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Mind The Spillovers: Managing The Unintended Consequences Of Policy Decisions

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Problem of practice

Policy decisions are designed to steer people toward specific intended behaviours. Governments might ban single-use plastic bags to reduce waste or organisations may implement work-from-home policies to boost productivity and flexibility. But after such policies are repealed, do individuals continue with the intended behaviours or revert to previous ones? Can policies unintentionally trigger behaviours that persist even after repeal, potentially offsetting the policy's intended benefits? For example, a plastic bag ban may lead to increased purchase of a permitted substitute: plastic trash bags. Such residual effects, when unaccounted for, can distort a policy's long-term effectiveness. It is crucial for top management to plan for intended and unintended effects of strategic interventions.

To avoid misjudging the impact of any policy, research by Dinesh Puranam, Sungjin Kim, Jihoon Hong and Hai Che recommends designing policies backed by break-even analysis, factoring in the stickiness of both positive and negative behaviours.[1] We illustrate this insight and show how managers can help sustain intended outcomes while minimising unwanted and unintended consequences

[1] The article 'Are We Worse Off After Policy Repeals? Evidence from Two Green Policies' by Dinesh Puranam, Sungjin Kim, Jihoon Hong and Hai Che, featured in Volume 62, Issue 2 of *Journal of Marketing Research* talks about how policies can generate spillover effects that persist after repeal, with lasting impacts over time, requiring policymakers to account for both immediate outcomes and longer-term carryover effects in decision-making

Intended-unintended behaviours

Behaviour-changing policies matter because they operate at scale and often trigger spillover effects —sometimes positive, sometimes counterproductive. These spillovers can redistribute demand, costs and value creation, going beyond the initial objective. Take the case of Philadelphia, US, which implemented a tax on carbonated soft drinks, aka soda beverages.[2] While the tax reduced soda sales by 51%, people started buying the same product from areas bordering the city that were not subject to the tax, where sales increased by 8.7 million litres, offsetting 24.4% of the decline. So the policy not only changed where people bought but also what they bought.

Take another case – a 2018 ban on single use plastics in the Indian city of Nagpur.[3] Despite the best intentions behind the policy, in 2025, the local government still seized 75 tons of plastic and collected 26.8 million rupees in fines.[4] Banned plastic bags remained widely in use because policymakers did not account for the cost of alternative materials or for how weakly the penalties affected wholesalers.

Not all spillovers are negative: towel reuse programs have been shown to lower laundry loads while also encouraging broader conservation, and 'bring your own bag' campaigns in supermarkets inspired some shoppers to choose more organic foods.[5] These cases show policies are powerful but often generate ripple effects, intended and unintended, that the managers and policymakers must anticipate.

Accounting unintended behaviours

When managers introduce a policy, direct outcomes, less of what is discouraged or more encouraged, tell only part of the story. Every policy creates spillovers that can amplify or cancel benefits, and these effects often outlast the policy itself. For instance, after plastic bag bans, households shifted to store-bought trash bags – a routine that continued even after the ban was lifted. So how can managers assess the impact of both immediate and longer-term behavioural shifts?

One approach managers can take to determine the true effectiveness of a policy or its repeal is to compute a simple break-even. A manager can start by defining the

intended outcome in measurable terms. For example, how many checkout bags were avoided because of a ban? Next, identify the main spillover and put it in the same unit, such as the number of trash bags purchased. Both can then be converted into a common metric, such as the weight of plastic, financial cost or environmental footprint. Suppose households begin buying 10 extra trash bags each month once free checkout bags are no longer available. If each trash bag weighs 20 grams, that adds up to 200 grams of extra plastic in a month. On the other side of the equation, every checkout bag avoided saves 5 grams of plastic. To balance the two, the extra 200 grams from trash bags would need to be offset by avoiding 40 checkout bags (200 : 5 = 40). Put simply, the policy only works if the average household skips at least 40 checkout bags in a month. If they avoid more checkout bags than that threshold, then overall plastic use falls and the policy succeeds; if they avoid fewer checkout bags, then the extra trash bags cancel out the benefit and the policy fails to deliver net plastic reduction. Stated as a general principle:

Break-even threshold = Total cost of unintended behaviour ÷ Value of one unit of intended benefit

Policies and business decisions also play out across multiple dimensions that need to be captured: the targeted effect (like reduced bag use), the unintended spillover (trash bag sales), the carryover effects after repeal (habits that persist even when the rule is lifted), and the break-even thresholds (the minimum intended saving required to offset unintended costs).

Business lens

Just as government policies shape behaviour, business decisions act as rules or structures that shape stakeholder behaviour. A policy may tax soda to reduce calorie intake, while a manager may introduce portion resizing or reformulated products to achieve the same goal. Both are designed to encourage certain behaviours and discourage others, but both can also spark unintended spillovers. Just as a government's plastic bag ban reduced checkout bag use while driving trash bag sales, in parallel, an e-commerce firm's free returns policy may increase purchases but also lead to excessive returns. In both cases, the intervention achieves its primary goal but creates second-order effects that can erode or even reverse the intended benefit.

Several global organisations already apply this way of thinking. Tesco corrected the unintended overuse of 'bags for life' by introducing a small charge, keeping the original benefit intact.[6] Unilever measures both the costs of reformulating products and the revenue lift from purpose-driven brands to prove a positive net impact.[7] IKEA, too, balances packaging trade-offs with transport efficiency in its flat-pack model.[8] Patagonia offsets the higher cost of sustainable materials with programs that extend product life, ensuring a net-positive impact.[9] Its Worn Wear (repair, reuse, resale) program, intended to reduce new consumption, could lead to spillovers, such as consumers buying both used and new products (no net reduction), increased resale logistics that raise shipping costs or a rebound effect that could induce consumers to feel entitled to consume more. To measure the spillover, its leaders could track sales of used and new products, measure emissions of resale logistics, compare regions with high and low Work Wear adoption, and estimate the incremental new product avoided. And if they stop promoting Work Wear, they could track resale behaviour, the consumption pattern and whether the culture of repair sticks. Essentially, a comparison of pre-, during, and post-promotion could help measure the spillover effects of the behaviour.

> Leaders and managers should anticipate spillovers, design for them and put in place measurement parameters, such as break-even thresholds, to help manage outcomes and keep them net-positive.

The above examples show that when managers adopt a break-even mindset and map effects across dimensions, they are better equipped to capture the true impact of their policies and decisions.

Table 1 presents examples from both the public and private sectors to illustrate how organisations are using this insight.

Unintended spillovers occurrence

Unintended spillovers are not inevitable. When helmet use was mandated by governments, most riders complied rather than compensating by driving riskier or engaging in resistance behaviours. Unlike cases where policy backfires, helmet laws largely worked as intended. So, a puzzling question is why some decisions spark unintended behaviours, while others don't?

- **Closeness of substitutes**

  Spillovers are strongest when customers can easily find alternatives. While in the case of plastic bag bans, substitutes were cheap and familiar, by contrast, seat-belt and helmet laws had no real substitutes. Drivers complied, and benefits were achieved. Managers should always map: what's the closest substitute, and how easy is it to switch?

- **Duration of the decision**

  The longer a policy remains, the more likely unintended behaviours will stick. Short-lived interventions rarely give people time to form habits, so effects fade quickly. Dallas's five-month bag fee ended with little persistence, but Austin's five-year ban normalised trash bag purchases, which continued even after repeal.

- **Category context**

  Unintended effects also depend on the volatility of the category. In stable categories like household utilities, behaviour is habitual and resistant to change. For example, when cities shifted from analog to digital electricity meters, households complied smoothly because metering is routine and alternatives don't exist. By contrast, volatile or dynamic categories like fast fashion, healthy food, and clean beauty, which constantly redefine themselves, often trigger strong spillovers.

- **Time horizon of behaviours**

  Whether spillovers fade or endure depends on if they solidify into habits. Short-lived discounts trigger temporary deal-hunting that vanishes when offers end. But when households adopt LED bulbs, reducing electricity use becomes a daily routine. Once new behaviours are embedded as habits, they persist well beyond the original intervention.

Reducing negative spillovers

Managers cannot always prevent unintended spillovers, but they can design strategies to reduce or redirect them. We suggest that leaders consider two key factors: the stability of the category and the number of close substitutes available. In stable categories with few substitutes, the best strategy is to reinforce habits by keeping decisions consistent over time, so people adapt once and don't look for workarounds. Seat-belt rules are a classic case in which compliance became

Table 1: Policies and business decisions triggering (un)intended outcomes

1A - Type: Public policy		
Decision	**Intended outcome**	**Unintended spillover (–/+)**
Plastic bag bans/fees	Reduce single-use checkout bags	(–) Increased purchase of small trash bags also made of plastic, which were not banned
Soda taxes[10]	Lower sugary drink consumption	(–) Substitution into high-calorie beverages and snacks
Hotel towel reuse programs[11]	Reduced laundry water usage	(+) Guests also reduce consumption of other elements, like electricity and consumables use
COVID-era suspension of reusable bag bans[12]	Reduce virus transmission risk	(–) Surge in disposable plastic bag use
1B - Type: Business		
Decision	**Intended outcome**	**Unintended spillover (–/+)**
Free return policies (e-commerce)[13]	Increase purchase confidence and conversion	(–) Over-ordering and high return costs
Healthy menu additions[14]	Attract health-conscious customers	(–) Excuse to eat indulgent add-ons
Open-source platforms[15]	Improve developer learnability and rapid innovations	(+) Stronger developer community and a level playing field for proprietary development, reduced costs of integration
Flexible work-from-home policies[16,17]	Improve satisfaction and productivity	(–) Blur between home and office time, poor time management, higher churn rate if policy is rolled back
Freemium app models[18]	Drive trial and user adoption	(–) Users churn or stay in free tier, straining resources
Surge pricing in ride-hailing[19]	Balanced demand and supply	(–) Customer resentment, trust erosion

Source: Created by the authors based on sources cited above, and Dinesh Puranam et al., "Are We Worse Off After Policy Repeals? Evidence from Two Green Policies," Journal of Marketing Research 62, no. 2 (2025): 189–206, https://doi.org/10.1177/00222437241290157

automatic because the rules were long-term and unavoidable. In stable categories with many substitutes, managers should design substitute incentives by steering customers toward alternatives that still serve the original goal. For instance, when phasing out plastic bags, promoting low-cost reusable totes helps prevent customers from switching to plastic trash bags.

Where substitutes are limited in dynamic categories, firms need to continuously communicate the benefits. So that the customers understand reasons for change, and do not drift back to old habits amid the noise of promotions and moves of the competitor. For example, streaming platforms often justify hikes in prices by highlighting exclusive content or better viewing features. Finally, in dynamic categories with several substitutes, managers must steer customers toward substitutes proactively. If customers switch, it's critical to make the nearest alternatives align with the original intent. A soda tax without accessible healthy drink options risks substitution into unhealthy snacks, but pairing the tax with attractive bottled zero-sugar drinks channels behaviour more positively. In short, the key is not to fight spillovers, but to anticipate them and design interventions that turn potential negatives into manageable or even beneficial outcomes.

We summarise the above strategies in a framework (see *Table* 2) for managers to use when making business policy decisions.

Policies and business decisions often create unintended ripples beyond their intended scope. This becomes even more complex when implemented policies can be repealed, leading to unfavourable, non-targeted, and irreversible behaviours. Leaders and managers should anticipate spillovers, design for them, and put in place measurement parameters, like break-even thresholds, to help manage outcomes and keep them net-positive. Planning should also account for the effects on consumer behaviour in the event of policy reversals. Embedding an integrated thinking of this nature into an organisation's strategic planning, whether product design, HR policies, building new markets, or when gaining consumer trust, can have lasting and on-target results.

Table 2: Framework to reduce negative spillovers

	Few substitutes	Many substitutes
Stable category	**Reinforce habits:** Keep the policy consistent overtime so customers adapt once and settle in. *Example: Seat-belt rules backed by consistent enforcement.*	**Design substitute incentives:** Channel customers towards substitutes that align with the original intent. *Example: Bag bans + promotion of durable and reusable totes instead of letting sales shift to plastic trash bags.*
Dynamic category	**Communicate benefits continuously** In fast-moving markets, remind customers why the change matters, so attention doesn't drift. *Example: Streaming platforms explaining content-value trade-offs when prices rise.*	**Shape substitutes proactively:** If close alternatives exist, redesign them to avoid backfiring. *Example: Healthy snacks (earlier low-fat, now keto, high-protein, clean-lable, etc.) + certification from trustworthy bodies about the right alternatives that consumers can trust.*

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