



# Tax and benefit policy: insights from behavioural economics

Andrew Leicester (IFS)

Peter Levell (IFS)

Imran Rasul (University College London and IFS)

HMRC, 24<sup>th</sup> July 2012

# Introduction

- Behavioural economics uses insights from psychology to enrich economic choice models and better explain observed outcomes
- Most visible application is ‘nudge’ agenda
- Behavioural implications deeper than nudge alone
  - resonance for ‘traditional’ policy levers should not be neglected
- Report focuses on four aspects of tax and benefit policy:
  1. efficiency of revenue-raising
  2. corrective taxation
  3. redistribution
  4. tax fraud and evasion

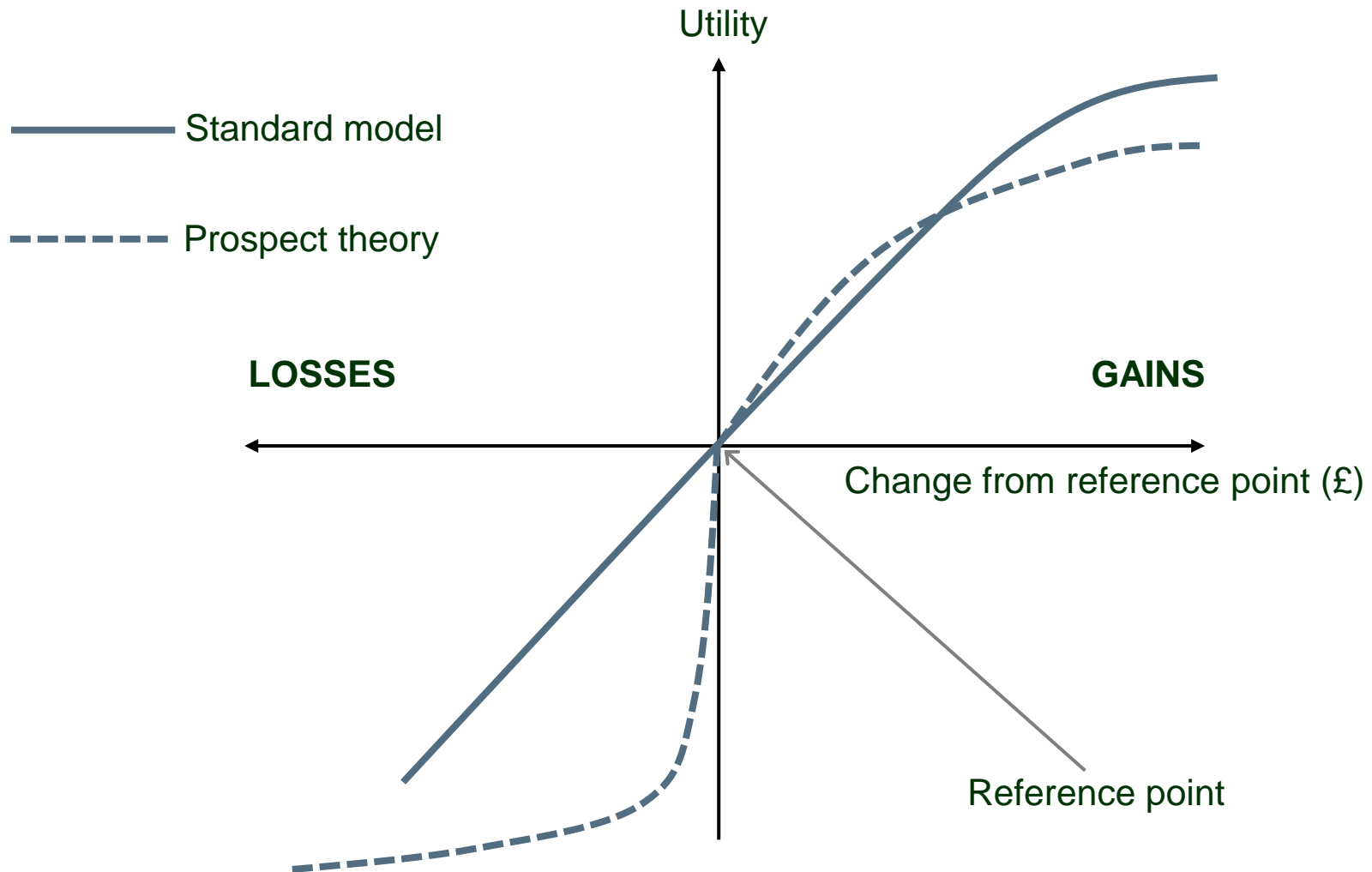
# The 'standard' economic model of choice

- Consumers pick from a menu of available options
- Choice depends on:
  - preferences (described by a utility function)
  - economic constraints (e.g. prices, income)
- Choices are:
  - consistent (same choice given same constraints and preferences)
  - rational (maximise utility)
  - self-interested (utility of others does not affect own choice)
- Model has been extended and developed in many ways
- Behavioural economics offers further insights
  - different assumptions about preferences, constraints
  - different views on how people make choices

# Developments from behavioural economics

- **Framing effects:** presentation matters
  - changes to choice environment can affect outcomes
  - salience of prices, taxes
- **Social preferences:** choices not always self-interested
  - can lead to ‘intrinsic’ motivations for certain behaviours
  - risk that ‘extrinsic’ incentives like taxes can crowd them out
- **Bounded rationality:** rules of thumb to simplify complex choices
  - make best choice according to ‘heuristic’, not necessarily ‘optimal’
  - always save 10% of income; only react to large price changes

# Prospect theory



# Time inconsistency

- Present-bias
  - discount immediate future more heavily than distant future
  - correlated with real-world behaviours (e.g. use of credit cards)
- Hard to stick with laid-out future plans
  - saving, giving up smoking, starting exercise – procrastination
  - upfront incentives may be more effective
- Awareness of this inconsistency gives desire for commitment
  - limit future behaviours (e.g. restricted access savings)

# What does this mean for policy?

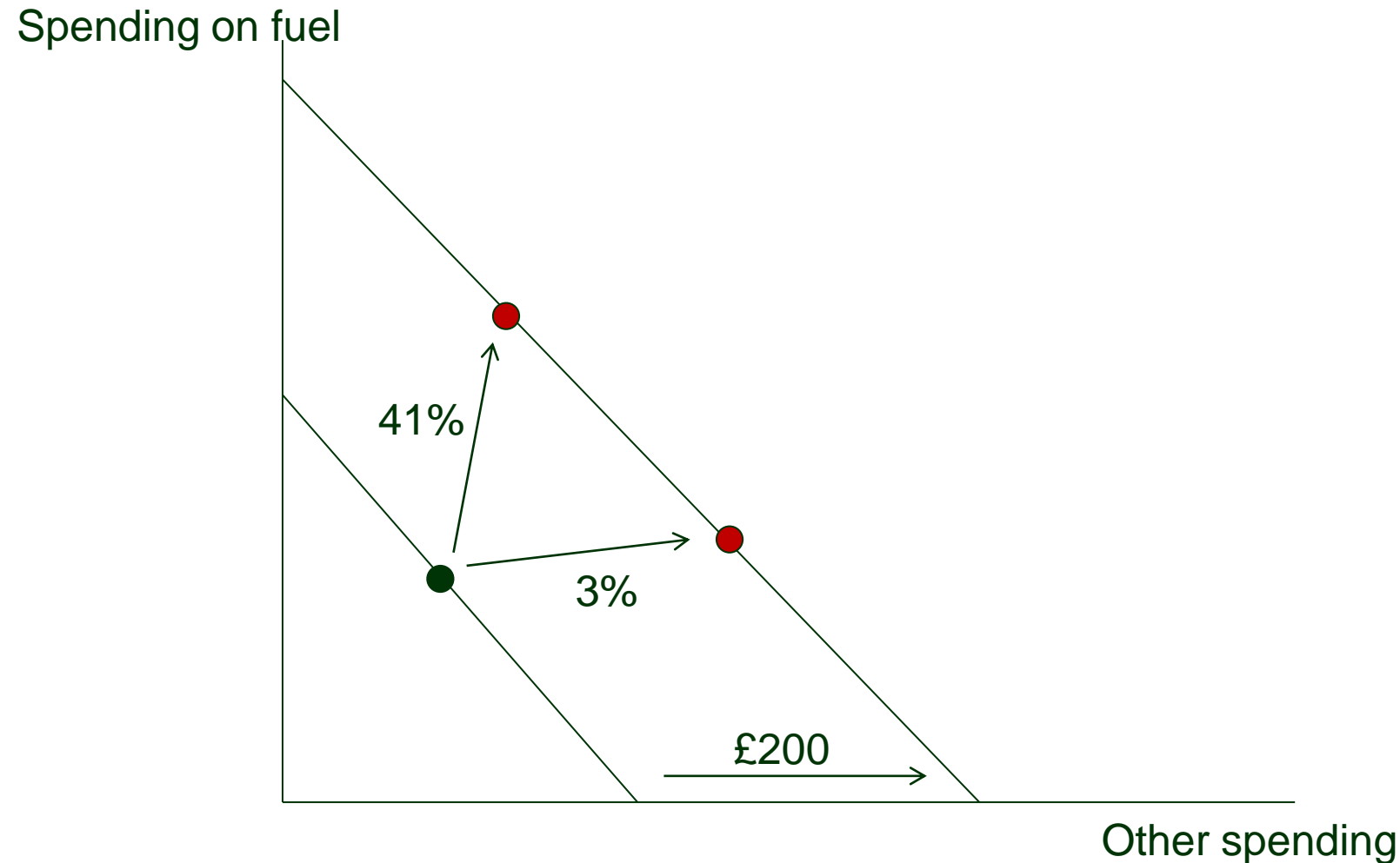
- BE questions many assumptions of the standard model
- Standard economics:
  - presentational features of tax and benefit system don't matter
  - taxes make individuals worse off
  - timing of tax doesn't matter
- Under BE these are no longer necessarily true...
- Consider in the context of some policy examples:
  - labelling of benefits
  - smoking
  - motoring

# How should we label benefits?

- Under mental accounting consumers allocate spending to different 'pots'
- Framing payments toward one budget or another can affect how they are spent
- Some evidence for this for winter fuel payment
  - £200 lump sum payment (£300 for over 80s)
  - paid between mid-November and December
  - no obligation to spend it on fuel
- ...income from this source disproportionately spent on fuel



# How do people spend the winter fuel payment?



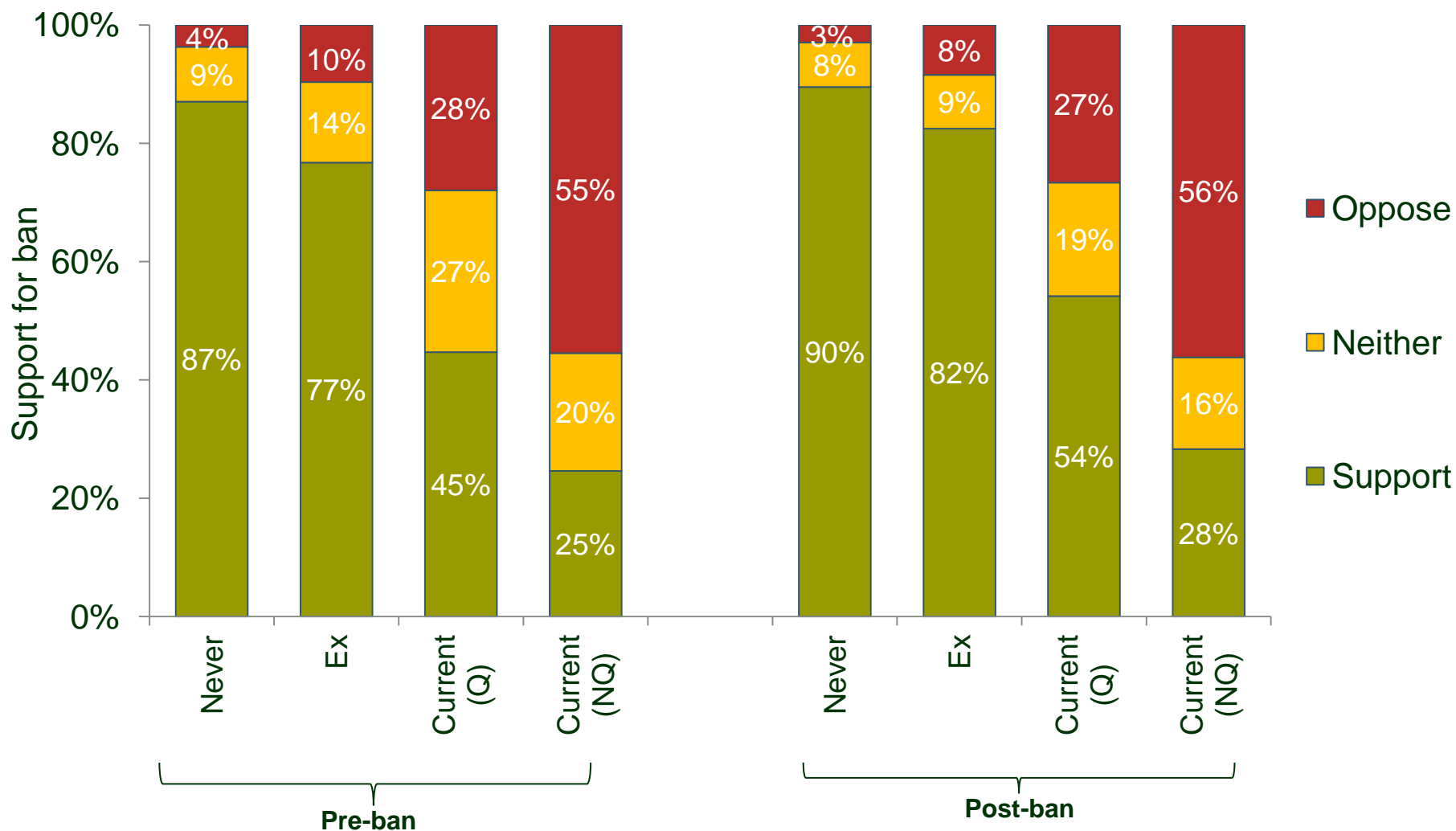
# How should we label benefits?

- Under mental accounting consumers allocate spending to different 'pots'
- Framing payments toward one budget or another can affect how they are spent
- Some evidence for this for winter fuel payment
  - £200 lump sum payment (£300 for over 80s)
  - paid between mid-November and December
  - no obligation to spend it on fuel
- ...income from this source disproportionately spent on fuel
- Is this what we want to happen?
  - do we think pensioners under-consume fuel?
  - an unintended consequence?
- Something we need to pay attention to

# How much should we tax smoking?

- Models exist of rational addiction
  - suggest tax according to externality only
- But ...
  - many smokers say they want to quit
  - demand for commitment devices
- Time inconsistency an alternative e.g hyperbolic discounting
- An “internality” justifies additional taxation/regulation. Such a tax might make some smokers better off
- Estimates of internality for cigarettes in US from 2001
  - valued at 60-300% of the external costs estimated for tobacco
- Not true of other models of time inconsistency
- US/Canadian evidence that smokers are made happier by tobacco taxes. Taxation provides a commitment device?

# Support for English smoking ban, 2007



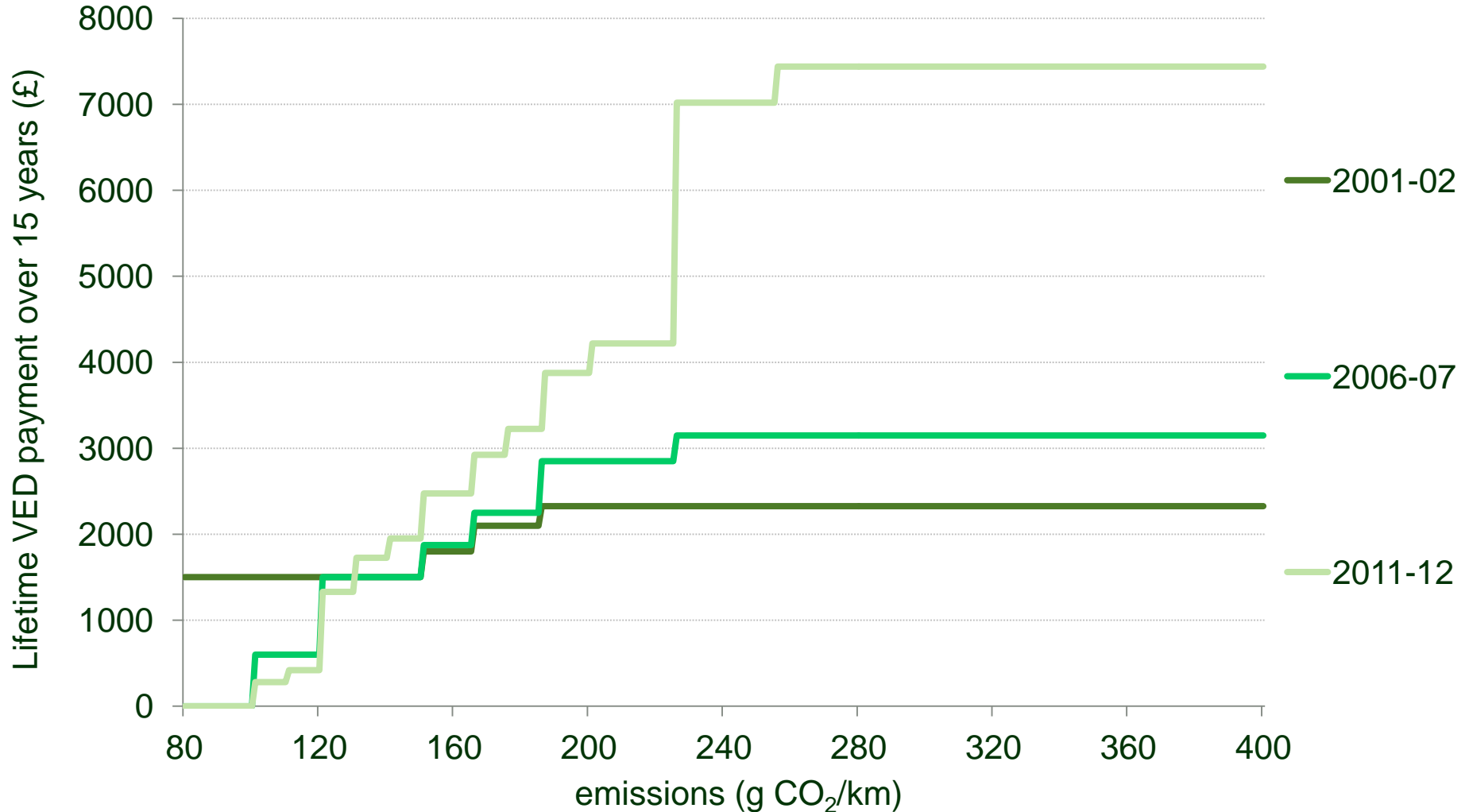
Source: IFS calculations using Health Survey for England

© Institute for Fiscal Studies

# How should we tax motoring?

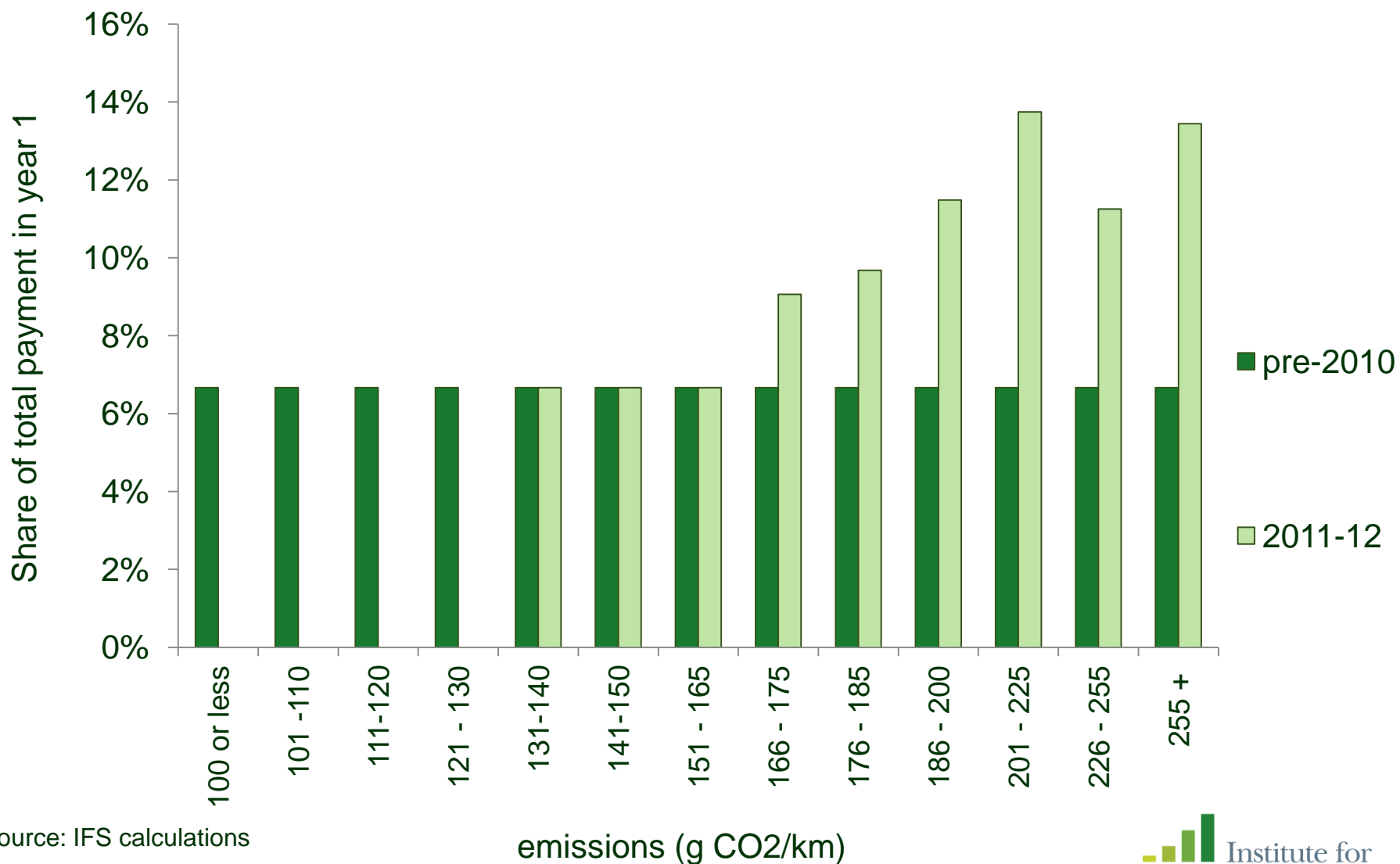
- Externalities of motoring incl. pollution (from burning fuel)
- Standard model suggests price externality directly
  - fuel duty
  - people will drive less and buy more fuel efficient cars
  - no need for a purchase tax
- But suppose consumers are time inconsistent...
- Fuel efficient cars are more expensive: higher costs today, distant future benefits
- A front-loaded tax based on efficiency could help consumers overcome present bias and better correct externality
  - though evidence on degree of present bias mixed in this context
- VED is an annual payment with a higher first year cost, to what extent does this serve this purpose?

# VED and fuel efficiency



Source: IFS calculations

# Relative importance of first year VED rate



Source: IFS calculations

© Institute for Fiscal Studies

# What else can we say?

- Benefit stigma
  - new ‘universal credit’ label might reduce stigma associated with benefit and so improve take-up
- Prospect theory suggests many small tax increases more painful than one large one
  - perhaps why some ‘escalators’ are difficult to sustain?
- Social norms and tax compliance
  - work done by HMRC/BIT on using descriptive norms for tax debt
  - applies to other things, e.g. TV licenses
  - how do these effects persist in the longer term?
  - little compelling evidence for effectiveness of ‘moral suasion’



# Conclusions

- Behavioural insights should not be neglected in tax policymaking
  - affect optimal way to structure and present taxes and benefits
  - relevant for process of tax reform
- Evidence is key ...
- ... useful evidence base for policy has not kept pace with theory
  - little UK-specific evidence for broader policy implications
  - little that tells us the consequences of ignoring behavioural biases
- Opportunity for the future!
  - bring behavioural insights into evaluation studies
  - feed back into modelling and development of theory
  - understand better which insights matter, for whom, in what contexts

# References

- Leicester, A., P. Levell and I. Rasul (2012), *Tax and benefit policy: insights from behavioural economics*, IFS Commentary C125, London: IFS (<http://www.ifs.org.uk/comms/comm125.pdf>)
- Leicester, A., P. Levell and I. Rasul (2012), *Behavioural economics and tax reform*, IFS Observation, London: IFS (<http://www.ifs.org.uk/publications/6267>)