Tax and benefit policy: insights from behavioural economics

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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

Change from reference point (£)

Utility

Standard model

Prospect theory

GAINS

LOSSES

Reference point

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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?

Spending on fuel

41%

3%

£200
How should we label benefits?

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• ...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
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

Lifetime VED payment over 15 years (£)

emissions (g CO$_2$/km)

2001-02
2006-07
2011-12

Source: IFS calculations

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Relative importance of first year VED rate

Share of total payment in year 1

emissions (g CO2/km)

Source: IFS calculations
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
