Material input taxation – the forgotten tool in policy-mixes for resource protection

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Motivation

- Will to protect the natural resources with a functioning policy-mix
- Taxation of wages instead of natural resources
- OECD (2010) and others recommend a revenue-neutral taxation-shift towards consumption over the medium term
- “Plastics problem” - impact (on sources and sinks) of light industries is underestimated in resource policy
Economic instruments

- Minimizing subsidies (esp. environmentally harmful)
- Extended producer responsibility (EPR) schemes (with ecological steering effect)
- Differentiation of VAT (dependent on the resource efficiency of goods and services)
- Taxation of a product group (e.g. beverage containers, single-use carrier bags)
- Taxation of raw material treatments (e.g. plastic-waste incineration)
- Material input tax
- e.g. Taxation of (primary) construction material extraction
Material input tax (theory)

- Fiscal psychology (a sound communication of policy package is indispensable)
- Excise duty (vs. transaction tax and fees)
- Quantity tax (vs. ad valorem tax)
- Indexing to avoid tax loss (through inflation)
- Feasibility (jurisdiction, political willingness, administration costs, etc.)
- Taxable base (differentiation increases complexity)
- Avoid substitution (other materials) effects
- Border adjustment necessary
- Steering effect (tax-rate not to high/low)
- Carrier of the tax burden
Material input tax (on plastics)

- **Policy-mix on plastics necessary** (waste, hazards, feedstock, efficiency…)

- **Carriers of tax burden**: producers & importers (probably passing on) → efficiency rises, rebound effects decrease, product life-span rises

- **Differentiation of tax-rates** by a) plastic type, b)content/harmfulness of additives, c) recycability, d) recycled content [→ combinations possible]

- **Intended effects** of tax rate and tax base: a) internalization of external costs (e.g. GHG-emission during production, toxicity, littering rate), b) steering effect “less usage of plastics”, c) attention on possible strangulation effect for businesses

- Decide if taxation is implemented on **international** (e.g. OECD, EU) or **national level** (incl. boarder adjustments)
Conclusions & recommendations

- EU-wide taxation easier than national implementation (border adjustments)
- MIT are an underestimated and necessary part of a policy-mix for resource-protection
- MIT are in line with SDGs (esp. No. 12)
- MIT can help reduce tax burden on wages
- MIT for every raw material is very complex
- MIT for specific raw materials in combination with taxation for special products is probably most successful
- MIT on plastics fits well into EU plastics strategy
- MIT on plastics is possible but specific implementation needs further in-depth analysis
- More effort on MIT-concepts is overdue