Using Behavioural Insights When Designing Regulatory Measures

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A. The behavioural turn – and the law

Over the past half-century, leading scholars such as Engel, Thaler, Sunstein, Kahneman, Tversky, and Jolls have shaped what is now termed 'the behavioural turn' – a paradigm shift in the social sciences that revises classical assumptions about human rationality through insights from psychology and behavioural research. Rather than viewing individuals as fully rational decision-makers, it is acknowledged that behaviour is often influenced by cognitive limitations, social norms and emotional factors. This understanding has enabled new approaches to analysing and guiding behaviour, notably via behaviour-based policy instruments such as nudging.

In legal scholarship, the application of behavioural insights is known as 'behavioural law and economics' (BLE) where Professor Engel is a shining beacon. This Festschrift contribution contends that legislators may enhance the efficacy of traditional regulatory measures by integrating behavioural insights into the design process.

Section B outlines BLE and regulatory design. Section C demonstrates how BLE may support the development of 'smarter regulation'. Section D considers the broader implications of integrating BLE into legislative processes.

B. Behavioural Law and Economics – and Regulatory Design

Within the legal domain, it is widely acknowledged that humans often act irrationally – indeed, many regulatory measures are adopted precisely to address this. This stands in contrast to neoclassical economic theory, which assumes that economic actors (consumers and businesses) behave rationally, seeking to maximise utility (consumers) or profit (businesses).

When a public authority enacts a regulatory measure, the explicit aim is often to influence behaviour. Even when not stated, regulatory mea-

sures typically have such impact. It is therefore advisable to incorporate behavioural insights into the drafting process. In this respect, two key questions arise: what behaviour is desired, and how can it best be promoted.

A pertinent example is organ donation legislation. Its overaching goal is to ensure organ availability by allowing individuals to decide whether they wish to donate upon death. The desired behaviour is that all willing donors register accordingly. Legislators typically choose between two models: automatic registration with an opt-out option, or no registration with an opt-in option. Although the decision to donate is far from trivial, studies show that opt-out systems yield significantly higher donor rates.[1] Given the general shortage of organs, countries with opt-in systems have increasingly moved towards opt-out models. The United Kingdom, for instance, has made this transition.[2]

Regulatory measures that influence behaviour may have unintended consequences. This risk is especially pronounced when behavioural insights are explicitly embedded in the design. Before the measure enters into force, it is crucial to clarify how it will function in practice. This is typically done through trials to gauge citizens' response – though such trials require behavioural insights expertise as well as time, both of which are scarce in fast-paced legislative environments.

There are numerous examples of regulation producing unexpected behavioural effects. For instance, financial service providers have been required to include warnings about product risks. Yet some consumers interpret these warnings as signs of official approval, assuming the products are safer – thus undermining the intended cautionary effect.[3]

In the present author's view, behavioural impact should always be considered during the design phase of regulatory measures. This is a complex task. A simplified framework is presented below, based on the British Behavioural Insights Team's (BIT) EAST model.

1 Albertsen, 60.

2 England implemented an opt-out model on 20 May 2020. See https://www.odt.nhs.uk/statistics-and-reports/opt-out-legislation-reports/.

3 Halpern (2019), 177.

C. The EAST model

I. Why use the EAST model?

Modern behavioural science rests on a range of complementary theories. Researchers in the field often work within a specific theoretical framework, whereas practitioners tend to focus on how these theories can be applied in real-world contexts. The latters' interest lies in translating theory into a practical 'toolbox'.

Several such toolboxes have been developed to help civil servants and other practitioners apply behavioural insights when designing regulatory measures. Among the most well-known are Pelle Guldborg Hansen's BASIC model.[4] Paul Dolan and Ivo Vlaev's SNAP model.[5] The MINDSPACE model developed by the British Institute for Government.[6] And the EAST model developed by the BIT.[7]

Each model has its strengths and limitations. For the purposes of this contribution, the EAST model is the most suitable. The BIT describes it in the following terms:

> EAST is a simple, pragmatic framework for practitioners, and that simplicity seems to have been a strength. It continues to be a touchstone for our projects; it has spawned a set of cards, in several languages, that help people generate ideas in new ways; it can communicate the basics of behavioural insights in a few minutes.[8]

EAST comprises four partly overlapping principles: Make it Easy, Attractive, Social, and Timely. It is deliberately simple and designed for practical use. Widely applied and revised in 2024, the model highlights the behavioural factors most relevant in regulatory design. It also serves as an effective educational tool for demonstrating the value of behavioural insights in this context. However, its simplicity comes at a cost: it captures only a limited subset of the behavioural insights relevant to regulatory design.

4 OECD.
5 Vlaev and Dolan.
6 Institute for Government.
7 BIT. Halpern (2019), 60, explains the origin of the (peculiar) acronym.
8 BIT, 2.

II. Easy

1. It's all about friction

Citizens are more inclined to "do something" that they perceive as easy than something they perceive as difficult. Even where what needs to be done is solely in their own interests. 'Friction' – any obstacle or effort required – thus affects decision-making, and even minimal friction can have a surprisingly strong impact.

Thaler and Sunstein have illustrated this with the example of pension scheme enrolment. When employees must actively sign up, participation rates drop – even when no financial cost is involved. The two authors write:

> To be sure, there are situations, say for young workers with other pressing financial needs, in which it could be sensible not to join [a pension scheme] even with an employer match. But in many cases, the failure to join is simply a blunder. One extreme example comes from the United Kingdom, where some defined-benefit plans do not require any employee contributions and are fully paid for by the employer. They do require employees to take action to join the plan. Data on twenty-five such plans reveal that scarcely half of the eligible employees (51 per cent) signed up! This is equivalent to not bothering to cash your paycheque.[9]

Of the four EAST principles, 'Make it Easy' is arguably the most crucial. When regulation requires citizens to make a choice, drafters should adopt the citizen's perspective, ensuring that the simplest option aligns with both individual and societal interests.

"Make it Easy" may be divided into three components; (1) default settings, (2) practical and cognitive barriers, and (3) simplifying the message.

2. Defaults

Defaults are ubiquitous. For instance, when sending a document to a printer, settings such as single- or double-sided printing are pre-selected. While users may change these settings, most accept the default.[10]

Defaults also play a significant role in legislation. The above example of organ donation illustrates this well: some countries adopt opt-in

9 Thaler and Sunstein, 117. At 263 the two authors note: "We thank David Blake and the U.K. Department of Work and Pensions for providing us with the data".

10 Rutgers, Office of Information Technology, and Egebark and Ekström.

systems, others opt-out.[11] Where the default is 'organ donor' (opt-out), registration rates are markedly higher than in opt-in countries.

Organ donation is perhaps the most cited example of legislative defaults, though its ethical sensitivity necessarily influences policy choices.[12] However, many less sensitive cases also demonstrate the importance of default settings in regulatory design.

One such example comes from Switzerland, where researchers studied the impact of making renewable energy the default for existing customers. Prior to the change, uptake ranged from 0.7 % to 3 %. Afterwards, it rose dramatically to between 77 % and 84.7 %, with the effect persisting over several years.[13]

A key point in using defaults is that when regulation offers a choice, the *presentation* of that choice matters. For instance, if public institutions are required to offer meals with or without meat to support climate goals (since meals without meat have a lower climate impact), the default option – meat or meat-free – will significantly influence behaviour.[14]

3. Practical and cognitive barriers

Firms offering subscriptions – such as gyms and streaming services – know that once automatic payments are set up, subscriptions often continue for long periods, even if unused. The need for the subscriber to *do something* to cancel creates a barrier, often with significant effect.[15]

When drafting regulatory measures aimed at promoting specific behaviours, drafters should identify all practical and cognitive barriers, including those that may seem minor. This requires adopting the citizen's perspective. Often the citizens are made up of several heterogeneous groups that are faced with different barriers – meaning that the drafters must consider a variety of barriers.

A small experiment at Rutgers University in the USA illustrates the importance of even minor barriers well. In many countries, free flu vaccinations are offered, yet uptake remains low. To test whether removing

11 In addition to opt-in and opt-out, other schemes also exist.

12 Albertsen.

13 Liebe *et al.*

14 Other aspects of communication are addressed in section C.II.4 below.

15 Default options – as presented in section C.II.2 above – illustrate this point, since choosing the default requires no action whereas choosing an alternative does.

a minor barrier could improve participation, university employees were split into two groups. One group received an email inviting them to book a vaccination appointment online. The other group received an email with a pre-scheduled time and location; they only needed to act if they wished to reschedule or decline. The second group showed significantly higher participation, demonstrating that even small frictions – like booking an appointment – can deter action.[16]

Regulatory drafters should therefore seek out such frictions, as they may undermine intended outcomes. However, friction can also be used constructively. In the UK and Denmark, for example, supermarkets may only sell one packet of painkillers per transaction. This restriction was introduced because the painkiller paracetamol is frequently used in suicide attempts. Remarkably, this small barrier has led to a measurable decline in such attempts, showing that friction can, in some cases, serve a protective function.[17]

4. Make communication simple and easily accessible

Prohibitions and injunctions – the classic legal instruments – are not always suitable. In such cases, drafters may turn to economic incentives or to simply provide information. Crucially, this information must be communicated in a way that is *easily accessible* to citizens.

Public authorities often produce detailed reports containing all relevant information, yet these reports frequently go unread. The key to effective communication lies in simplicity and accessibility.

A good example of a legislator using easily accessible communication as an efficient regulatory means is the EU's energy labelling scheme for household appliances – aimed at the consumer. Instead of lengthy technical reports, the scheme uses a straightforward scale from A to G, enabling consumers to easily compare energy efficiency when choosing products.[18]

16 Chapman *et al*. The study was limited to a university workplace sample, and vaccination records were limited to vaccinations received at the occupational health department. Still, the authors conclude that the results suggest that automatic scheduling of flu shot appointments may be an effective way to increase vaccination rates.

17 Limiting customers' access to certain products (such as tobacco) to the sales counter is a similar way of creating 'friction'.

18 Regulation 2017/1369 of 4 July 2017 setting a framework for energy labelling, OJ 2017, L198/1. See similarly Regulation 2020/740 of 25 May 2020 on the labelling of tyres with respect to fuel efficiency and other parameters, OJ 2020, L177/1.

III. Attract

When designing regulatory measures, drafters should consider how to make the desired behaviour more attractive. This can be achieved by increasing its salience and reducing that of undesired behaviour, or by introducing targeted incentives.

For example, the Scottish Parliament has restricted the display of alcohol in retail outlets to reduce impulse purchases by making alcohol less visible.[19]

Subsidies and taxes are among the most common regulatory incentives, but their design is critical. The UK's 2018 tax on sugary soft drinks is a notable example.[20] Rather than targeting consumers, the tax was structured to influence producers: the higher the sugar content, the higher the tax. This encouraged reformulation, resulting in a 46% reduction in sugar content in soft drinks between 2015 and 2020 – allowing consumers to maintain consumption while lowering intake.[21]

Not all incentives are financial. Blood donors, volunteers supporting the elderly, or those running homework cafés are typically motivated by altruism. Introducing monetary rewards may undermine this motivation. For instance, offering €8 to blood donors – who previously gave blood freely – can be perceived as devaluing their contribution. Instead of feeling they have done something meaningful, donors may compare the modest compensation with the inconvenience and physical effects of giving blood.

IV. Social

The fear of 'standing out' or being seen 'doing something wrong' can be a powerful behavioural driver. For instance, many roads feature digital speed displays: if a driver complies with the limit, their speed appears in plain numbers; if they exceed it, flashing lights are added – creating the impression with the driver that others can see their transgression.

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19 Licensing (Scotland) Act 2005, Schedule 3, section 13. For another example, see Directive 2003/33 of 26 May 2003 on the approximation of the laws, regulations and administrative provisions of the Member States relating to the advertising and sponsorship of tobacco products, OJ L152/16.

20 See, in particular, The Soft Drinks Industry Levy Regulations 2018.

21 BIT, 23, with further references.

Most people prefer not to deviate from the norm. Convincing citizens that a particular behaviour is typical can be highly effective – provided the behaviour aligns with the one the regulators want to promotoe. If the norm is undesirable, however, highlighting it may be counterproductive. For example, a campaign to combat violence in the night life stating that many young people carry knives at night may inadvertently normalise the undesired behaviour. Similarly, pointing out widespread bribery among civil servants as part of a campaign to combat corruption carries the risk of reinforcing such corrupt practices.[22]

Moreover, appeals to social norms only work if the target group identifies with the reference group. Telling elderly men what is typical among young women – or *vice versa* – is unlikely to produce meaningful behavioural change.

V. Timely

The fourth element of the EAST model – Timely – encompasses two dimensions:

(1) The timing of behavioural interventions, including time of day,[23] week, or year, as well as major life events such as marriage, parenthood, relocation, or job changes.[24]
(2) The way individuals respond to events depending on whether they occur in the present or the future.

When designing regulatory measures to influence behaviour, careful attention should be paid to the timing of communication. The EU's Denied Boarding Regulation illustrates this well.[25] It grants air passengers rights

22 The social psychologist Robert Cialdini has referred to the risk of legitimising an unwanted behaviour in this way as the 'big mistake', cf Halpern (2015) and (2019), 35.

23 An examination of using text messages to blood donors to keep a constant flow of new donations showed that messages sent in the evening increased donations by 6.5 %, cf Fosgaard *et al.*

24 Less significant disruptions may also be relevant. For example, when car owners switch from a fossil fuel car to an electric vehicle, they are likely to be particularly open to changing their habits with regards to their cars; such as switching to a different car insurer, cf Wendt Jensen, 73.

25 Regulation 261/2004 of 11 February 2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights, OJ2004 L46/1 and Broberg.

in cases of cancellation, delay, or denied boarding, and specifies when and how carriers must inform passengers. Timely notification is essential for the regulation to be effective.

The adace 'an ounce of prevention is worth a pound of cure' should also be considered by drafters of regulatory measures. Preventing bad habits is often more effective than correcting them later. For example, start-up entrepreneurs frequently neglect compliance with tax and VAT rules while focusing on business development. Once non-compliance becomes habitual, it is harder to reverse. Authorities should therefore intervene early, when habits are still forming.

Timing also matters where the state promotes a certain behaviour by offering subsidies to citizens. Programmes tend to be more successful when a substantial portion of the subsidy is paid only after the desired behaviour has been completed.[26]

The second dimension of timing reflects the human tendency to prioritise immediate outcomes. People are more motivated by short-term rewards than long-term benefits, and more willing to accept future obligations than immediate ones. Thus, regulatory measures may be more effective if they offer immediate rewards for desired behaviour or impose immediate costs on undesired actions.

Finally, when regulation requires citizens to follow specific procedures, success rates improve if barriers to following the procedures are identified and guidance to overcome the barriers is provided. For instance, unemployed citizens receiving benefits are often required to apply for jobs and attend training. If job centres help them develop concrete plans to meet these requirements, the success prospects increase considerably.[27]

D. The future of behavioural insights in the design of regulation

The above overview covers only a fraction of the behavioural insights relevant to regulatory design. Nonetheless, there is little doubt that such insights can significantly enhance the effectiveness of new measures.

26 See further Halpern (2019), 135–137.

27 Halpern (2019), 9. A similar situation is where patients are discharged from hospital and are thereupon required to perform certain treatment tasks themselves.

Incorporating behavioural insights into the process of drafting regulatory measures presents three key practical challenges. *First*, most civil services rely primarily on prohibitions, mandatory orders, and economic incentives (e.g. subsidies and taxes). Recognising that factors such as timing may be equally important requires a shift in mindset.[28] *Second*, applying behavioural insights is time-consuming and may extend the drafting process – often an impractical option. *Third*, successful integration depends on access to behavioural expertise, which is currently limited in many public administrations.

Moreover, ethical concerns may arise, as illustrated by the example of organ donation defaults.[29]

Despite these challenges, the benefits of integrating behavioural insights into regulatory design are compelling. It therefore appears likely that future regulation will increasingly draw on these insights during the drafting phase.

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28 Duflo *et al.*

29 See also Hansen & Jespersen as well as Hansen.

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