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# **When Fair Isn't Fair: Framing Taxes and Benefits**

Taxes and benefits create incentives for people to adopt or avoid certain behaviours. They create premiums for (socially) preferred states. A premium can be determined by either taxing unwanted behaviour or by subsidizing desired behaviour. The resulting economic incentive for changing one's behaviour is nominally equivalent under both mechanisms. However, the choice of *frame* for an incentive to be either described in terms of a tax or as a benefit can strongly influence perceptions of what is fair treatment of different, e.g. income, groups. Using a survey-experiment with Flemish local politicians, we show policy-makers to be highly susceptible to such tax and benefit framing effects. As such effects may (even unintendedly) lead to sharply different treatment of the same group under the two mechanisms, important questions arise, particularly for the design of new tax and benefit schemes.



The design and implementation of redistributive policies usually evoke much discussion. Opinions, both in public and often also in political debate, tend to be driven by ethical and fairness considerations. However, such concerns can lead to unintended consequences and – at least in terms of *ex-ante* intended fairness – to *ex-post* imbalanced incentive structures for different (income) groups.

An important function of taxes and benefits is the creation of premiums for certain behaviours or actions. Either unwanted behaviour may be taxed and thereby sanctioned, or desired behaviour may be encouraged through benefits. Irrespective of the method chosen, an economic incentive is created for individuals to opt for the desired behaviour.

The way such premiums are defined can usually be thought of as a two-step process. First, a baseline for a given behaviour, action, or state is chosen as a reference-point. For instance, baseline behaviours could be to not have retirement savings, to not use safety-certified equipment or follow accepted standards at work, or to not have children. Arguably, these are cases warranting the creation of incentives to encourage people to adopt the socially desirable behaviours of saving money for their old age, working in a safe environment, and having children. The second step, then, requires a choice of mechanism to create an incentive. The mechanism can be to either punish the unwanted behaviour – such as not adhering to safety standards at work – or to grant (cost-reducing) subsidies and benefits for taking the desired action, such as saving for old age or having children.

Importantly, the combination of the chosen reference point and the mechanism to create the incentive can influence the way people think about the fairness of an incentive when the targets belong to different (income) groups. Schelling (1981) demonstrated this point in an in-class experiment, which, somewhat simplified, runs as follows:

Families typically receive some child benefit: they get a certain sum per child. Imagine there are two

families, one poor and one rich, both with their first child. What amounts of child benefit should each family get? Should the poor get more than the rich, should both families get the same, or should the rich family get more for having a child than the poor family? Schelling's students would tend to voice support for either the poor getting more or both families getting the same. After all the rich family is surely already affluent enough to support their child. At the extreme, the rich family would get nothing for having a child, and the poor family quite a lot.

Now think of a world where the standard is to have a child, and couples who do not have a child have this 'socially undesirable' behaviour 'penalised' through a fee, for instance in the form of a tax. Should the poor couple pay a higher fee, should both couples pay the same, or should the rich couple pay a higher fee? The students now overwhelmingly supported requiring the rich couple to pay more. After all, they have more disposable income. However, in this case, the rich couple receives a lot for having a child (they no longer need to pay the steep fee), whereas the poor family may get no (additional) economic incentive for having a child. The treatment of the same family thus obviously drastically differs between the two frames. At the extreme, the poor family gets quite a lot for changing from having no children to having one child in the first frame, but nothing in the second frame. For the rich family, the situation is the reverse: there is no premium for having a child in the first frame, but potentially quite a high premium for having a child in the second frame.

Does this thought-experiment matter outside the classroom (see also Traub 1999, McCaffery & Baron 2004), beyond the context of child benefit, and among those actually exposed to the design considerations of tax and benefit systems? In a recent paper (Kuehnhanss & Heyndels 2018), we test the occurrence of such framing effects with elected local politicians in Flanders, Belgium, who are involved in the budgetary decision-making in their municipalities.



## Framing experiment

We invited 5,928 local politicians to take part in an online survey on economic and social preferences in spring 2016. Participation was voluntary, not incentivised, and questions were not compulsory, allowing respondents to skip them if they so chose. In total, 869 responses to the survey were registered and ( $N_1=$ ) 608 participants provided usable answers to the questions relevant to the framing effect described above.

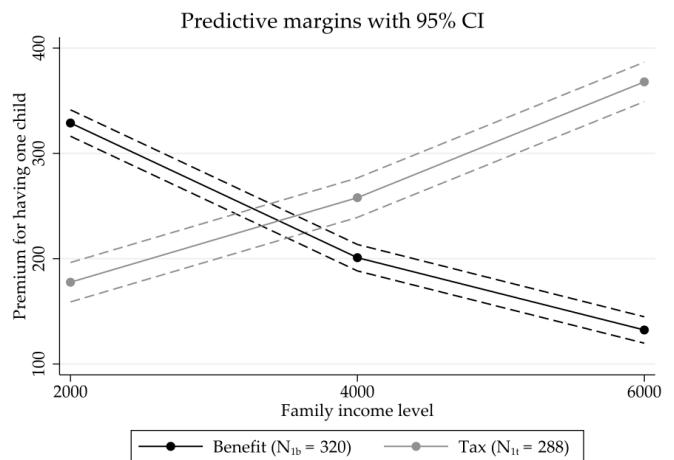
Participants were randomly allocated to one of two groups, each receiving a slightly different wording of the following question:

"In Belgium couples receive financial benefits from the state. Suppose that it is not relevant how the transfer is funded, and ignore any other benefits, which might come into play. How much [**more / less**] should a couple [*with their first child / without children*] receive per month than a couple [*without children / with their first child*]?"

One group saw the question in the benefit frame with only the italicised phrases in the brackets displayed; the other group saw the question in the tax frame with only the phrases in boldface displayed. In both groups, participants were then asked to fill in amounts they would consider appropriate for each of three couples with different monthly net incomes: €2,000, €4,000, or €6,000, respectively.

With framing effects – and distinct from classic rational choice models – the expectation is that the three couples would be treated differently depending on the phrasing of the question. In the italicised benefit version the amount granted should be decreasing with the income of the family. In the boldface tax version the stated amount should be increasing with the families' income.

Figure 1. Results child scenario



Source: Kuehnhanss & Heyndels (2018, p.32)

As Figure 1 shows, the results strongly conform to this pattern. The low-income (€2,000) couple is granted an average of €330 in the benefit frame, but only €178 in the tax frame (recall that the premium in the latter arises from no longer receiving less – or ‘paying a fee’ – once there is a child). For the high-income (€6,000) couple, the amounts granted average €132 in the benefit frame, but a much higher €368 in the tax frame.

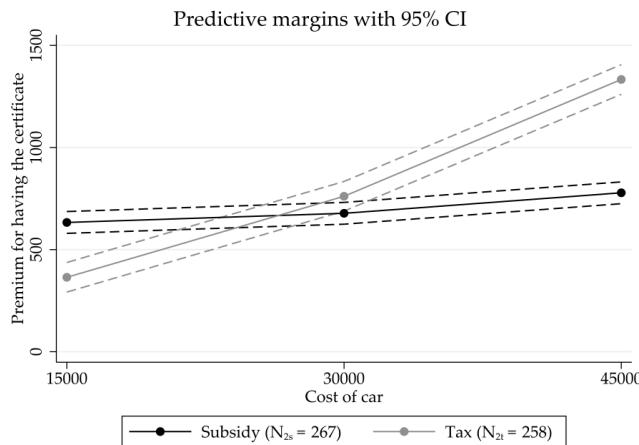
## Environmental taxes and benefits

Child benefit systems are usually a well-established part of countries' tax and benefit systems. The design of new instruments is more common in policy areas undergoing, for instance, technological change or being newly regulated. A relevant example is policy on the promotion of environmentally friendly behaviour and technologies, e.g. through ‘green’ taxes and subsidies. To test the validity of the hypothesised framing effect, we also included a second scenario in our survey related to the municipal interests of our respondents, namely car taxes. Flemish municipalities receive income from a surcharge levied on the car taxes paid by motorists. Consequently, we asked our participants ( $N_2 = 525$ , see the paper for details) to imagine the



introduction of a new environmental certificate for cars in Belgium, and to provide amounts they would consider appropriate for the difference in annual tax paid on cars with or without the certificate. Specifically, roughly one half of participants was asked how much *less* the owner of a *certified car* should have to pay in annual car tax than the owner of a *non-certified car* (the subsidy frame). The other half was asked how much **more** the owner of a **non-certified car** should pay in annual car tax than the owner of a **certified car** (the tax frame). The question was again asked for three different levels, proxying wealth via the cost of the cars: €15,000, €30,000, and €45,000, respectively.

*Figure 2. Results car scenario*



Source: Kuehnhanss & Heyndels (2018, p.32)

Figure 2 shows the results. The effect is less pronounced in this scenario, as the slope for the granted amounts in the subsidy frame remains largely flat or slightly increases. Nonetheless, a substantial framing effect remains. In the tax frame, the amount of the premium (i.e. the amount of taxes no longer owed once a certificate is obtained) strongly increases with the cost of the

car. Taking the most expensive car (€45,000) as an example, we thus observe differential treatment across frames also in this scenario. In the subsidy frame, the premium for having a certificate is €778, in the tax frame it is a much higher €1,333.

## Conclusion

These results suggest a strong and economically meaningful effect of framing among policy-makers with a stake in tax and benefit systems. While the exact mechanism driving the results invites further research, the strongly divergent premiums, and hence distribution of incentives, across baseline frames raise concerns of unintended effects in the design of taxes and benefits. Especially new schemes – e.g. ‘green’ policy, reform, or regulatory expansion – may benefit from increased scrutiny in the design process. Awareness of susceptibilities to framing and its potential influence on the formulation of individual tax and benefit instruments may help to align intended fairness, incentive structures, and redistributive outcomes.

## References

- Kuehnhanss Colin R.; and Bruno Heyndels, 2018. 'All's fair in taxation: A framing experiment with local politicians' *Journal of Economic Psychology*, 65, 26-40.
- McCaffery, Edward. J.; and Jonathan Baron, 2004. 'Framing and taxation: Evaluation of tax policies involving household composition' *Journal of Economic Psychology*, 25(6), 679–705.
- Schelling, Thomas C., 1981. 'Economic reasoning and the ethics of policy' *Public Interest*, 63, 37–61.
- Traub, Stefan, 1999. *Framing Effects in Taxation*. Heidelberg: Physica-Verlag



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