

# **The Irish Plastic Bag Levy –Review and Lessons**

**Simon McDonnell and Frank Convery  
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# Pre-amble

- promotion of EAERE Annual conference, Goteborg, Sweden, June 25-25, 2008
- <http://www.eaere2008.org/>
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- A social and intellectual cornucopia
- **Be there!**

# Key reference

- Convery, F., McDonnell, S., and S. Ferriera (2007) The Most Popular Tax in Europe? Lessons from the Irish Plastic Bag Levy. *Environmental and Resource Economics* 38(1): 1-11.

# Antidote to Edmund Burke

To tax and to please, no more than to  
love and be wise, is not given to men.  
*On American Taxation.*

# Patrick Kavanagh (1904-1967)

*“It was sad to see the empty bag  
Blown about like a dirty rag”*

A Summer Morning Walk

# **Ireland as pioneer in Europe**

- **Smoke** March 29, 2004, workplaces in Ireland – offices, shops, factories, restaurants, bars and other enclosed workplaces smoke free by law.
- **Plastic Bags**

# CONTEXT 1

- Before levy, plastic bags constituted  $> 5\%$  by weight of total waste generated by Irish households each year

## **Why bother?**

- Visibility
- Long life
- Visible and persistent component of litter pollution throughout the countryside and along coastlines.

# Context 2

## **Why plastic?**

Differential impact (in relation to plastic bag durability and visibility) compared to other litter items.

## **Policy Options**

Ban on littering – already exists, but perceived as ineffectual

Voluntary agreement (preferred by business)

Ban (command and control)

Levy

# Intellectual Context

-Internalisation of Pareto relevant externalities?

Not really...

Incentivising good behaviour by punishing bad behaviour

Pearce DW, Turner RK (1992) Packaging Waste and the Polluter Pays Principle: A Taxation Solution. *Journal of Environmental Planning and Management*, 35(1):5–15.

Pigou A. (1960) *The Economics of Welfare*, 4th edn. MacMillan, London

Baumol W., and W. Oates (1988) *The Theory of Environmental Policy*, 2nd edn. Cambridge University Press.

Stern T (2003) *Policy Instruments for Environmental and Natural Resource Management*. Resources for the Future, Washington DC

# Recycling and Fairness

- Goulder L. (1995) Environmental Taxation and the “Double Dividend”: A Reader’s Guide. *International Tax and Public Finance* 2(2):157–183
- Ekins P., and S. Speck (1999) Competitiveness and Exemptions from Environmental Taxes in Europe. *Environmental and Resource Economics* 13:369–399
- Barker T, and J. Köhler (1998) Equity and Ecotax Reform in the EU: Achieving a 10% reduction in CO<sub>2</sub> Emissions Using Excise Duties. *Environmental Fiscal Reform*. Working Paper No. 10. University of Cambridge, Cambridge.

# Design Issues

- Upstream (imposed on producers and/or importers) or downstream (imposed at the point of sale)?
- Units and Level ?

*Consultancy report recommendations:*

- Upstream levy
- Modest level (under the equivalent of €0.05 per bag)
- Key consideration – low administrative costs
- No estimates of Pareto optimum level

Rejected by Minister and DOE

Wanted direct impact on consumers that would make them ‘pay attention.’

# Decisions

Rate of €0.15 (£0.11) per ‘normal’ plastic bag at retail outlet

- Well above what was estimated maximum willingness to pay for bags
- Decision was made – only debate with stakeholders was ‘how’.

What to do with money?

- General government revenue
- Recycled to reduce other taxes
- Recycled into Environment Fund used mainly to pay for waste related activity

# Stakeholder concerns

Supermarkets will be 'blamed' for profiteering by charging for bags

- **Solution:** Government funded promotion campaign to explain

Collecting money will impose transactions costs

- **Solution:** integrate collection into the VAT system – close collaboration with the Revenue Commissioners.

**Hygiene** concerns with meat, fruit

- **Solution:** allow small in store bags
- One plastics bag manufacturing facility
- Didn't lobby effectively.

# Initial Performance:

## Costs

- Advertising costs - publicity and awareness campaign \$0.358 million
- Set up (establishment) costs - €1.2 million (£0.91 million)
- Annual administration costs - €350,000.

# Revenues from Levy

Year	Revenues (Mill Euro)	% increase year on year
July 02-June 03	13.6	
July 03-June 04	13.0	-4.51
July 04-June 05	16.1	23.79
July 05-June 06	17.8	10.47
July 06-June 07	20.4	14.86

## But note:

- Large increases in the volume of retail sales
- seasonally adjusted volume of goods sold in July 2007 was 44.8% higher than in 2000 and the value of those goods was higher by 59.3%
- (CPI) indicates that prices have increased by approximately 22.7% over the period December 2001 to August 2007

# Impact on plastic bag numbers

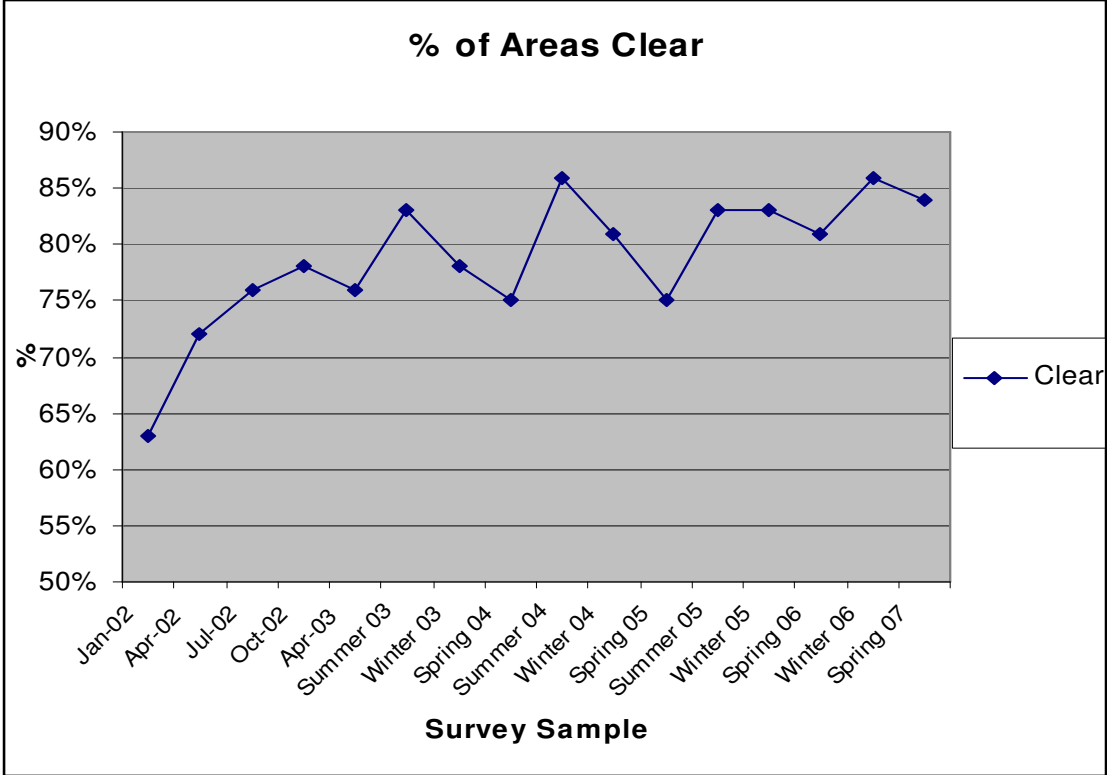
Consumption was reduced by 94% from pre-levy levels of approximately 1.2 billion bags.

But some slippage – reduction of 90 per cent in 2006

Solution: Increase levy from €0.15 to €0.22 in July 2007

# Landscape impact

- Surveys - between January 2002 and April 2003, the number of “clear” areas (i.e. areas in which there is no evidence of plastic bag litter) increased by 21%.
- Number of areas without “traces” increased by 56%
- National Litter Pollution Monitoring System.
- In 2002, plastic bag litter accounted for 5% of national litter composition.
- After the introduction of the levy, the percentage fell to 0.32% in 2003 and 0.22% in 2004



# High Degree of Popularity

## **Retail outlets** (especially supermarkets)

- Save money on plastic bags, make money on life time bags (available for €1 – 2.50 per bag)

**Consumers** – feel good factor and easy compliance – buy a bag

- Removal would be resisted.

# Slippage

Bags usage (number) per capita

- 2002 328
- 2003 21
- 2007 30

# International Experience

## **Command and Control**

Nepal, Bangladesh, the Philippines, Taiwan and South Africa and in parts of India  
- bans on the manufacture and distribution of plastic bags

City of San Francisco also banned plastic bags

## **Voluntary**

IKEA introduced their own voluntary levies

## **Levy**

- Greater London Authority
- Scotland a bill was introduced to the Scottish parliament based almost entirely on the Irish model. However, the bill was eventually withdrawn in October 2006.

Between 15 and 20 small and medium enterprises involved in the manufacture, importation and distribution of plastic bags in Scotland - 300-700 job losses directly

# Conclusions and Implications

- **Personal commitment** of the lead Minister (Noel Dempsey) crucial  
Personal communications with the Minister of Finance ensured ring fencing

Engagement with Revenue Commissioners ensured their support.

No dissimulation with stakeholders - VA off the table from day 1

**Ring fencing** of revenues for Environment Fund helped, but not crucial

- There is no such thing as a free lunch, but this is close

## **Limited Generalisation?**

But not yet extended to other areas

- Ban in incandescent light bulbs from January 2009 announced.....

Thank You