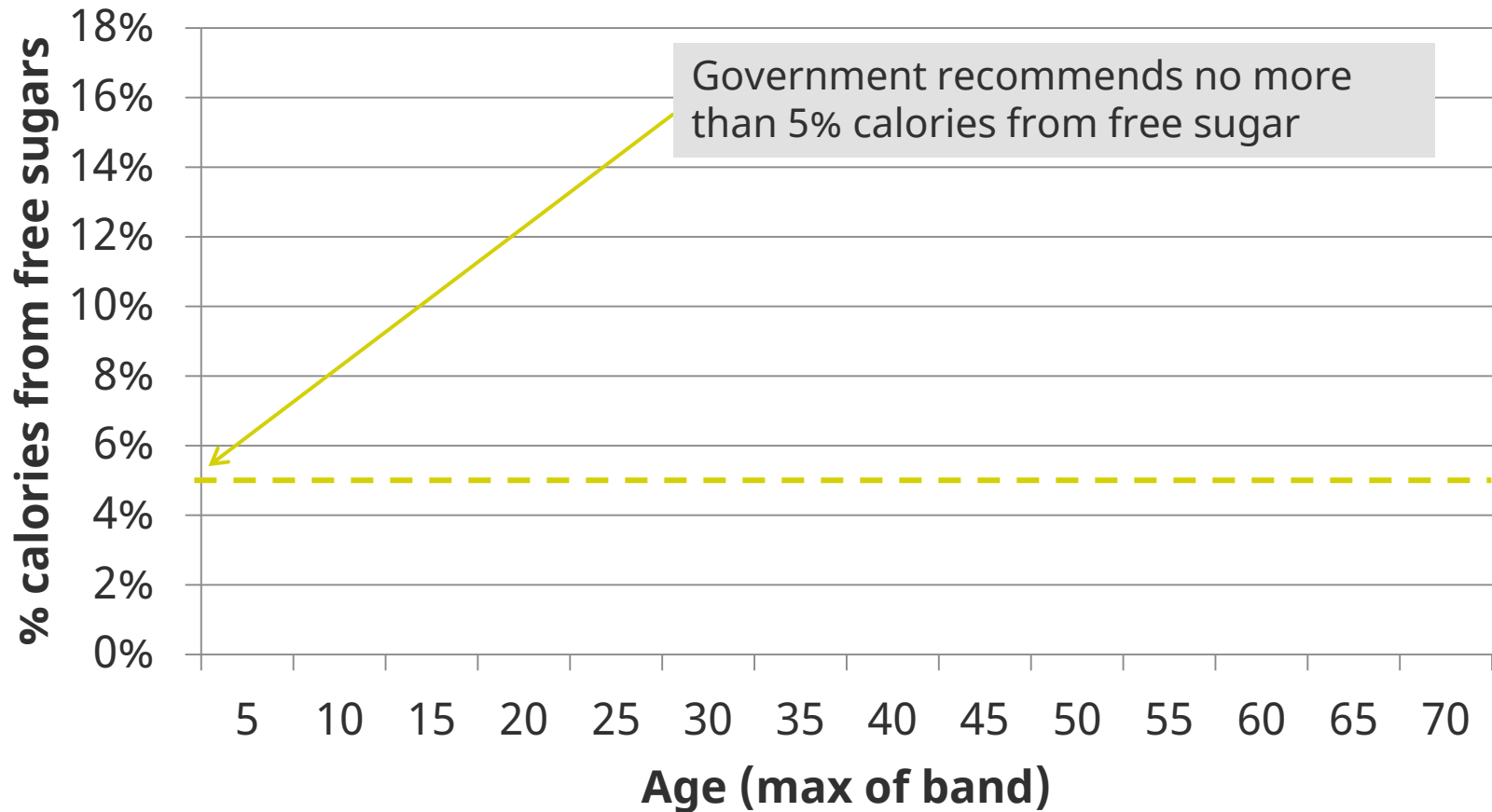


Fighting the fat: sugar tax design

All Party Parliamentary Group for Social
Science and Policy

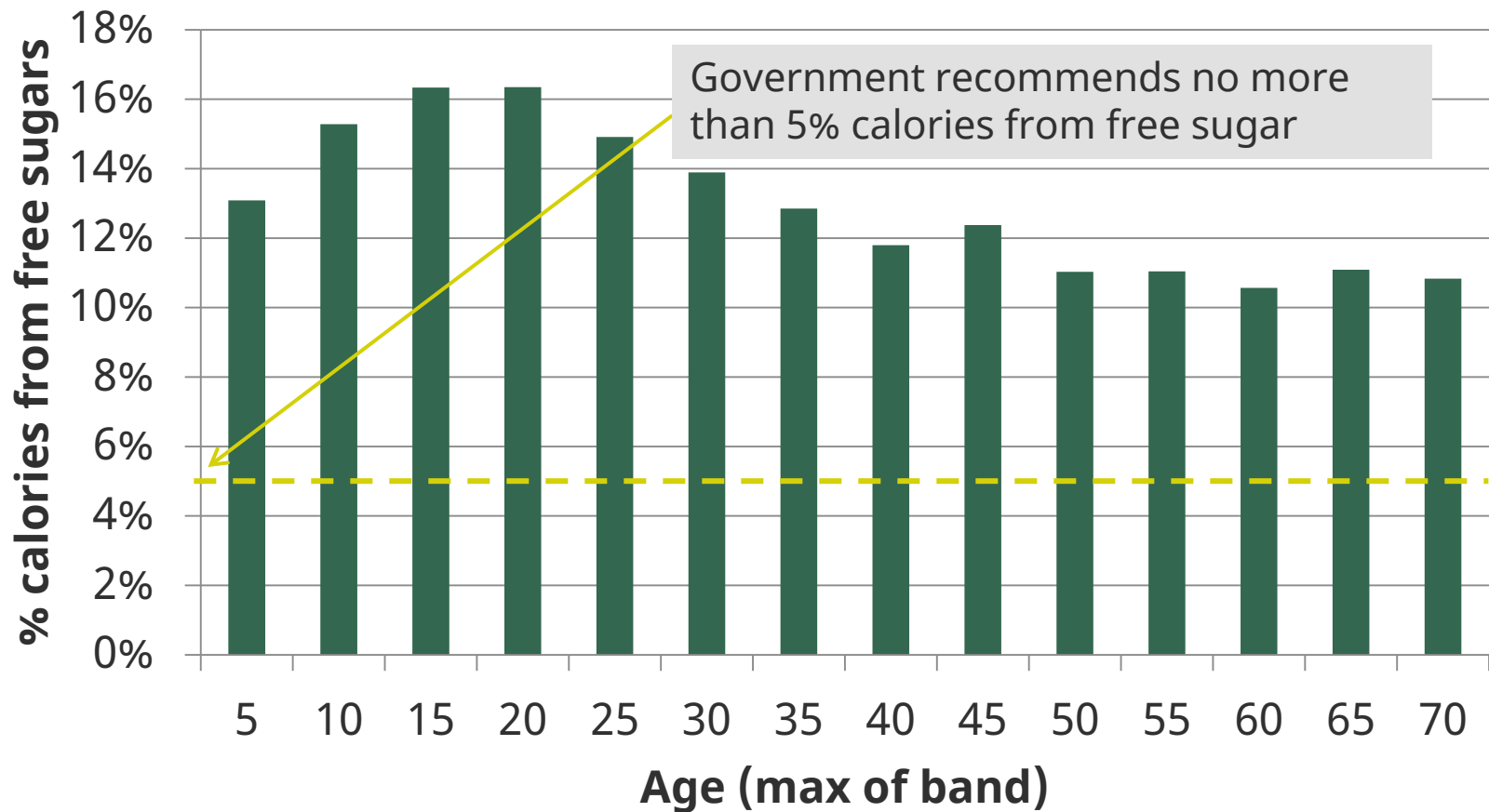
Kate Smith

People, particularly the young, are consuming too much sugar



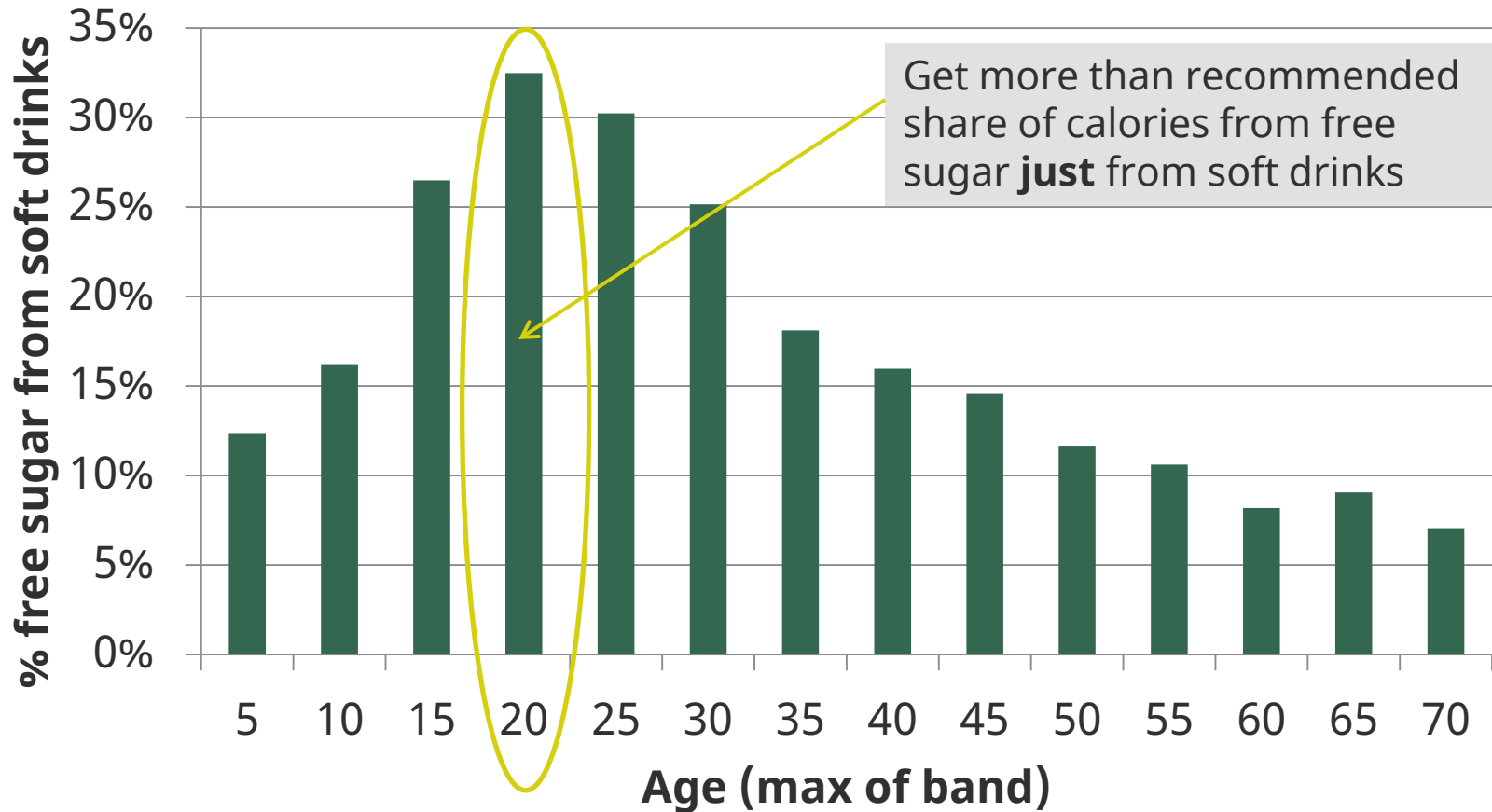
Source: National Diet and Nutrition Survey, 2008-14

People, particularly the young, are consuming too much sugar



Source: National Diet and Nutrition Survey, 2008-14

Teenagers get more than a quarter of their free sugar from soft drinks



Source: National Diet and Nutrition Survey, 2008-14

How should we design taxes aimed at reducing obesity and improving nutrition?

How strongly do purchases respond to price changes?

- Are responses largest among the targeted populations?

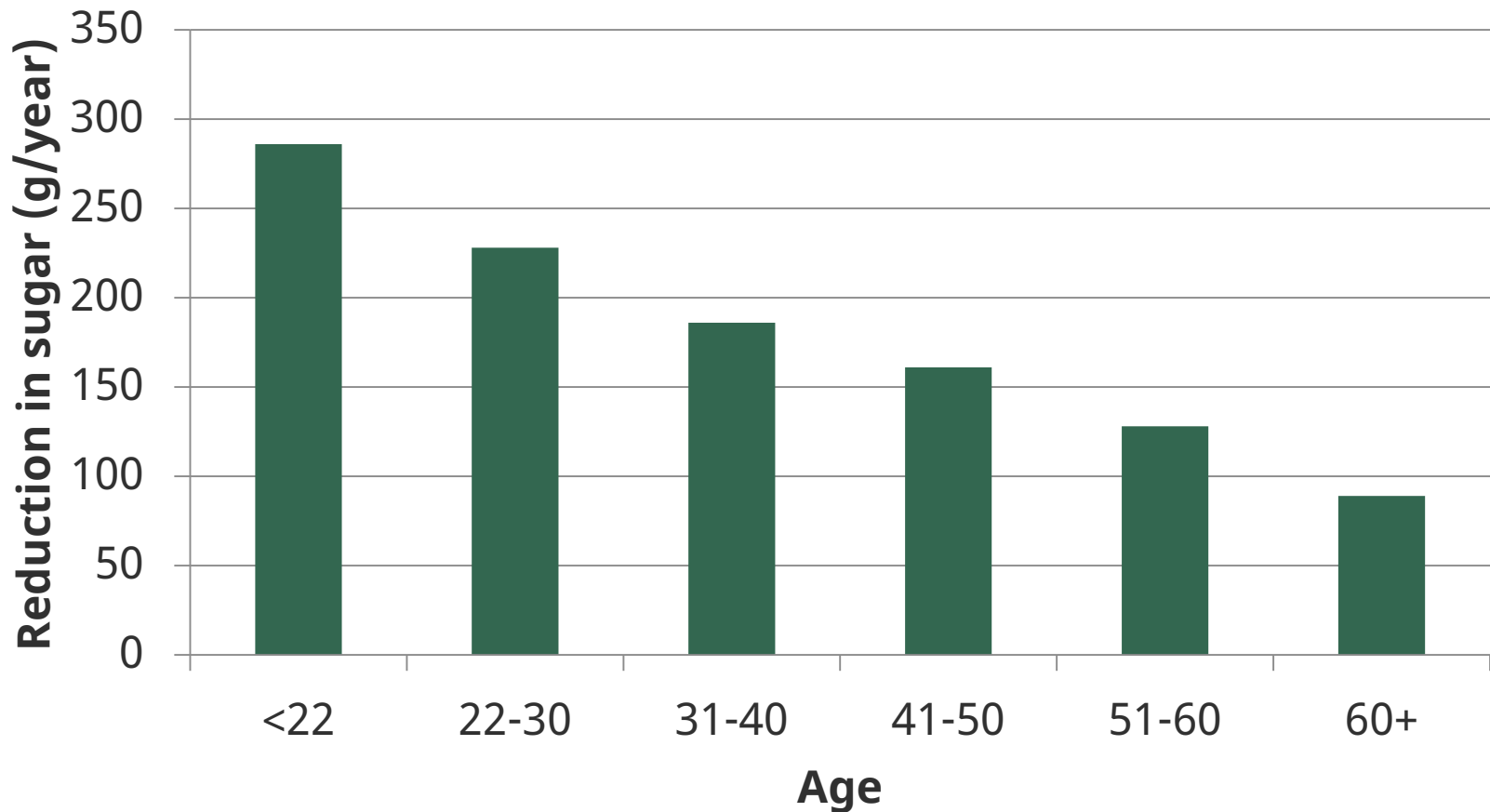
How is the tax structured?

- Levied directly on sugar or volumetric?

How do firms respond to the tax?

- How do prices change?
- Do firms reformulate their products?

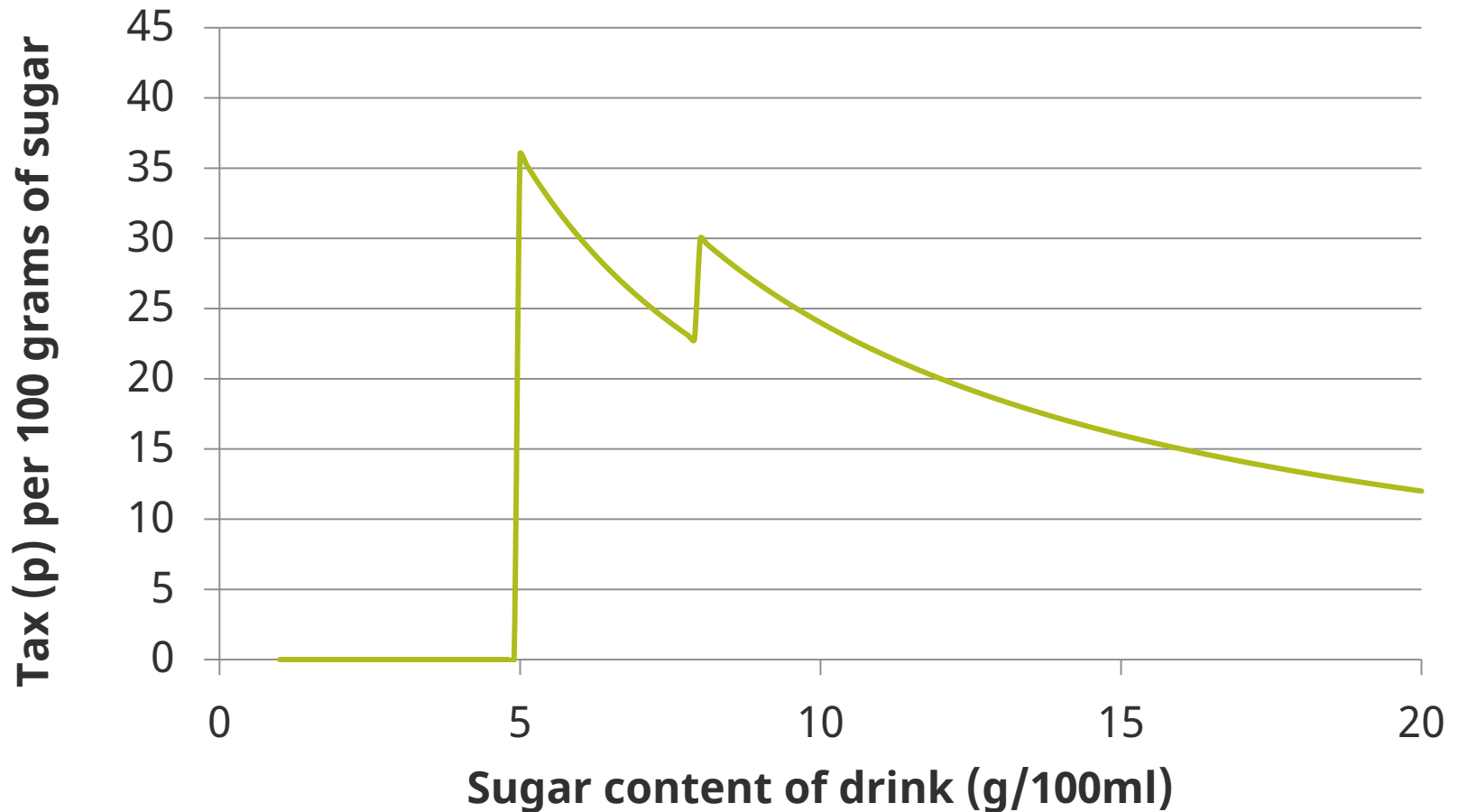
Young people's soft drink purchases are more responsive to price changes



Notes: Tax applied is 25p/litre on sugary soda.

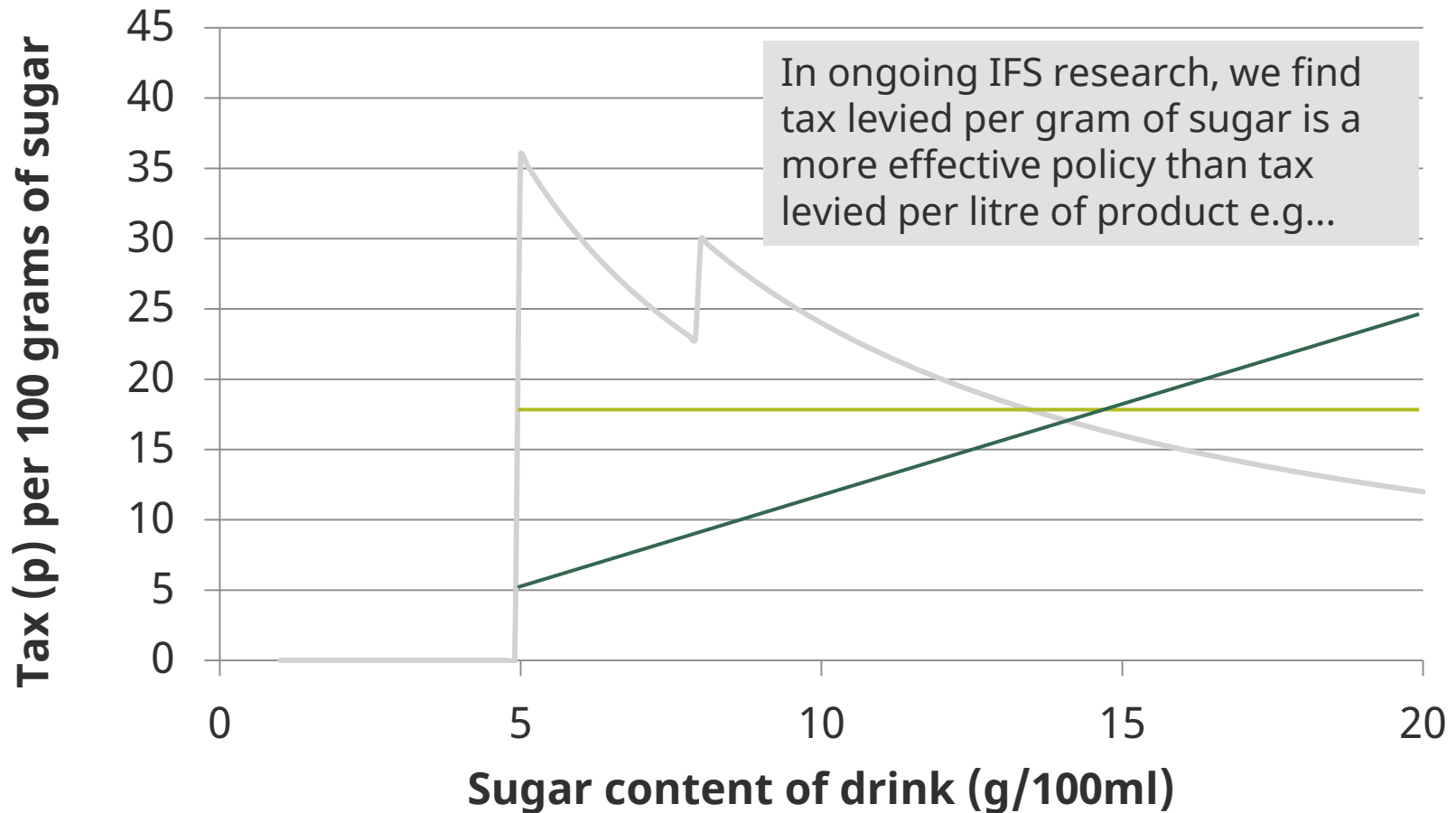
Source: Figure 4.1(a), Dubois, Griffith and O'Connell (2017), "How well targeted are soda taxes?", CEPR Discussion Paper DP12484.

UK Soft Drinks Levy implies lower tax per gram of sugar on most sugary products



Notes: Tax of 18p/litre applied to products with 5-8g sugar per/100ml and tax of 24p/litre applied to products with 8-10g sugar/100ml.

UK Soft Drinks Levy implies lower tax per gram of sugar on most sugary products



Notes: Tax of 18p/litre applied to products with 5-8g sugar per/100ml and tax of 24p/litre applied to products with 5-8g sugar/100ml.

How do firms respond?

How do consumer prices change with the tax?

- Tax may be under or over shifted to consumer prices
 - Important determinant of overall impact on sugar consumption
- Currently studying how firm pricing response affects soda tax design

Do firms reformulate their products?

- Initial evidence from the Soft Drinks Levy suggest several firms have reformulated products to reduce sugar content
- Could increase efficacy of policy...
- but also increase costs to people whose consumption doesn't generate social costs

Conclusion – no silver bullet to solving the obesity crisis

Challenges posed by obesity, poor nutrition are substantial

Tax is only one policy lever - other policies available to government:

- Advertising regulation
- Information provision

Part of wider IFS research agenda

Understanding the relative effectiveness of different policies requires rigorous, evidence-based policy making

- Economics provides a useful tool to understand how markets will respond
- Models, statistical techniques, and detailed data can be combined to provide vital evidence for policy design