

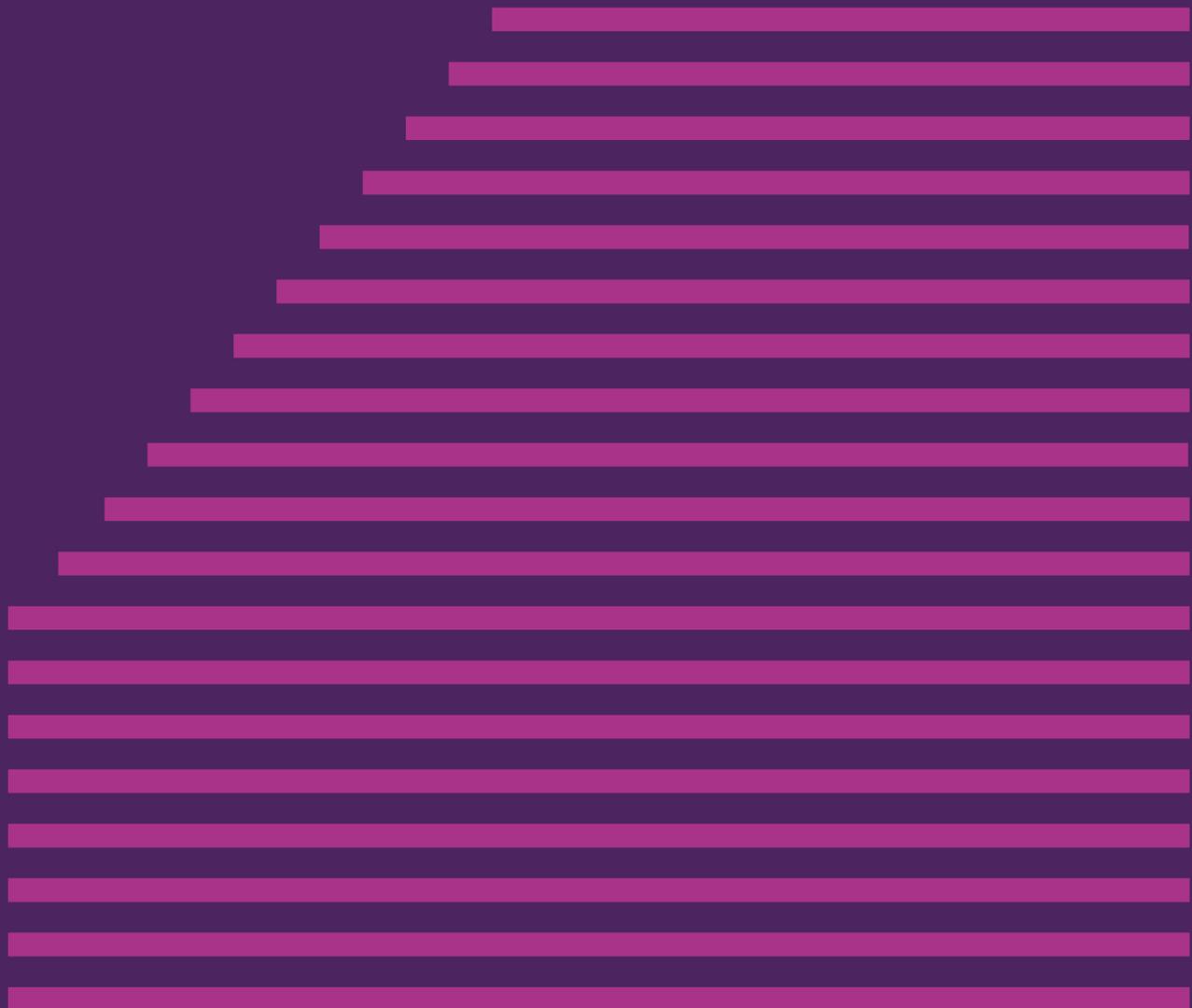


Australian Government
Department of the
Prime Minister and Cabinet



Harnessing the power of defaults

Governance Note



Who?

Who are we?

We are the Behavioural Economics Team of the Australian Government, or BETA. We are the Australian Government's first central unit applying behavioural economics to improve public policy, programs and processes.

We use behavioural economics, science and psychology to improve policy outcomes. Our mission is to advance the wellbeing of Australians through the application and rigorous evaluation of behavioural insights to public policy and administration.

What is behavioural economics?

Economics has traditionally assumed people always make decisions in their best interests. Behavioural economics challenges this view by providing a more realistic model of human behaviour. It recognises we are systematically biased (for example, we tend to satisfy our present self rather than planning for the future) and can make decisions that conflict with our own interests.

What are behavioural insights and how are they useful for policy design?

Behavioural insights apply behavioural economics concepts to the real world by drawing on empirically-tested results. These new tools can inform the design of government interventions to improve the welfare of citizens.

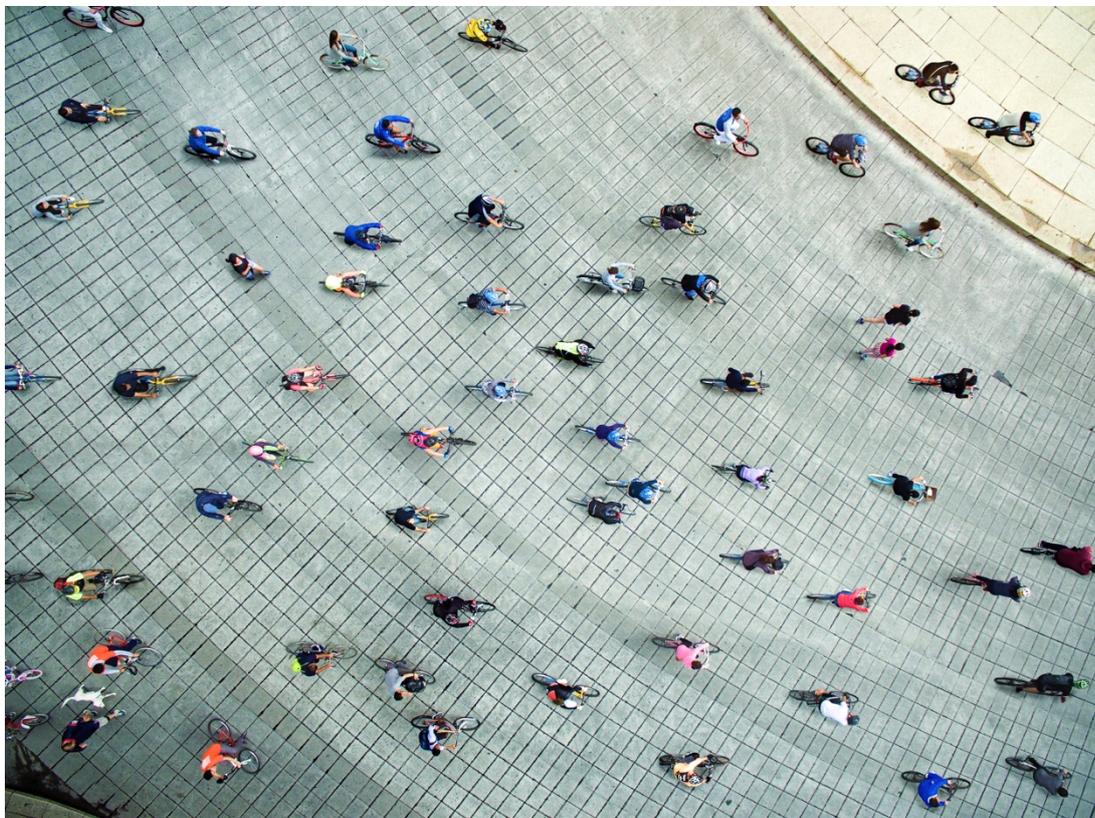
Rather than expect citizens to be optimal decision makers, drawing on behavioural insights ensures policy makers will design policies that go with the grain of human behaviour. For example, citizens may struggle to make choices in their own best interests, such as saving more money. Policy makers can apply behavioural insights that preserve freedom, but encourage a different choice – by helping citizens to set a plan to save regularly.

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Harnessing the power of defaults

- **Setting effective defaults is a powerful behavioural insights tool for policy-makers.**
- **Carefully designed defaults could help reduce complexity and costs and simplify choices for people.**
- **For defaults to be effective, they need to be appropriate, transparent and ethical and clearly identify the trade-offs.**



What?

What is a default option?

Default options are pre-set courses of action that take effect if nothing is specified by the decision-maker¹. Defaults are everywhere and we rely on them every day.

Examples include default temperature settings, default mobile ringtones, default time lag and screen savers on computers, automatic subscription renewals and default double-sided printer settings among numerous others. Defaults help to reduce and simplify the number of choices we make everyday, often without realising it.

Over the last number of years, we've seen defaults:

- dramatically increase participation rates² and amounts³ of retirement savings schemes in the US and increase organ donation rates across the European Union^{4,5}
- drive consumers towards making more environmentally friendly choices^{5,6}
- increase charitable donation rates in the UK⁷.

From a traditional economics perspective, making a choice is the process of optimal decision-making, formalised by utility functions which are underpinned by people's preferences. Decision-makers face a range of possible consumption bundles (combination of choices) of which ultimately one optimal bundle is chosen at any given point in time. A central assumption of this model is that the default position, i.e. the starting point, does not bear any relevance to the decision-maker's final decision.

However, we now know this not to be true with people often 'going-with-the-flow' and valuing their default position by treating it as a 'reference point' for decisions. In such cases, the evidence is overwhelming that presenting one option as a default (the reference point) increases the chance it will be chosen. The default option is also the outcome that is realised when no active choice (choosing not to choose) is made by the consumer.

An ever-growing body of evidence suggests that this phenomenon can be successfully used to achieve improvements in policy outcomes across a diverse number of areas.

The magnetism of defaults is believed to be so strong that it has been called the “iron law of default inertia”⁸. As such, setting effective defaults could be one of the most powerful behavioural insights tools for policy-makers. Policy and programme designers often have to think about whether to set a default option, force an active choice or do nothing to support a choice.

This paper will explain how default settings can be used in policy and program design, why default architecture is an effective tool and how to set up an optimal framework for default.



Making sensible decisions

How default settings could be harnessed

If an established default leads to a sub-optimal behaviour, changing the **choice architecture** could reverse an inefficient outcome.

Carefully designed defaults could help trigger the optimal behavioural response by reducing complexity when people find it hard to choose, reducing administrative burden (for example, the hassle costs of switching bank accounts or utility suppliers) and by restricting the number of choices (if choice overload is a problem).

The most celebrated, and most cited, example of a policy default is in the area of retirement saving. Plans to 'auto-enrol' people into workplace pension saving have been inspired by behavioural insights using default settings.

In 2012, new legislation meant that all employers in the United Kingdom with 250 workers or more had to automatically enrol their workers in a pension plan and allow them to opt-out. There is substantial evidence that such policies encouraged people to start pension plans more quickly. Indeed, enrolment in pension schemes in the UK had increased dramatically since the roll-out of the automatic enrolment option. By the end of August 2015, 5.4 million workers were enrolled into new workplace pensions, simply because they did not have to make an active decision to enrol⁹.

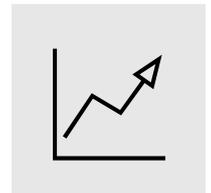
Closer to home, New Zealand, which at one point in time had the lowest savings rate in the OECD, launched the KiwiSaver scheme in July 2007. The default in this case was an employee savings plan with money paid into the savings account by the employer unless employees ticked a box to opt-out. From the start of the scheme until May 2015, those who joined KiwiSaver received a \$1,000 tax-free "kick start" to their KiwiSaver account from the government. By the end of the financial year (June 2008) around 716,000 people were signed up for the KiwiSaver account. By July 2015, that number rose to 2.5 million active accounts¹⁰.



Why?

Why defaults work

A whole host of factors contribute to the effectiveness of defaults; however, they can be aggregated under three main categories: transaction barriers, behavioural biases and preference formation (Figure 1 in appendix)^{11,12}.



Transaction barriers

Transaction barriers impose cost by requiring some effort from people to opt-out of defaults, even when options are easily understood and opting-out may better align with individual's preferences. For instance:

- A default might be sticky due to the **altering rule** or the process of opting out. These rules **impose actual or perceived costs** and/or **create confusion**. For example, at one point there were 50 privacy buttons and 170 options Facebook users had to wade through in the course of rejecting the website's pre-set privacy defaults¹³. Such high transaction costs could make the default sticky if the individual **could not clearly perceive a benefit** relative to the effort involved in opting out of a default.
- A default may also appear unchangeable if it is not framed correctly, or when the choice to opt-out is **not clearly visible** or made plain.

Behavioural Biases

Behavioural Biases such as **Judgment Biases** (skewing of perception) and **Decision Biases** (reaction to uncertainty) play a strong role in the effectiveness of a default. These include:

- **Loss aversion** – where individuals weigh losses more heavily than gains against some reference point (for example, against the default position). One manifestation of loss aversion is the **endowment effect**, placing a higher value on what one already possesses (the reference point – 'default') against which losses are measured.
- **Discounting** – where the perceived upfront costs of opting out are immediate and certain but the benefits are uncertain and in the future.
- **Procrastination** – where a decision carries a high cognitive or emotional load or has the presence of high stakes, leading to individuals maintaining the status quo.

- **Omission** – bias where the fear of making the wrong decision gives defaults traction. This leads to **regret aversion** where people blame themselves for a poor outcome (the error of commission) more than when the outcome is caused by sticking to the default (the error of omission).

Preference formation

The process of **preference formation** could also make defaults sticky in situations where defaults influence how preferences are formed.

For example, defaults may portray:

- **Implicit advice** – where people treat the default as the recommended option set by knowledgeable experts and as such, form the opinion that the default is the best choice for them.
- **Experience** – where staying in a default position for too long leads to the decision-maker developing a strong preference for the default.

The optimal default framework

Key principles^{11,12}

Following are some key principles that policy-makers should consider when thinking about applying a default setting to improve a policy or service delivery outcome.

Principle 1

Appropriateness – consider whether the policy/programme/service delivery setting is appropriate for default

Defaults work best where people are homogenous in their preferences and circumstances, and have relatively limited decision-making expertise, with the costs of making an alternative choice being high relative to the benefits of doing so.

When assessing whether a policy, programme or service would benefit from a default setting, policy-makers should clearly identify whether the following conditions exist:

- **An opposed party with access to the consumer:** Policy-makers should consider whether the effectiveness of the default option could be frustrated as a result of the actions of other stakeholders who are capable of influencing people's choices, have a vested interest in doing so and could counter-nudge people in a different direction to reduce the effectiveness of the default.

The success of the UK pension enrolment relied on the pension funds being in favour of enrolling participants into the program. If these stakeholders were opposed to the program, they could influence consumer's behaviour to opt-out of the default. This has been a regulator's experience in the US when they tried unsuccessfully to introduce default settings to protect consumers from bank overdraft charges¹¹. Banks conducted a targeted campaign to entice consumers to opt-out of the default and to revert back to their original arrangement with the bank.

- **A confusing decision environment and/or consumer preference uncertainty:** These lead to reinforcement of behavioural biases discussed earlier. In particular, fear of making a mistake (omission bias), procrastination and loss aversion all lead to the default setting being effective. A default that does not align with strong established preferences may not be successful.

A recent intervention attempted to automatically invest the tax refund amount of low income participants into US bonds. The majority of participants decided to opt-out of this default and receive the refund in cash instead, because they had already allocated the anticipated tax refund toward paying off debts and other living expenses¹⁴. Similarly, even though the default for both men and women is to retain their pre- marriage surnames, only 20 per cent of Australian women do so¹⁵. The failure of this default to be effective has been attributed to the real cost incurred in keeping a previous surname along with strong established preferences (social norms) to adopt the partner's name¹².

Principle 2

Transparency and optimality – the default must be a good choice

A default should be transparent and align with people's best intentions. Attempting to mislead customers may result in backlash if it is seen to be steering people in a direction which they do not support. As such, it is crucial to conduct proper pre-rollout diagnosis and post-rollout evaluation of the intervention's effectiveness.

Principle 3

Winners and losers – identify and quantify the trade-offs

If people are more heterogeneous, any default is likely to be sub-optimal for a greater proportion of them. Because average effects typically mask differential impacts, some participants may be worse off as a result of the default. If the trade-offs are not clearly communicated and mitigation strategies identified, special interest groups could undermine the default setting. In certain cases it may be a better option to prompt people to make their own decisions.

Consequently, when designing a default it is important to clearly identify and communicate the trade-offs and adjust the default setting accordingly. For example, in the KiwiSaver scheme, a number of people signed up to a default conservative fund and did not switch to a portfolio more in line with their risk profile.

Principle 4

Default type – use principles 1-3 to determine an appropriate default setting¹⁶

The degree of default choice architecture that would best accomplish the policy's objective should be considered in line with principles 1-3. Below are some commonly used default settings:

- **Mandated defaults:** For example, participation in the Australian Superannuation Guarantee system is automated (simple) and mandatory. A mandated default may be justified when the decision is complex and perceived benefits are too far away in the future to be calculated accurately.
- **Non-mandatory or soft defaults:** Continuing with the above example of the Australian Superannuation Guarantee, a participant could be allocated into a default Superannuation fund if they do not nominate a preferred fund. However they are free to opt-out of this soft default at any time and choose a fund that best reflects their preferences.
- **Active choice:** This approach is suitable when policy-makers do not want to make an implicit recommendation via its default structure and when it is critical to engage and focus people on the choices they have been asked to make.
- **Sensory defaults:** Defaults that change according to what can be inferred about the user, e.g. websites that change language dependent on country of origin of the visitor.
- **Predictive defaults:** Defaults that are intelligently altered after observing users.

Principle 5:

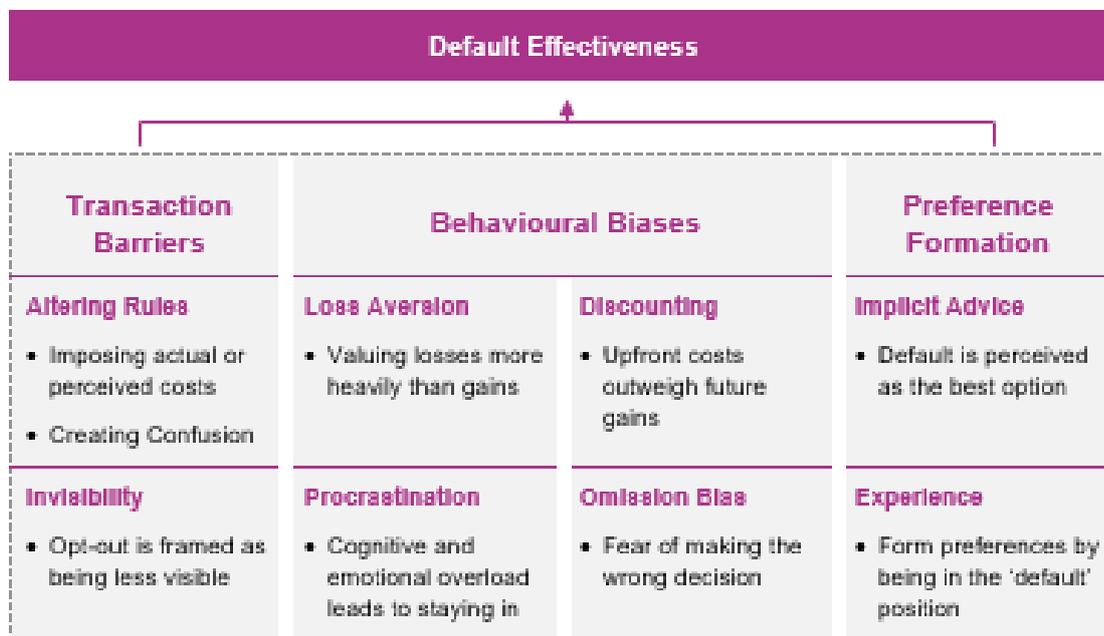
Consider consideration – be mindful of the ethical issues

It would be prudent to conduct extensive qualitative research on the relevant population's views of policy and potential outcomes should a default be introduced. One way to achieve this is to set a forced choice default experiment and observe the outcome.

In cases of mandating defaults policy-makers must carefully consider if it is in everyone's best interest to be covered by the default. Even if on aggregate a default leads to a socially beneficial outcome, a range of factors including

inconvenience and burden experienced by a small fraction of users could make this default architecture unethical. When opt-out as an active choice is permitted, the above-mentioned concerns are somewhat alleviated; nevertheless, ethical considerations around active consent and participation remain.

Appendix: factors contributing to default effectiveness



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