



Evaluation of Tax Expenditures in Ireland

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Outline of presentation

1. What are Tax Expenditures?

2. Economic Issues & Challenges in Evaluation of Tax Expenditures

3. Experience in Ireland

4. Case studies

- Film Relief (2012)
- R&D Tax Credit (2013)

5. Next steps

- EU Fiscal Rules
- Official Guidelines?



What are tax expenditures?

Not clear-cut – but potential criteria include:

- Equivalent to direct expenditures, except this spending takes place through the tax system (Surrey, 1973)
- Reduces potential tax revenue
- Targeted at a narrow group or activity
- Non-revenue raising objective
- Is a deviation from a benchmark structure
 - Benchmark is the baseline against which a tax reducing measure can be recognised as either part of the 'normal' tax structure or as a tax expenditure
 - But no agreement in literature on appropriate benchmark.

Clearly distinct from direct expenditures with fixed sum of funds and/or eligibility

- Market led



Distinction between Tax Expenditures and Direct Expenditures – Example Benefits and Limitations

	Tax expenditures	Direct subsidies
Cost control	Cost uncertain – depends on taxpayer participation	Cost capped by expenditure ceiling.
Possible abuses	Reduced risk of fraud as already tax compliant. Still room for evasion, avoidance & for rent seeking.	Room for arbitrariness and capture of the allocating body.
Equity	Regressive by nature.	Discretionality can provide more equitable access.

Based on: Villela, Lemgruber & Jorratt (2010)



Economic Issues

- **Optimal taxation theory – principle of neutrality**
 - Also efficiency

- **Market failure as motivation for tax expenditures**

- **Other economic issues**
 - Impact on the fiscal position,
 - Pro-cyclicality,
 - Fiscal illusion / political economy



Challenges in Evaluation

1. Data issues

- Availability of data determines the types of evaluations possible
- In practice effectiveness tests often dominate efficiency reviews
- Data requirement for future evaluation vs compliance and administration burden

2. Estimating costs

- Revenue Forgone
- Final Revenue Loss
- Outlay Equivalence

3. Health warning

- Aggregation Problem,
- Evaluation of Aggregate Effects of Tax Expenditures



Tax expenditure evaluations

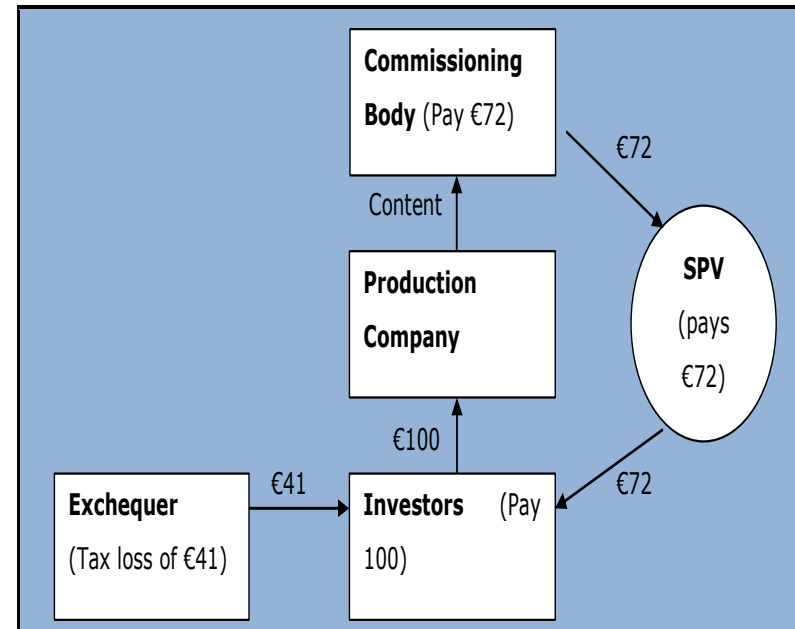
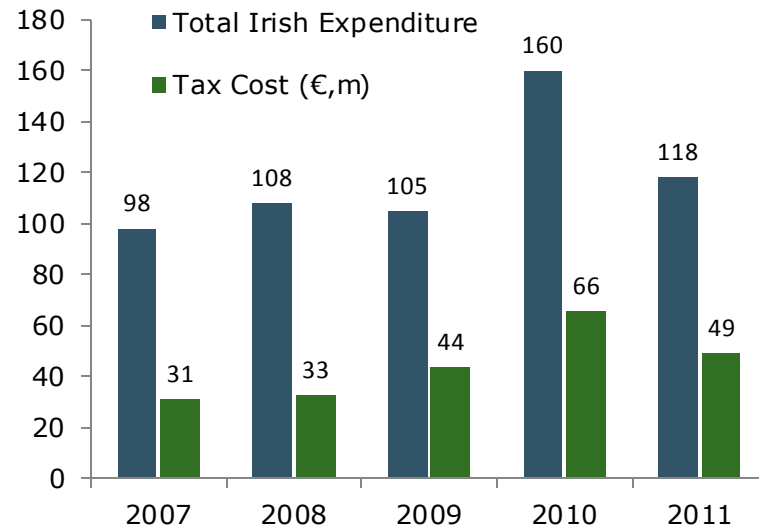
2006/2007	Property Incentives, Film Incentives	Department of Finance
2011	Property Incentives	Department of Finance
2012	Film Incentives	Department of Finance
2013	R&D Tax Credit	Department of Finance
2013	Living City (property)	Department of Finance
2014	Agri-Taxation	Finance, Agriculture, Revenue



Case Study 1: Film Relief

2011: €118m in expenditure, €55m cost

- Income tax relief at marginal rate
- High yield, low risk for investors
- Inefficient scheme – cost €41 per €28 funding gap





Case Study 1: Film Relief

1. Methods

- Survey of domestic and international production companies
- International review of audiovisual incentives
- Confidential access to Revenue case files and data
- Public consultation
- CBA

2. CBA approach and findings

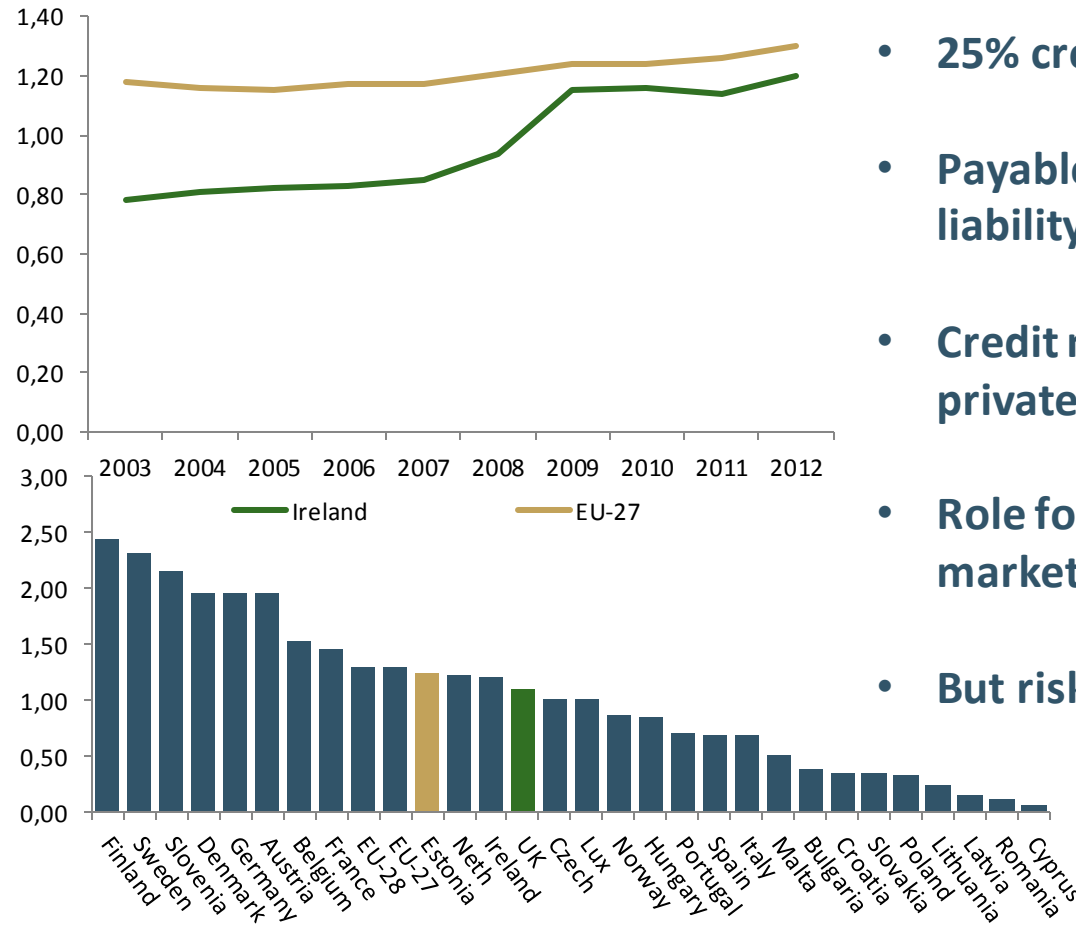
- Forfas model – for industrial development agency supports
- Parameter values for shadow price of public funds, shadow price of labour from Forfas model
- Internal estimate for deadweight

Shadow price of labour	100%	80%	60%	50%	40%	30%	20%
Deadweight	Range of Net Benefits						
10%	-€38.2m	-€21.1m	-€4.2m	€4.1m	€12.3m	€20.5m	€28.6m
20%	-€41.8m	-€26.5m	-€11.6m	-€4.2m	€3.2m	€10.4m	€17.6m
35%	-€47.1m	-€34.7m	-€22.5m	-€16.5m	-€10.6m	-€4.7m	€1.2m
40%	-€48.9m	-€37.4m	-€26.2m	-€20.7m	-€15.2m	-€9.7m	-€4.3m
50%	-€52.4m	-€42.9m	-€33.5m	-€28.9m	-€24.3m	-€19.8m	-€15.3m
60%	-€56.0m	-€48.4m	-€40.9m	-€37.2m	-€33.5m	-€29.9m	-€26.3m
70%	-€59.5m	-€53.8m	-€48.2m	-€45.4m	-€42.7m	-€39.9m	-€37.2m



Case Study 2: R&D Tax Credit

BERD/GDP ratio converging on EU-27



- R&D tax credit introduced in 2004
- 25% credit on R&D over 2003 levels
- Payable credit if insufficient tax liability
- Credit motivated by market failure in private sector investment in R&D
- Role for Government to correct market failure (Mirrlees, 2011)
- But risk associated with intervention



Case Study 2: R&D Tax Credit

1. Methods

- Public consultation
- Survey of R&D companies
- Literature review on economic of R&D
- International review of R&D incentives
- Analysis of confidential Revenue case files
- Econometric methods

2. Econometric methods

- R&D demand equation: $R\&D \text{ Expenditure} = F(\text{User Cost of R\&D})$
- Model also incorporates firms specific 'control' variables (e.g. liquidity ratio, sales, profit, size, sector)
- Panel (multi-year) analysis

3. Data issues

- Revenue case files matched with financial data from company accounts
- Small sample size and problems with data quality
- Lessons for future evaluations – data collection essential from outset



Future work in evaluating tax expenditures

1. Medium Term Economic Strategy (2013)

- Official policy on tax expenditure
- Commitment to evaluation (including ex-ante)

2. EU Fiscal Rules

- Requirement for Member States to list and cost tax expenditure

3. Other countries

- Unlike current expenditure limited instances of official evaluation guidelines – Germany plus one or two others

4. Next steps

1. Compliance with Fiscal Rules requirements
2. Role for official guidelines as per current and capital expenditure?