Ecological Fiscal Transfers: The Portuguese Case

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Intergovernmental Fiscal Transfers to the local level

Substantial source of income for municipalities:
e.g., on average 60% in Portugal, 30% - 50% in Germany

Fiscal compensation today:

Urban agglomerations

Rural and remote areas

Not considered:
Ecological services involving spatial externalities: spillover benefits

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Spatial distribution of conservation benefits and costs

**Benefits**

Goods and services of national and global relevance

**Costs**

Regionally and sectorally unequal distribution

**Ecological services** involving spatial externalities: spillover benefits

Payments for ecological services at the local level:

- Land users – private actors  
  (e.g., agri-environmental programmes, conservation programmes)

- **Local governments** – public actors  
  (Intergovernmental fiscal transfers to the local level)
Different possible rationales for Ecological Fiscal Transfers

• **Compensation of expenses/supply costs** for ecological public goods and services;

• **Compensation of opportunity costs** (e.g. loss of land-use revenue on municipal property; loss of tax revenues);

• **Payments** for external benefits to local governments for providing **spillover benefits** beyond their boundaries;

• **Fiscal equalisation/distributive fairness** (e.g. vertical equalisation between higher and lower levels of government)

Source: Irene Ring, Christoph Schroter-Schlaack, 2011, Instrument Mixes for Biodiversity Policies, POLICYMIX project report.
Ecological fiscal transfers: a realistic way to go?

- Ecological fiscal transfers may be introduced at different levels:

1. **State level:** e.g., Brazil or Saxony/Germany

2. **National scale:** e.g., Portugal

3. **International transfers (IPES):** e.g., Indonesia: Combining REDD and fiscal transfers to the local level based on cost and benefits of forest conservation. Voluntary – donating governments
Ecological fiscal transfers in Brazil

Brazil has gained positive experiences with ecological fiscal transfers: **ICMS-Ecológico**

- Compensation for land-use restrictions
- Incentive to create and maintain protected areas

or commonly also called: Ecological value-added tax
States with ICMS-E legislation in Brazil (2008)

- “Conservation Units”: officially registered protected areas
- Watershed protection areas
- Different categories of protected areas are multiplied by a conservation factor reflecting the varying land-use restrictions
- Paraná and Minas Gerais have introduced a “quality indicator” – ranges from 0 (bad management; “paper park”) to 1
Transfer potential of ecological fiscal transfers to Germany

Consideration of conservation areas within the intergovernmental transfer system to the local level – possible scenarios:

**Brazilian model:**
Set aside a definite budget in advance and allocate according to share of conservation units within municipal territory

**Alternatively:**
Consideration of conservation units as part of the additional approach to allocate lump-sum transfers (analogous to area, pupils, etc.)

Corresponding scenarios are calculated at UFZ for the Free State of Saxony
The Portuguese case - Municipal revenues in Portugal

- 308 municipalities in Portugal
  (278 in the mainland and 30 in Azores and Madeira)

- Direct fiscal transfers from central government are an important source of revenues for the municipalities (around 60% in average).
  - E.g. for municipalities such as Barrancos and Porto Moniz, fiscal transfers in 2008, stand for 97% and 96%, respectively, of their total revenues.

- Transfers are based mostly on population, area, topography and development level. Until 2007, no land use or environmental criteria were considered.
Ecological fiscal transfers – Recent experience in Portugal

Portugal started very recently (2007) an experience with ecological fiscal transfers - The Portuguese Local Finances Law (2/2007, January 15th)

Rationale: recognizes that municipalities face preservation costs (including opportunity costs), while benefits extend over municipal boundaries; give financial incentives to local governments
Ecological fiscal transfers in Portugal

Ecological fiscal transfers integrated in the annual transfers from the national general budget to the municipalities (Local Finances Law - LFL), in order to compensate them for land-use restrictions imposed by protected areas and Natura 2000 sites.

Idea was pushed by the Ministry for the Environment and accepted by the Ministry of Finance.
New Local Finances Law  
(2/2007, January 15th)

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 allocated to protected areas and Natura 2000, in the scope of FGM (General Municipal Fund)**

> Concession of exemptions and fiscal benefits to taxpayers (municipal taxes) that promote activities according to given environmental standards

> Use of fiscal instruments (namely taxes) directed to the promotion of social objectives as well as contributing to the urban, territorial and environmental quality
Comparing the new LFL and the old Law

Old LFL

OE
90.5% of the average value between 3 taxes (IRS, IRC, IVA)

67% 18% 15%

FGM
Municipal General Fund

FCM
Municipal Cohesion Fund

FBM
Municipal Baseline Fund

New LFL

OE

5% Participation on IRS

“Ecological Signal”
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% ca. 50 million €
- Population 65% ca. 600 million €
- Total Area 20 - 25% ca. 200 million €
- Protected Areas & Natura 2000 5 - 10% ca. 80 million €

Lump-sum payments
municipalities decide upon use of money
Instrument evaluation

We analyzed the impact of this new mechanism for the period 2007-2009 considering all Portuguese municipalities.
Some results for a sample of 26 out of the 308 municipalities in Portugal
## Effects of the Ecological Component

<table>
<thead>
<tr>
<th>Municipalities with more than 70% of CA</th>
<th>Real transfers New Law 2008</th>
<th>Transfers New Law without ecological component</th>
<th>Comparing with the Real Transfers New Law 2008</th>
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<tbody>
<tr>
<td></td>
<td>Municipalities</td>
<td>FGM (Euros) 2008</td>
<td>TOTAL real 2008</td>
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<td>National Total</td>
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<td>995.805.175</td>
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</table>

Santos, Ring, Antunes and Clemente: Ecological Fiscal Transfers – the Portuguese case
### Ecological Component Indicators

<table>
<thead>
<tr>
<th>Districts</th>
<th>Municipalities</th>
<th>Share of the ecological component</th>
<th>Estimated Ecological Component (euros)</th>
<th>Population (inhabitants)</th>
<th>Total Municipal Area (ha)</th>
<th>Classified Area (ha)</th>
<th>€/inhabitant</th>
<th>€/ha of Total Municipal Area</th>
<th>€/ha of CA</th>
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<tbody>
<tr>
<td>FARO</td>
<td>VILA DO BISPO</td>
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<td>873.332</td>
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<td>17.423</td>
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<td>49</td>
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<td>353.343</td>
<td>2.706</td>
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<td>42.6</td>
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<td>294.729</td>
<td>9.804</td>
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<td>BRAGA</td>
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<td>24.400</td>
<td>22.157</td>
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<tr>
<td>BEJA</td>
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<td>7.772</td>
<td>56.900</td>
<td>43.240</td>
<td>279</td>
<td>38</td>
<td>50</td>
</tr>
</tbody>
</table>

**Municipalities with more than 70% of Classified Areas**

**Municipalities with less than 70% of Classified Areas**

...
Final remarks

- The Ecological component **discriminates positively** municipalities with high percentages of classified areas (protected areas + Natura 2000);

- Ecological fiscal transfers can be significant for some municipalities in which the amount of land granted conservation status constitutes a large part of their overall territory;

- However, **it is not a very strong incentive** - current fiscal transfers still **do not seem to compensate for the opportunity costs** in some municipalities. We are now studying how it is accepted by stakeholders;
Final remarks

- The mechanism is **too recent** to be possible to evaluate the existence of direct or indirect impacts (positive or negative) on biodiversity & ecosystem services;

- By simultaneously introducing a significant number of changes in the Portuguese intergovernmental fiscal transfer scheme, however, the ecological component of the new LFL is difficult to grasp by the stakeholders affected due to the presence of many crossover effects;

- Introducing this ecological component is an important step to change the mindset of the decision makers;
Final remarks

- This is a first step that requires further improvements and that may lead to the development of other complementary instruments;

- The developed exercise has shown that several options exist for improving the Portuguese LFL in order to strengthen the incentive to maintain existing conservation areas and to create new ones. The introduction of a “quality” criterion for the allocation of ecological fiscal transfers is an approach which complements the existing criteria, providing an additional incentive at the level of conservation management.
Final remarks

- EFT has the potential to combine conservation policies with poverty alleviation objectives;

- Governance issues: feasible; potentially transparent and accountable but it is important to guarantee access to the information and a clear evidence of the incentive;

- No relevant transaction costs: implementation costs (cost of introducing and implementing the instrument itself – necessary institutions are already present) and decision-making costs