological fiscal transfers in POLICYMIX case studies
 - Brazil
 - Portugal
 - Germany
3. Aligning ecological fiscal transfers in policy mixes

1. What are ecological fiscal transfers?

Fiscal transfer schemes:

Public revenue is redistributed through transfers from national and subnational governments to local governments



Purpose:

- Help lower-tier governments cover their expenditure in providing public goods and services
- Compensate decentralised governments for expenditure in providing spillover benefits to areas beyond their boundaries

Why consider fiscal transfer systems for conservation purposes?

Substantial source of income for subnational governments:
e.g., on average 60% in developing and transition countries,
non-Nordic Europe 46%, Nordic Europe 29%

Fiscal compensation today

Urban agglomerations



Rural and remote areas



Mostly not considered:

Ecological services involving
spatial externalities: spillover benefits

Rationales for ecological fiscal transfers

Benefits:

Goods and services of
national and global relevance

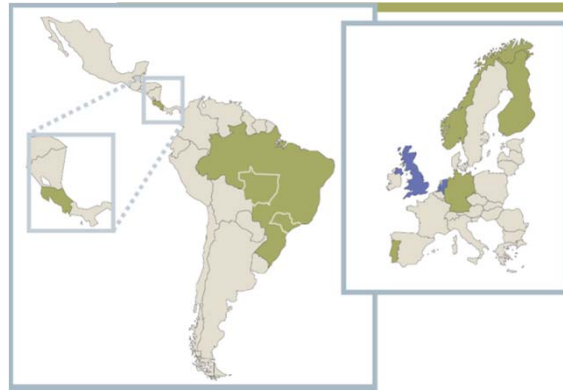
Costs:

Regionally and sectorally
unequal distribution



- Environmental services involving **spatial externalities**:
Local / state costs and spillover benefits
- **Opportunity costs** of conservation; usually reduced tax
income (land, business, income taxes)
- Conservation **management costs**
- **Fiscal equalisation** / distributive fairness

2. Ecological fiscal transfers (EFT) in POLICYMIX case studies



- **Impact evaluation** of existing EFT to the local level:
 - Brazil (cross-state comparison, NW Mato Grosso)
 - Portugal
- **Scenario evaluation** of EFT as a new instrument from federal to state level:
 - Germany

Ecological fiscal transfers in practice



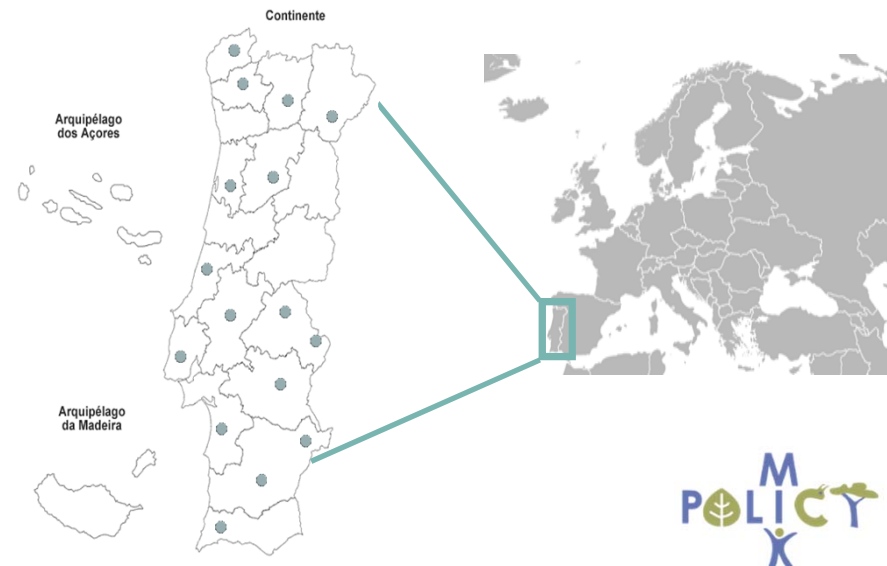
Portugal

Local Finances Law 2007

- promote sustainable local development
- Natura 2000 and other nationally protected areas as indicators for fiscal transfers to municipalities

Brazil (since 1991)

13 out of 26 states consider protected areas for distributing state-level value-added tax to municipalities (ICMS Ecológico)



Brazilian states with ICMS Ecológico (ICMS-E)

State	Year	Environmental criteria	
		Biodiversity conservation (%)	Other criteria (%)
Paraná	1991	2.5	2.5
São Paulo	1993	0.5	0.0
Minas Gerais	1995	0.5	0.5
Rondônia	1996	5.0	-
Amapá	1996	1.4	-
Rio Grande do Sul	1998	7.0 ⁽¹⁾	-
Mato Grosso	2001	5.0	2.0
Mato Grosso do Sul	2001	5.0	-
Pernambuco	2001	1.0	5.0
Tocantins	2002	3.5	9.5
Acre ⁽²⁾	2004	20	-
Rio de Janeiro	2007	1.125	1.375
Goiás ⁽²⁾	2007	5.0	-
Ceará	2007	-	2.0
Piauí	2008	-	5.0
Pará ⁽²⁾		Undergoing definition	Undergoing definition



Evaluation of EFT in the policy mix

Effectiveness?

Could be related to the quantity and quality of the conservation indicator that is newly introduced in fiscal transfers, here protected areas (PA)

Recent introduction:

**Changed revenues due to EFT /
Protected areas**

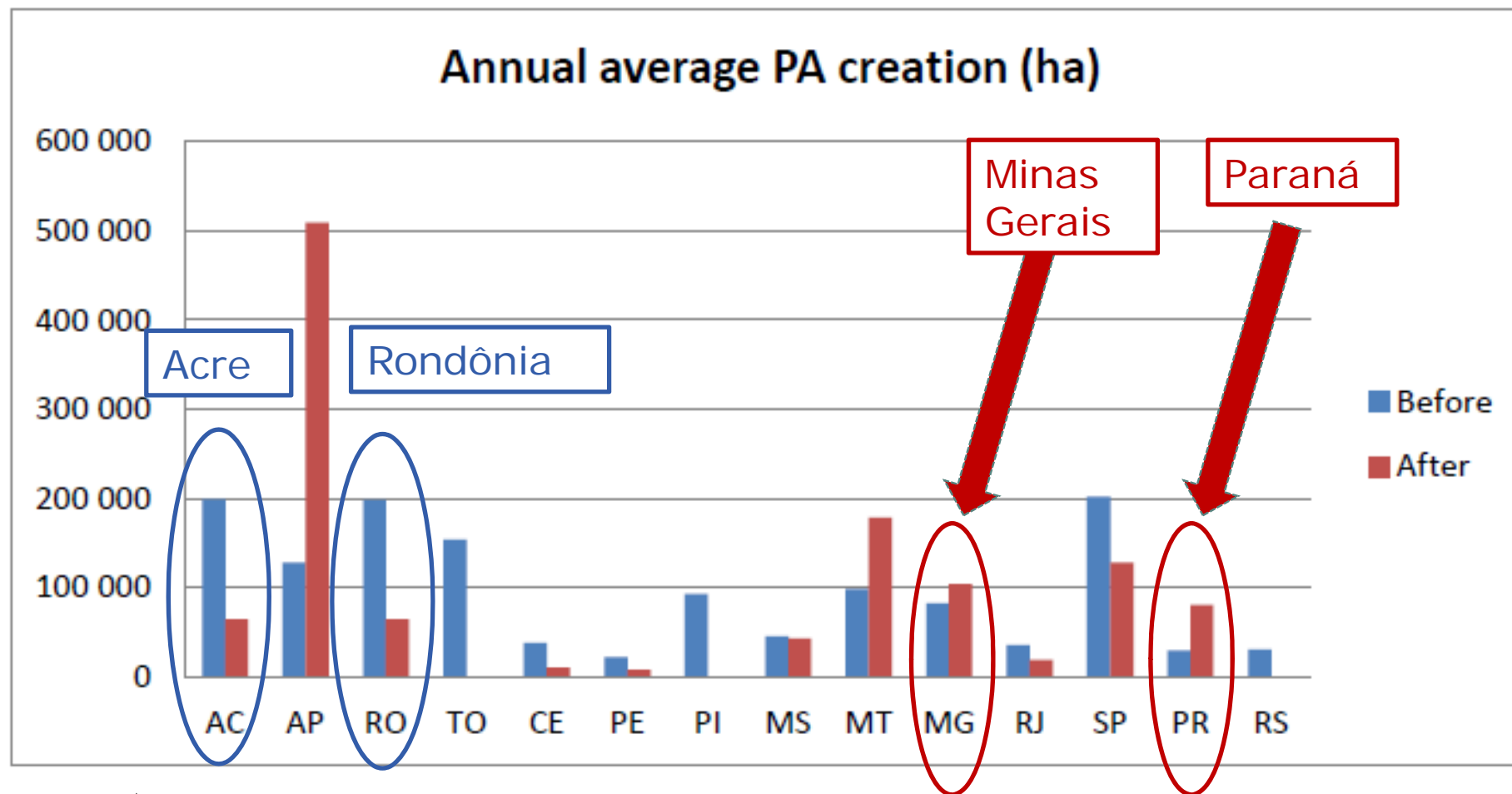
Growth in protected areas up to 1991 and from 1992 to 2009, Paraná, Brazil

Protected areas	Prior to 1991 (ha)	Up to August 2009 (ha)	Increase (%)
Federal conservation units	584,622.98	714,913.10	22.3
State conservation units	118,163.59	970,639.05	721.4
Municipal conservation units	8,485.50	231,072.02	11,338.8
Indigenous areas	81,500.74	83,245.44	2.1
RPPN	0	42,012.09	0
Faxinais (traditional community)	0	17,014.56	0
Permanent Protection Areas - APP	0	17,107.69	0
Legal Reserves – RL	0	16,637.73	0
Special Sites – SE	0	1,101.62	0
Other connective forests – OFC	0	3,245.62	0
Total	792,772.81	2,096,988.92	164.5

Source: Wilson Loureiro, IAP/DIBAP-ICMS Ecológico for Biodiversity, in Ring et al., POLICYMIX Report No. 2/2011

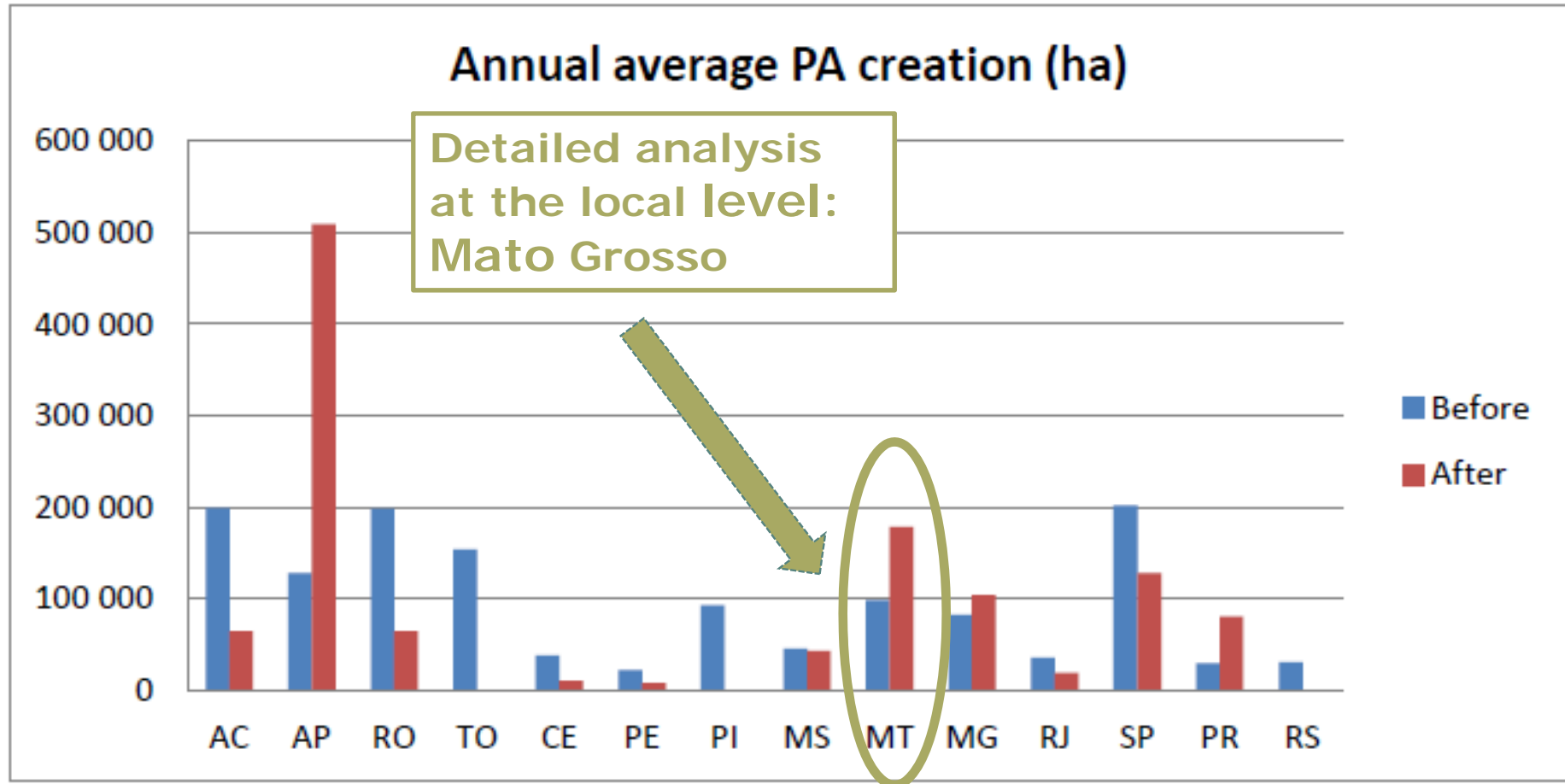


Cross-state comparison: Creation of protected areas before and after ICMS-E



No clear explanatory power of before/after ICMS-E introduction in relation to average PA creation per year

Creation of protected areas before and after ICMS-E



No clear explanatory power of before/after ICMS-E introduction in relation to average PA creation per year

Detailed analysis of ICMS-E in North West Mato Grosso



- 5% for Conservation Units and Indigenous Lands (2002)
- Is the ICMS-E an effective instrument for conservation?
- How fair is the intra-municipal allocation of ICMS-E revenues?
- What legal and institutional arrangements could allow an improvement of effectiveness and equity effects?
- Comparison of 2 municipalities **Juína** and **Cotriguaçu**



ICMS-E revenues can compete with revenues from livestock and logging!

But need for capacity building and qualitative criteria.



The Portuguese 2007 Local Finances Law (LFL) (15. Jan. 2007)

Art 6 – Promotion of Local Sustainability

Financial regime of municipalities shall contribute to the promotion of economic development, **environmental preservation** and social welfare

This objective is assured namely by the:

Positive discrimination of municipalities with area under Protected Areas or Natura 2000 status, in the scope of FGM (General Municipal Fund)

Ecological component in FGM

Local Finances Law establishes that 5 to 10% of FGM shall be distributed according to the area included in Natura 2000 and national protected sites

Municipal general fund (FGM) allocation criteria:

■ Equal allocation to all municipalities	5 %	
■ Population	65%	
■ Total area	20-25%	} 30%
■ Protected Areas & Natura 2000	5-10%	

- **Transfers per hectare PA are higher if protected area coverage in relation to municipal area is beyond 70%**
- **Lump-sum payments** municipalities decide upon use of money

Santos et al. (2012)



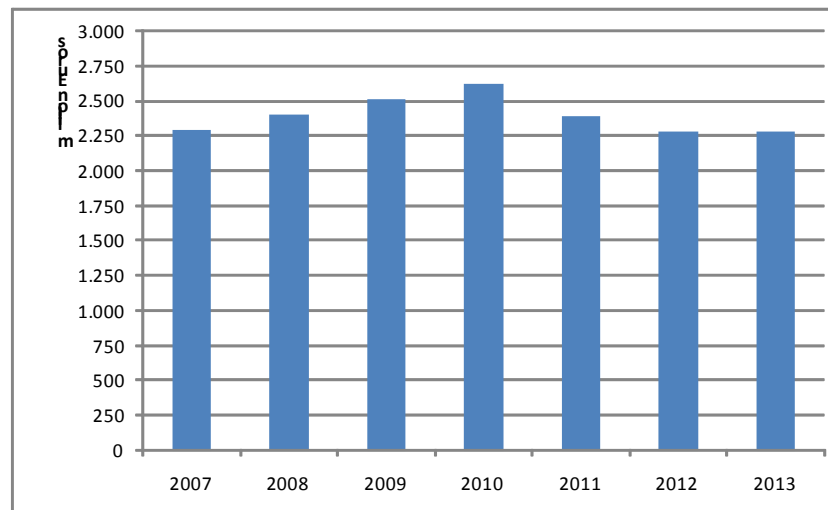
Relevance of ecological signal for local budgets of a sample of municipalities (2008)

	Municipalities	Share of fiscal transfers as a proportion of total municipal revenue	Share of ecological fiscal transfers	Share of conservation areas to total municipal area
with more than 70% conservation areas	Campo Maior	89%	25%	100%
	Murtosa	78%	6%	80%
	Porto de Mós	75%	11%	76%
	Aljezur	70%	16%	73%
	Barrancos	97%	26%	100%
	Terras de Bouro	94%	22%	95%
	Freixo Espo. Cinta	93%	21%	91%
	Castro Verde	90%	34%	76%
with less than 70% conservation areas	Lisboa	25%	0%	0%
	Grândola	71%	2%	9%
	Viana do Castelo	60%	0.5%	24%
	Lamego	80%	1%	33%
	Almeirim	62%	0%	0%
	Peso da Régua	87%	0.4%	12%
	Évora	62%	1%	16%
	Vimioso	96%	8%	38%



EFT in Portugal – problems

- **Crossover effects:** significant number of simultaneous changes – makes the ecological component of the new scheme difficult to grasp for the affected stakeholders
- **Economic crisis:** municipalities receive in 2012/13 more or less the same as in 2007



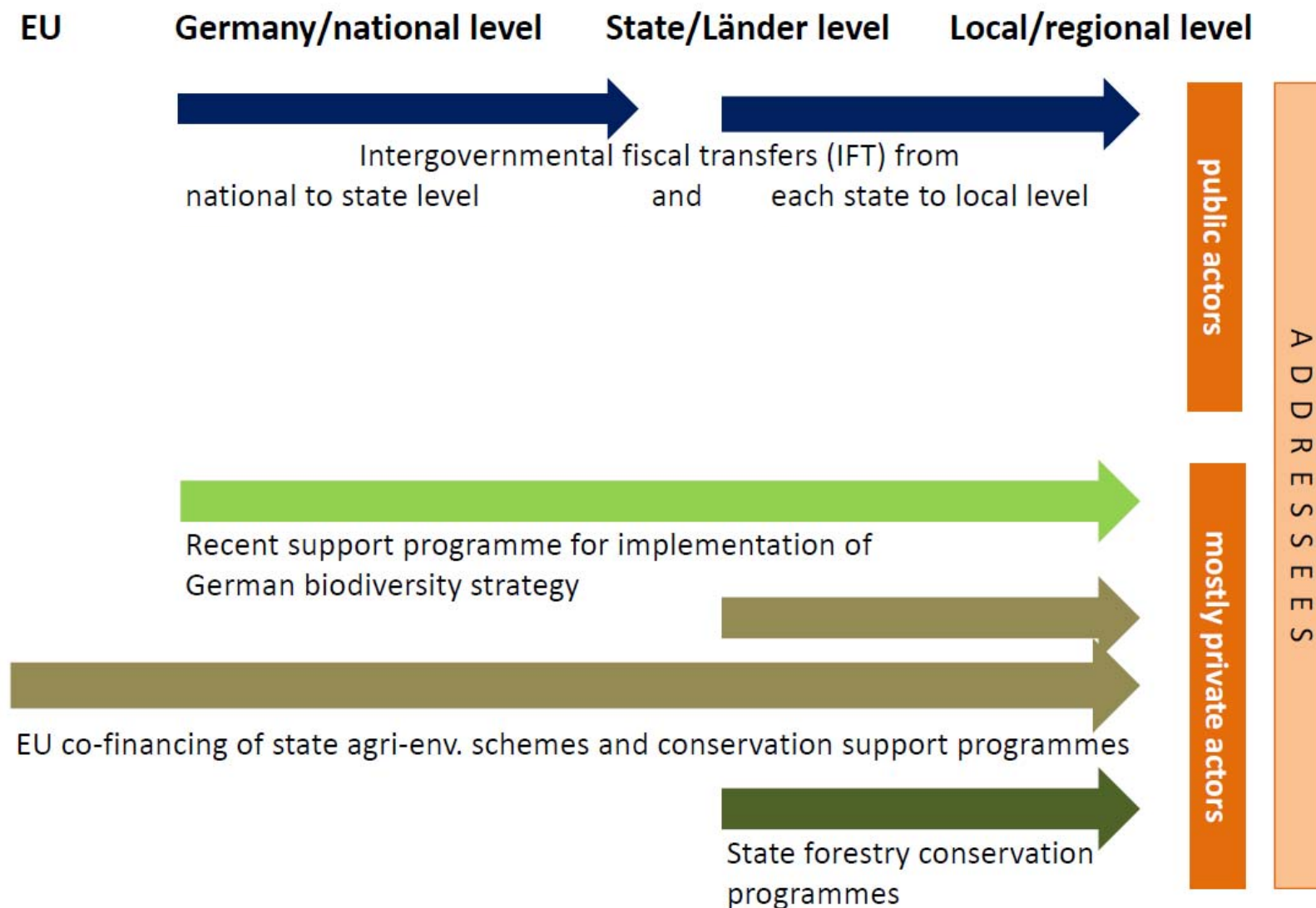
EFT in Portugal: Future design challenges

The EFT mechanism has a relevant potential but needs to be revised and improved.

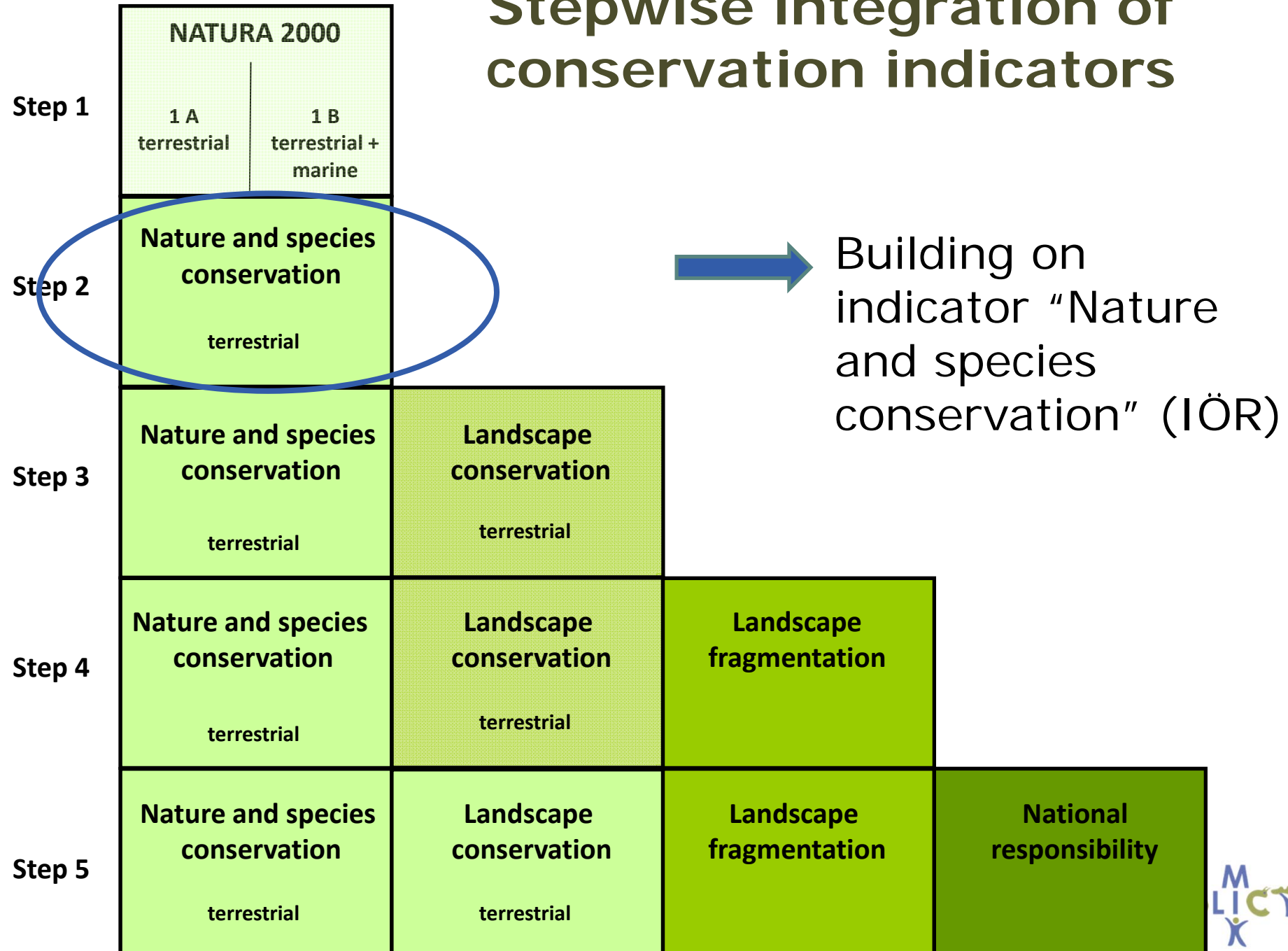
- Fill the information gap – communication strategy to disseminate and interact with municipalities
- Isolate and make clear the incentive signal
- Complement with a quality criterion



Scenario evaluation: EFT in the German policy mix



Stepwise integration of conservation indicators



Future scenario for ecological fiscal transfers in Germany

„Ökologischer Länderfinanzausgleich“



Per capita changes (euros) in relation to current fiscal transfers to the German Länder as of 2010, if National Parks, Natura 2000-sites and Nature Reserves were included in German fiscal equalisation



Future of EFT in Germany?

- Zero sum-game, no earmarking, but.....
- Leverage effect of EFT:
 - acknowledging biodiversity conservation as public responsibility
 - recognising associated costs as eligible for compensation via fiscal transfers
- Provide impetus for EFT at municipal level
- Help mainstreaming biodiversity conservation into sectoral policies at state level (land-use planning, infrastructure development etc.)
- Provide / secure funding for PES schemes
- Extend to spatial externalities from ecosystem service provision



3. Alignment challenges of ecological fiscal transfers (EFT)

- **Goal:** Compensating subnational *governments* for conservation costs (opportunity and/or management costs) as well as spillover benefits of protected areas (PA)
- **Actors addressed:** Public actors (national to local; state to local; national to state) – **align with instruments for private actors**
- **Conservation effectiveness:** Incentive to increase quantity and quality of PAs (especially when beneficiary of transfers can influence quantity and quality of PAs) – **Monitoring important!**

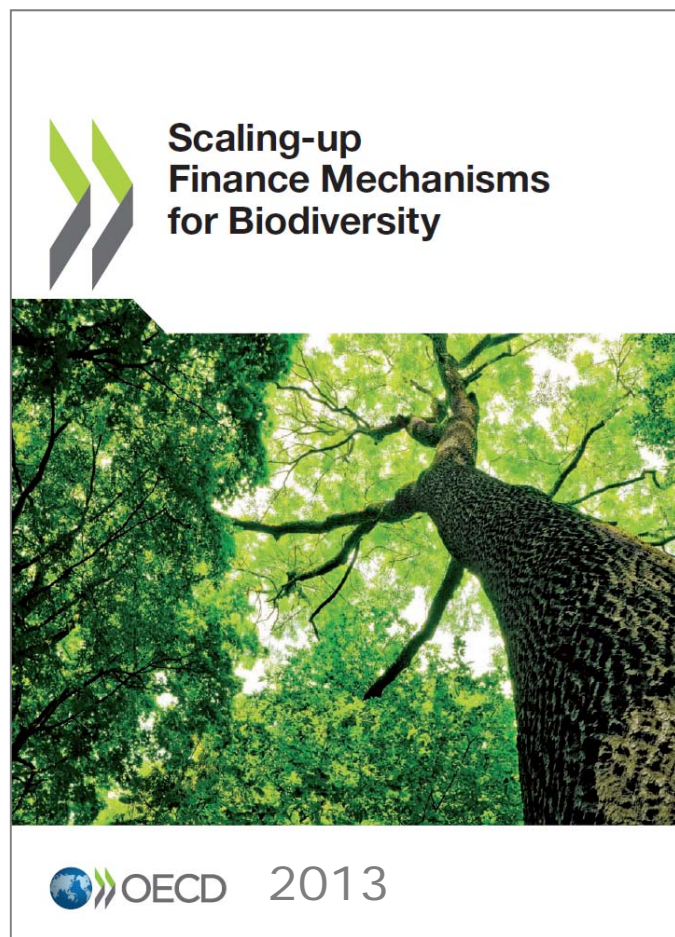
Alignment challenges of EFT

- **Associated costs:** low transaction costs, building on existing mechanisms (fiscal transfer schemes and PA regulation); **secure no double funding**
- **Social impacts:** depending on entry point of PAs in fiscal transfer scheme; fiscal transfers as such address inequalities between jurisdiction – **distributive instrument**
- **Legal and institutional requirements:**
PA coverage as a indicator for biodiversity conservation: easy to grasp, monitor and information available;
introduction of new indicators often needs constitutional changes and new laws, **requiring political majorities**



Relevant: Good information policy to increase knowledge and motivation of actors addressed

...and the wider picture:



- CBD strategic plan to 2020: mobilisation of financial resources for implementing biodiversity targets
- **Mainstreaming** biodiversity in public finance and fiscal transfer schemes
- Raising biodiversity finance and promoting biodiversity conservation and sustainable use through **Environmental Fiscal Reform** (EFR)
- **Create synergies** between instruments addressing public and private actors



Further EFT presentations: this afternoon

Policy mixes for biodiversity conservation and species protection (2)

- **Schröter-Schlaack** et al.: EFT in **Germany** and their role in the policy mix for biodiversity conservation
- **Cassola** and Ring: EFT for biodiversity conservation in **Brazil**: options for a federal-state arrangement
- May, **Gebara** et al.: The effectiveness and fairness of the ICMS-E as a fiscal transfer for biodiversity conservation. A tale of two municipalities in **Mato Grosso, Brazil**

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Thank you!



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