

# How ‘nudge’ happened: the political economy of nudging in the UK

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The UK Behavioural Insights Team transformed nudging and behavioural economics from nascent ideas to key policy tools for the UK Coalition Government. This article argues that political economic circumstances significantly contributed to the success of this ‘nudge’ programme. The Global Financial Crisis (GFC) created a ‘contest of authority’ over dominant policy approaches. By framing the crisis as a crisis of rationality, behavioural perspectives gained political support. The GFC also saw that the UK Government (from 2010) adopt a programme of fiscal austerity. Nudging complemented this programme by suggesting effective policy could be made cheaply. Using various accounts of nudging in the UK from those involved in its development, we demonstrate the role of the country’s political economy in the behavioural turn. We conclude by reflecting on the role of behavioural insights today, given a political–economic landscape much changed since 2010.

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## 1. Introduction

The Global Financial Crisis (GFC) of 2007–8 led to significant criticism of mainstream economic thought, resulting in policymakers seeking alternative perspectives to discredited economic models. The aftermath of the crisis also saw the return of familiar tropes around ‘belt-tightening’ and economic prudence (Blyth, 2013A, p. 4). Subsequently, the economic model of austerity introduced by the UK Coalition Government (2010–15) fundamentally changed how policymakers understood their abilities to make policy.

This article argues that these were the opportune conditions for the adoption of nudging and behavioural insights in the UK, which prospered in the form of the

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Behavioural Insights Team (BIT). Today, behavioural insights have become enormously influential in policy, industry and the academy (Pendleton *et al.*, 2019). Halpern and Sanders (2016) note a tenfold rise in ‘nudge’ projects undertaken by governments since 2010. Nudge methods, such as randomised controlled trials, have become part of the professional toolkit for some economic policymakers, with the UK Cabinet office arguing they represent, ‘the best way of determining whether a policy is working’ (Haynes *et al.*, 2012, p. 4). The UK’s financial regulator, the Financial Conduct Authority, has argued that ‘behavioural economics enables regulators to intervene in markets more effectively, and in new ways’ (Erta *et al.*, 2013, p. 3). The UK’s Department for Business, Energy and Industrial Strategy (2019) suggests that nudging may be a key to improving private sector productivity. Della Vigna and Linos (2022) document over 200 behavioural teams around the globe, as do the OECD (2018).

*How did all this happen?* One explanation for the rise of nudging and behavioural insights is likely to be that behavioural economic interventions appear to be effective, delivering compelling benefits for relatively little cost (Halpern, 2015; Algate, 2022). Yet, this perspective has been contested in recent years (e.g. Nisa *et al.*, 2019; Ewert, 2020; Harford, 2022; Maier *et al.*, 2022; Chater and Loewenstein, 2023). Some (Maier *et al.*, 2022) question the strength of the empirical evidence underpinning many nudge interventions. Others (Chater and Loewenstein, 2023) question the appropriateness of some nudge interventions, given the scale of various policy challenges being nudged. If the credentials of nudging were so self-evident as to account overwhelmingly for the approach’s policy adoption, one would not anticipate such a flurry of scepticism. Yet, as this article shows, scepticism of the behavioural approach is a remarkably consistent feature of its history. This points to an alternative account of how nudging and behavioural insights came to have such an influence in policymaking.

Focussing on the UK, this article argues that the GFC and the Coalition Government were crucial political events which drove the adoption of the behavioural programme. Following Kingdon’s (2003) framework of political agenda setting and Kuhnian accounts of economic idea adoption from Blyth (2013B) and Hall (1993), this article argues that the GFC prompted a ‘contest of authority’ over the dominant approach to economic policymaking in the UK. Failure by professional and academic economists to foresee the crisis created an opportunity for alternative perspectives to define what caused the crisis and offer policy solutions.

Suggestions that the crisis arose from unrealistic assumptions about human behaviour aligned well with the behavioural programme’s demand for using realistic models of behaviour in policymaking. This explanation of the crisis was also being levered, politically, to attack the incumbent Labour Government and underpinned the policy outlook of the incoming Conservative-led Coalition Government (UK Coalition Government, 2010). Thaler and Sunstein’s (2008) *nudge* gave proactive recommendations to policymakers, which ‘policy entrepreneurs’ (Kingdon, 2003) such as Conservative advisor Rohan Silva effectively coupled to the Government’s austerity agenda (Osborne and Thaler, 2010). Thus, this article argues that the political-economic conditions of the UK between 2008 and 2010 mattered substantially to the adoption of nudging and behavioural insights.

This article contributes an alternative narrative for the rise of nudging and behavioural insights. It also contributes an interesting case study to the broader study of economic ideas. The study of how economic ideas are used has many relevant insights

for economics (Strange, 1986; Shiller, 2017). Popular ideas push financial and human resources towards different aspects of economic policy, shaping the resources available in other areas, the dominant methodologies with which practitioners become familiar, and ultimately, one’s outlook on economic events which feeds back into the study and interrogation of the economy itself. Just as a new scientific paradigm may prompt discoveries which create tools for further scientific investigation, too so may new policy paradigms create economic conditions which influence the economy (Kuhn, 2012). A further motivation for the study of economic ideas may be an appeal to the self-motivations of economists themselves. Economists want their ideas to impact the world. They may be perplexed when an idea, which by their standards of evidence, is effective and fails to arrive on the political agenda (Kingdon, 2003). Acknowledging and interrogating the extra-economic factors which influence the adoption of economic ideas is thus a valuable exercise for the promotion of positive economic ideas themselves.

## 2. ‘Nobody has a monopoly on ideas’<sup>1</sup>

This article draws from Kingdon’s (2003) account of agenda setting and policy adoption, which explores how policy ideas gain political attention, and land on the political agenda. However, nudging is not a policy *per se*, but rather a conceptual lens, or process, to design policy (e.g. Hallsworth, 2023). As such, nudging is better understood as being in ideational competition with other *economic ideas* concerning welfare, decision making, the role of the state and so on (e.g. Sunstein, 2013). Thus, this article adapts Kingdon’s (2003) approach with Blyth (2013B) and Hall’s (1993) respective Kuhnian accounts of shifting economic ideas.

Kuhn (2012) describes the evolution of scientific ideas through the notion of a *paradigm shift*. For Kuhn (2012, p. 10), science typically proceeds as ‘normal science’, where established ideas form the foundation for further scientific exploration. However, over the course of normal science practice, *anomalies* emerge. Normal science can typically tolerate a few anomalies (Kuhn, 2012, p. 78). However, as anomalies mount, they form an additive pressure which eventually overwhelms the dominant paradigm, plunging normal science into crisis. This prompts a search for new ideas to explain anomalies, leading to the emergence of a new scientific paradigm—a paradigm shift.

Hall (1993) argues that the evolution of economic ideas in policymaking has some parallels with Kuhn’s (2012) thesis. However, rather than scientists probing natural truths, ‘experts in a given field of policy, either working for the state or advising it from privileged positions at the interface between the bureaucracy and the intellectual enclaves of society’ advise politicians on the policy action which should be taken (Hall, 1993, p. 277). Kingdon (2003, p. 179) prefers the term ‘policy entrepreneurs’, who ‘are willing to invest their resources—time, energy, reputation, money—to promote a [policy] position’. For Hall (1993), as for Kingdon (2003) and Blyth (2013B), these experts or entrepreneurs are crucial for the evolution of policy and policymaking ideas.

Rather than scientific evidence, ‘the process whereby one policy paradigm comes to replace another is likely to be more sociological than scientific’ (Hall, 1993, p. 280). Hall (1993) understands these sociological factors as competitions between alternative economic ideas to capture the authority of those with political power. Proponents

<sup>1</sup> Kingdon (2003, p. 72).

of economic ideas are said to ‘engage in a contest for authority’ with a paradigm shift being ‘preceded by significant shifts in the locus of authority over policy’ (Hall, 1993, p. 280).

Returning to Kuhn, Hall (1993) argues that this contest arises as existing ideas fail to address emerging anomalies. Incomparable Kuhnian language, Kingdon (2003, p. 95) argues that ‘to make an item from a less visible arena move up on a governmental agenda, something must happen, and that something is often a real crisis... [which] government decision makers cannot ignore’. An existing paradigm may forestall a full contestation of authority through ‘ad hoc’ adjustments, but such adjustments ‘stretch the terms of the paradigm’ and over time undermine the paradigm’s ‘intellectual coherence’ allowing ‘supporters of a new paradigm to secure positions of authority over policymaking’ (Hall, 1993, p. 281). As Kingdon (2003, p. 113) notes, ‘if there is a failure to address [a] problem, the result may be frustration and a turn to something more tractable’.

Blyth (2013B) builds from Hall arguing that competition between economic ideas occurs not just over solutions to policy problems but over *definitions of the problem itself*. Discussing the GFC, Blyth (2013B, p. 204) notes that ‘rational expectations theorists, real business cycle theorists, post-Keynesians and Austrians can all explain, in terms of their own theories, what caused... the global financial crisis’. Yet, Blyth (2013B) argues competition over which explanation that political actors adopt is crucial to ‘secure positions of authority over policymaking’, to use Hall’s (1993) language. So too does Kingdon, (2003, p. 115) who notes that ‘[policy entrepreneurs] push for one kind of problem definition rather than another... Once a particular problem comes to capture the attention of important people, whole classes of approaches come into favor and others fall from grace’. Crises may be particularly important for shifting ideas because they put problems onto a policy agenda for which solutions may not yet have been determined (Kingdon, 2003, p. 142). Reframing a problem such that a solution may meet it can galvanise political energies (Kingdon, 2003, p. 127).

Kingdon (2003, p. 124) argues that policy entrepreneurs must be fortunate for the crisis which precipitates a contest of authority to be suitable for one to articulate a favourable explanation of the crisis, characterising the adoption of policy ideas as an evolutionary process in which ideas must be well-adapted to the political environment to survive and prosper. Yet, in addition to good fortune, both Blyth (2013B) and Kingdon (2003, p. 165) emphasise the importance of exploiting this ‘policy window’ by coupling a new economic idea or policy with one’s proposed definition of the problem. As Blyth (2013B) notes, at any given moment, many different experts may offer explanations of a problem, but successful ideas often marry explanations with new ideas to craft a politically coherent *narrative* that can persuade relevant political stakeholders (also see Hay, 1996, 2004).

Likewise, Kingdon (2003, p. 72) argues that ‘nobody has a monopoly on ideas’ and that ‘problem recognition is not sufficient by itself to place an item on the agenda’ (Kingdon, 2003, p. 114). Only when ‘solutions become joined to problems, and both of them are joined to favorable political forces’ (Kingdon, 2003, p. 20) are policy entrepreneurs likely to effectively shift the policy paradigm in their favour. It is only through coupling policy ideas to political actors, who have the ‘locus of initiative’ (Kingdon, 2003, p. 16) can a policy entrepreneur hope to control the ‘locus of authority’, to use Hall’s (1993, p. 280) language again. This is what may be meant by a well-adapted idea.

### 3. ‘Needed: a new economic paradigm’<sup>2</sup>

Professional faith in economics before the GFC was considerable. Fourteen consecutive years of economic growth in the UK and the perception of unending prosperity prompted central banker celebrations of the ‘Great Moderation’ and the triumph of economics (Carney, 2021, p. 1). In a decade of speeches, the UK Chancellor and later Prime Minister, Gordon Brown, proclaimed the end of boom-and-bust economics (Summers, 2008). Seemingly, these ‘masters of the universe’ (Carney, 2021, p. 1) had, through an embrace of the primacy of markets, delivered an unending boom, born of economic precision and theoretical perfection. Academic economists, too, seemed confident. For instance, the 2003 Presidential Address to the American Economic Association noted that ‘[the] central problem of depression prevention has been solved, for all practical purposes’ (Lucas, 2003, p. 1). However, as funds began to fail, the perceived security of risk diversification instead became the transmission vector of an economic crisis which would soon rival the Great Depression. Stalwart institutions, such as Northern Rock, the Royal Bank of Scotland Group, and in the USA, Lehman Brothers, failed or needed rescuing by the state (Carney, 2021).

The GFC precipitated a questioning of the dominant economic approach (Green and Hay, 2015). Colander *et al.* (2009, p. 2) argue that, as a rule, the economics mainstream was unaware of the build-up to the GFC and that ‘In our hour of greatest need, societies around the world are left to grope in the dark without a theory’. In its wake, the Stiglitz (2010) asked whether a new economic paradigm was now needed. The Queen, famously, asked why no one saw it (the GFC) coming<sup>3</sup>. In the media, Anatole Kaletsky (2008) considered almost every leading economist and financier in the world to have failed to foresee the crisis. Former Federal Reserve chairman Alan Greenspan testified to the US House of Representatives (2008, p. 34) that he did, ‘not fully understand why it [the GFC] happened’, blaming his ‘mistake in presuming that the self-interest of organizations, specifically banks and others’, would protect the economy (p. 33). Whatever explanations were to come to the fore, for Green and Hay (2015), an inadmissible casualty of the GFC was the legitimacy of the existing economic paradigm.

Immediately, efforts to critique and define the failings of pre-GFC economic paradigm began (e.g. Solow, 2008; Lux and Westerhoff, 2009; Brown and Spencer, 2014; Streeck, 2014). A central criticism was the assumption of human rationality in economics. Stiglitz (2010, para. 1) and others (Colander *et al.*, 2008, 2009; Kirman, 2009; Asensio, 2014) argued that economic models were ‘too far removed from reality’ and that the economics profession needed to question the ‘sacrosanct assumption of rationality’ (Stiglitz, 2010, para. 6), given it was evidently incompatible with observed behaviour. Activist voices, too, were quick to draw links between the unrealistic assumptions of human rationality in areas such as the economics curriculum and professional economics education, in juxtaposition to the activities of the market which

<sup>2</sup> At the height of the crisis in economics, this call for action appeared in the *Financial Times*.

<sup>3</sup> Said at the Queen’s visit to the LSE 5 November 2008. The British Academy, (2009, para. 12) convened a forum of expert voices to respond to Her Majesty’s question and in their letter of reply noted ‘the failure to foresee the timing, extent and severity of the crisis and to head it off, while it had many causes, was principally a failure of the collective imagination of many bright people, both in this country and internationally, to understand the risks to the system as a whole’, ending with a call for reform: ‘The events of the past year have delivered a salutary shock. Whether it will turn out to have been a beneficial one will depend on the candour with which we dissect the lessons and apply them in future’.



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seemingly bore little resemblance to a utility maximising agent (Krugman, 2009; Earle *et al.*, 2016). These calls for greater realism in professional economic training reflected a newfound fragility in the legitimacy of the profession.

Criticisms of the rationality assumption in economics were not new (e.g. Sen, 1977). Rationality had long been held as a reasonable, if *unrealistic*, assumption of economics which was necessary to make the discipline capable of contributing to policy discussions (Marshall, 1890; Schumpeter, 1940). In a series of lectures throughout the 1990s, Nobel Laureate Herbert Simon criticised the abandonment of the ‘rationality of common sense’ implicitly found in thinkers such as Keynes and Smith (Simon, 1997, p. 14). These lectures bookended a half-century career of attacking the idea that humans optimise and maximise in their economic decisions (Simon, 1996). While Simon’s Nobel Prize might imply a reasonable acceptance of rationality critiques amongst mainstream economic thinking, economic historians (Petracca, 2021), and even Simon (1996) himself, note several instances of Simon manoeuvring and softening his approach for a reluctant intellectual community.

It is immediately important to note, however, that the GFC did not produce *new* criticisms of rationality. Rather, the crisis precipitated the reconsidering of old ideas which, immediately prior to the crisis, had been substantially less prominent (Santos, 2011). The degree to which the GFC changed economics will continue to be debated. For the purposes of this article that the GFC created the conditions for a contest of authority about economic ideas is most relevant.

### 4. ‘Nudging, not nannying’<sup>4</sup>

Before proceeding, it is useful to briefly outline what is meant by *nudging*, *behavioural insights*, *behavioural science* and various other terms which appear in the following discussion. To a not insignificant extent, the notion of *nudging* has become generally understood in policy and academic circles, as well as the professional press (Harford, 2022). Nevertheless, it is useful when discussing the political adoption of nudging, *in particular* by the UK Coalition Government (2010–15), to recount the simplicity of the original idea.

*Nudge*,<sup>5</sup> as given by Thaler and Sunstein (2008), argues that small changes in a person’s decision-making environment can have significant and predictable effects on what is ultimately decided. Nudges, as popularly understood, should not ban or mandate any options and should avoid utilising significant economic (dis)incentives, such as taxes. Not all ‘behavioural insights’ are necessarily ‘nudges’ with the past decade seeing the emergence of subtly different (but still *behavioural*) approaches (e.g. Hertwig and Grüne-Yanoff, 2017; Oliver, 2017; Hallsworth, 2023). Yet, the success of *Nudge* has been so great that almost all ‘behavioural insights’ are colloquially intertwined with the term nudge (Dolan *et al.*, 2012; Halpern, 2015; Loewenstein and Chater, 2017). For instance, the BIT is also known as the ‘Nudge Unit’.

Behavioural economics was a precursor to nudging and behavioural insights, owing to the proximity of economics and law to many policy areas (Jolls *et al.*, 1998; Thaler, 2015). For instance, one of BIT’s most prominent studies involved changing the

<sup>4</sup> A quote from Eaglesham (2008) describing David Cameron’s preference for the newly fashionable theory that politicians should seek to influence, rather than simply dictate, behaviour.

<sup>5</sup> Henceforth, when referring to *Nudge*, the book by Thaler and Sunstein (2008), capitals and italics are used; when referring to nudging or a nudge, neither are used.

messaging around tax documentation to increase tax compliance in the UK (Hallsworth *et al.*, 2017). However, nudging and behavioural insights increasingly focus on behaviours and domains outside of the typical realm of economic policy (Hallsworth and Kirkman, 2020). For instance, trying to discourage student absenteeism (Gunter, 2023) and tackle online misinformation (Salomon *et al.*, 2023). As such, while some nudging has close ties to behavioural economics, applied behavioural economics is not the same as nudging (Sugden, 2018).

Many nudge policies are underpinned by findings from cognitive psychology—particular loss aversion (Kahneman and Tversky, 1979)—which have been shown to have applicability in economic decision making and beyond (e.g. Kahneman *et al.*, 1991). Other behavioural findings, such as mental accounting (Thaler, 1985), have emerged more directly from the study of consumption behaviours. Findings such as these have been used to ‘nudge’ individuals in areas such as retirement saving (e.g. Thaler and Benartzi, 2004) and home energy consumption (e.g. Schultz *et al.*, 2007).

### 5. ‘Nudge, nudge, win, win’<sup>6</sup>

All ideas come from somewhere. Tversky and Kahneman’s (1974) ‘heuristics and biases’ programme is widely regarded as the impetus for the emergence of a modern ‘behavioural’ school in economics and policymaking (Thaler, 2015). Heukelom (2012) argues that the success of this programme was significantly driven by Tversky and Kahneman’s decision to present their *psychological* results in a language and style appealing to economics. For instance, Kahneman (2011) directly attributes the success *Prospect Theory*—for which he would receive the 2002 Nobel Prize in Economics—to their (Tversky and Kahneman) decision to publish it in the economics journal *Econometrica*, rather than a psychology journal. As Heukelom (2012, p. 810) argues, ‘From the start, prospect theory had been carefully constructed so as to be able to broaden the scope to economists specifically’.

The appeal to policy came also from this positioning; by conceptualising human behaviour as *biased* behaviour, a policymaker could in theory use these biases to affect policy outcomes (Camerer *et al.*, 2003; Thaler and Sunstein, 2003, 2008). By emphasising that people often fail to act in their best interests, Thaler and Sunstein (2003, p. 179) argued that this ‘authorizes both private and public institutions to steer people in directions that will promote their welfare’. The importance of this appeal to policymaker initiative is seen in a contrast with the work of Herbert Simon and his followers.

While Simon openly attacked the economics discipline, Heukelom (2012, p. 817) argues that ‘Kahneman and Tversky were much less hostile’ (also see Petracca, 2021). From a policy perspective, today, Simon’s work is most typically associated with the ‘fast and frugal’ programme (see Gigerenzer, 2004). This programme essentially argues that people *already get most decisions right*, implying little to no role for behavioural insights in government. Such a thesis was put forth in Gigerenzer’s (2008) own popular science book, *Gut Feelings*, released around the same time as Thaler and Sunstein’s (2008) *Nudge*. Thus, where the ‘heuristics and biases’ perspective *prescribes* behavioural economics as a lens to solve various societal problems which come about from poor decision making, the ‘fast and frugal’ perspective often uses these findings to suggest the same decision making is efficient and effective.

<sup>6</sup> Then shadow chancellor George Osborne (2008) explaining in an online article why embracing nudging as opposed to classical economics made the Tory party the party of ideas.

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While *Nudge* presented behavioural economics as an effective tool for solving policy problems, this was not *sufficient* for the immediate adoption of behavioural ideas in government. Resistance and scepticism to the behavioural movement remained.

David Halpern (2015), who has served as Chief Executive of BIT since it was established in 2010, and who prior was a Chief Analyst within UK Prime Minister Tony Blair's Strategy Unit (PMSU) from 2001 to 2007, provides a worthwhile example here. While at the PMSU, Halpern (2015, pp. 35–36) notes:

[The PMSU] wrote a series of policy discussion papers... [O]ne of these discussion papers was explicitly designed to explore the implications of psychology and the behavioural literature for policy... To cut a long story short, the launch of the paper on 'behaviour change' was not a happy one. After a leak, the paper was subject to heavy press attack, leading the Downing Street Press Office to distance itself from it... For a government that was already prone to be seen as a nanny state – it was in general expanding the role of the state – the idea that we might start 'messing with people's heads' was seen as a step too far.<sup>7</sup>

The referenced policy paper, titled *Personal Responsibility and Changing Behaviour*, was published in 2004 (Halpern *et al.*, 2004), suggesting that close to the formative years for behavioural insights (i.e. 2008–14), political conditions for the behavioural programme were lacking. Scepticism towards the reception of behavioural ideas was also reflected in the expectations of behavioural scientists at the time. As Richard Thaler (2021, *online interview*), co-author *Nudge* and advisor to BIT in 2010, noted when discussing his expectations for the book:

We were hoping people outside of our immediate family [*sic*] might be willing to read it [*Nudge*]. The major trade publishers had no interest in this book, so it was published by a sleepy university press that didn't believe in marketing. So, it's really kind of a miracle that the book ever saw the light of day... It was all a big surprise to us, [as was] what happened in the UK.

Even in 2011, after the GFC, the publication of *Nudge* and the establishment of BIT in 2010, a House of Lords (2011, p. 5) report into the use of 'nudge interventions' was sceptical of the idea. It is noted 'that there is relatively little evidence of the effectiveness of particular behaviour change interventions at a population level' and pointed to, 'few substantial responses... following our request for examples of successful interventions' (House of Lords, 2011, p. 18). Gallagher (2024, para. 2), a founding member of BIT, also notes that the Unit's inception came amid 'a wave of scepticism' from 'the media and bureaucracy'.

Despite a hostile reception to proto-nudge ideas in 2004, low expectations even in 2008 and scepticism as late as 2011, momentum seems to have been building. By 2010, *Nudge* had been picked up by a major trade publisher (in the UK, by Penguin Books), and behavioural science was being heralded as a new, and more *natural*, way of making policy (for a critique, see Santos, 2011). These events are not isolated, as various forthcoming evidence suggests.<sup>8</sup> For instance, Thaler (2021) recounts:

The story is [that] Rohan Silva, who was at that time a 20-something, precocious advisor to [UK Leader of the Opposition, later Prime Minister] David Cameron, bought a dozen copies

<sup>7</sup> Further to a previous argument, Halpern *et al.* (2004) cite Tversky and Kahneman (1974) extensively but make no reference to Simon's work.

<sup>8</sup> Some further examples include Thaler's aforementioned involvement in establishing BIT in 2010, Thaler's *Guardian* article co-authored with the UK's shadow chancellor (later chancellor) George Osborne (Osborne and Thaler, 2010), and Osborne's own 2008 article praising nudge as an approach to government (Osborne, 2008).



of the book [*Nudge*] and put them in a pile in Conservative Party Headquarters, as a nudge, and David Cameron picked one up and read it, and that was the beginning of it.<sup>9</sup>

As [Algate \(2022\)](#), another early member of BIT, notes that this would not be the only exposure of the Conservative Party to *Nudge*, with the book being placed on the Conservative Party ‘summer reading list’, in 2009. This shift from ‘messing with people’s heads’ to an ‘intelligent’ way to ‘encourage, support and enable people to make better choices’ ([UK Coalition Government, 2010](#), pp. 7–8) likely lies in the circumstances between 2008 and 2010. Immediately, one may highlight that the problematising of the GFC, and thus government economic policy, around unrealistic rationality assumptions supported the narrative of a behavioural solution.

In 2010, the aforementioned Rohan Silva drafted an article—publicly to be jointly co-authored by Thaler and George Osborne (previously the UK’s shadow Chancellor, becoming Chancellor of the Exchequer in 2010)—where the relationship between the behavioural economics of *Nudge* and the emerging Conservative Party programme of fiscal austerity was clearly outlined ([Thaler, 2021](#)). It begins by invoking the intellectual crisis brought about by the financial crisis as a rationale for an embrace of behavioural science in government:

[S]ome of the lessons from the crisis are glaringly obvious... [P]erhaps most significantly, the crisis has finally put to rest the assumption... that individual behaviour is always entirely rational and that market prices always reflect intrinsic values ([Osborne and Thaler, 2010](#), para. 2–3).

The [House of Lords \(2011, p. 17\)](#) also note that Coalition Government ministers, when asked to justify their advocacy for nudging, pointed to past governments’ tendency to ‘[underestimate] the importance of automatic or non-deliberative aspect[s] of making choices’. [Halpern \(2015, p. 46\)](#) offers further elaboration:

[T]he profound aftershocks of the 2008 financial and banking crises were continuing to highlight deep cracks in conventional economic and policy thinking. The crisis showed that even so-called financial experts, in both academia and the markets, were prone to make serious errors of thought and judgement, with catastrophic consequences. The crisis had shown equally catastrophic failures of regulators and central banks, and of the models of human behaviour that their policies were based on.

To summarise thus far, efforts were made to position behavioural ideas as legitimate economic and policy perspectives decades prior to the GFC ([Kahneman, 2011](#); [Heukelom, 2012, p. 810](#); [Petracca, 2021](#)). Yet, such ideas still failed to impact the political agenda as late as 2004 ([Halpern et al., 2004](#)), with key advocates holding low expectations for their ideas henceforth ([Thaler, 2021](#)). Even after the GFC and the election of a new government in the UK, scepticism persisted ([Gallagher, 2024](#)), with a relative lack of evidence behind the behavioural programme suggesting that other factors—factors now advantageous to the programme—were driving the newfound momentum to nudge ([House of Lords, 2011](#)). One factor would appear to be that political actors blamed the GFC, and the failings of the previous government, on poor

<sup>9</sup> One may note the potential parallels which could be drawn between this story, and comparable tales, such as Margaret Thatcher’s supposed proclamation in front of aides, upon becoming leader of the Conservative Party, that ‘this is what we believe’, referring to a copy of Friedrich Hayek’s *The Constitution of Liberty*. While this story may (debatably) be considered an economic fable, the political theatre such fables invoke is a curiosity worth noting.

assumptions about the rationality of human behaviour, coupling this explanation with nudging and ‘behaviour change interventions’ as viable solutions (Osborne and Thaler, 2010; House of Lords, 2011; Halpern, 2015).

## 6. ‘A fundamentally conservative approach’<sup>10</sup>

With the problem of economic policymaking around the GFC now defined, at least in part, as a problem with unrealistic assumptions about human behaviour, the behavioural programme which was emerging had a problem with which it could couple its solution (Kingdon, 2003). Yet, with the rise of the Coalition Government in 2010, the Conservative Party’s macroeconomic policy of fiscal austerity also became critical. Aligning with the austerity agenda was likely vital (if not catalytic) for the adoption of behavioural insights in the UK.

Osborne and Thaler (2010) were aware of the relationship between behavioural science and austerity. They were quick to advertise these complements, invoking the potential cost-saving benefits of behavioural science with various examples. With each example, Osborne and Thaler (2010) do not make *explicit* reference to ‘austerity’ but rather intersperse their prose with political phraseology (e.g. ‘value for money’, ‘meet our goals more effectively’ and ‘get the deficit down’) which scholars of austerity (Blyth, 2013A) and political language (Evans and Walker, 2020), as well as journalists (Williams, 2018), have linked to the fiscal austerity programme. On tax credits, Osborne and Thaler (2010, para. 4–5, emphasis added) write:

[I]t wasn’t just financial regulation that was wrongly based on the assumption that people are always rational – public policy has also come to be based on this flawed premise. A classic example is the way that Gordon Brown’s [former UK Chancellor of the Exchequer, at the time UK Prime Minister] tax credits system was initially designed... [W]hen the system was first introduced it was assumed that people would promptly inform HM Revenue and Customs of any change in their income... But of course, as it turned out, people don’t quite behave like figures on a Treasury spreadsheet, and as a result *billions of pounds were lost*.

And on government advertisement spending, they (para. 7–10) write:

Over the past decade, the UK government has spent billions of pounds trying to encourage households to become more energy efficient. These efforts have largely failed, but it doesn’t have to be like this... A Conservative government will require all public bodies that want to launch marketing campaigns to state precisely what behaviour change the advertising is designed to bring about... This will... help to cut wasteful spending, and secure better value for money for taxpayers.<sup>11</sup>

Finally (para. 8, emphasis added):

Evidence from behavioural economics and social psychology can’t only help us meet our goals more effectively, it can also help us to achieve them more cheaply, and without intrusive and burdensome regulations. This is therefore a *fundamentally conservative approach*, which can help us to reduce government spending and get the deficit down.

<sup>10</sup> Osborne and Thaler (2010, para. 8).

<sup>11</sup> Osborne and Thaler (2010) make several appeals to a distinctly British kind of austerity, characterised by public spending reductions but not tax rises. For instance, Osborne and Thaler (2010, para. 9) write: ‘[B]ecause the behavioural sciences show that people often make bad decisions when they’re excited by the prospect of immediate gratification, a Conservative government will impose a seven-day cooling off period for store credit cards... That’s a far less intrusive way to tackle problem debt than banning store cards, for example, or introducing a new tax’.

The motivation (if not *necessity*) for behavioural insights to function as a tool for cost reduction within an austerity landscape is also conveyed by Halpern’s *Inside the Nudge Unit* (2015). This includes discussions preceding the creation of BIT, with some reflection on the political landscape. This landscape was, according to Halpern, one which demanded radically different approaches to government than had been seen in the preceding 50 years:

Britain, like many other countries, was in the grip of austerity. Most departments faced major cuts, ranging from 10 to 30 per cent. At the same time, the new government was pushing them to deregulate, cut red tape and avoid legislation. In effect, the two main tools that most departments had relied on for the past 50 years – spending money and legislation – had been put in a box labelled ‘do not touch’ by the new Coalition Government. Here in front of them was a tool [nudging, behavioural insights] they could use. And if the numbers were right, it was a tool that might actually work (Halpern, 2015, p. 13).

Halpern’s colleague at BIT in 2010, Rory Gallagher (2024, para. 2), offers similar commentary, noting that BIT was in part spurred by ‘frustration with existing policy tools’ and ‘budgetary constraints due to the GFC’. Contemporaneous accounts also provide supporting evidence for this perspective. The UK Coalition Government’s (2010, p. 7) *Programme for Government* emphasised that ‘there has been the assumption that central government can only change people’s behaviour through rules and regulations. Our government will be a much smarter one, shunning the bureaucratic levers of the past’. The House of Lord’s (2011, p. 6) would subsequently report that ‘the evidence we received indicated that the Government’s preference for non-regulatory interventions has encouraged officials to exclude consideration of regulatory measures when thinking about behaviour change’.

For Halpern (2015), as implicitly for Osborne and Thaler (2010), austerity was—at the very least—a component in the rise of behavioural insights within government which could not be ignored. In fact, the austerity agenda may even be regarded as a *complementary* policy programme which allowed behavioural insights to flourish *politically*. *Firstly*, by maligning more traditional policymaking approaches, such as tax and spend, and *secondly*, by emphasising ‘value for money’ and ‘cost effectiveness’ as the *prima facie* policymaker consideration (Halpern, 2015). Austerity, thus, created ‘political capital’ (Halpern, 2015, p. 17) for behavioural insights.

For this austerity thesis to hold, one would expect to find opposition to behavioural insights from parties also opposed to fiscal austerity—as the Labour party were in 2010—and one would expect to find the Conservative Party employing behavioural insights in aid of an austerity agenda. Evidence of both can be found leading up to the 2010 General Election. As reported by the *Financial Times*, for the Tories, nudging and behavioural insights was an opportune response to the challenge of pursuing social policies in a time of austerity:

The theory [nudging, behavioural insights] appears to offer an answer to one of Mr Cameron’s central dilemmas – how to achieve his social goals, such as tackling poverty and obesity, without resorting to the centrist state measures, such as statutory curbs, that he attacks Gordon Brown for employing. So it is not surprising that the Tories have taken to nudging with enthusiasm (Eaglesham, 2008, para. 6).

Labour, by contrast, explicitly rejected nudging. At the 2009 Fabian Conference, the then energy secretary Ed Miliband noted that the GFC had led to the wholesale rejection of ‘market solutions’ requiring in its stead large state involvement. As such, for

Miliband (2009), ‘[I]t was now impossible to believe that you could achieve progressive ends by Conservative means’. Miliband continues:

Remember something called Nudge... Nudge was about not really needing the state to do big things. You just need a few incentives here and there. People don’t talk about Nudge much any more (Sparrow, 2009, para. 19).<sup>12</sup>

Based on such statements, regardless of any merits *inherent* to nudging and behavioural insights, the success of this behavioural programme—at least within the UK—was dependent upon the outcome of the 2010 election. One *could* thus argue that nudge simply happened because of *luck*—the Conservatives (in a Coalition) came to power. Yet, as above, the Conservative adoption of behavioural insights was intimately linked with their austerity agenda and utilised rhetorically—and later *actually*—to promote this agenda (Osborne, 2008; Osborne and Thaler, 2010). Ideas that in 2004 were deemed to be ‘messing with people’s heads’ as part of big government nannying were, by 2010, ‘smart’ and ‘intelligent’ ways for a deregulatory state to govern. This political switch suggests that the adoption of nudging had less to do with the *merits* of the approach (which, as above, continued to be questioned) and more to do with the successful coupling of problems and solutions articulated by the approach to the political agenda which had ultimately emerged.

### 7. ‘Many ideas are fashionable for a time, then vanish without trace’<sup>13</sup>

The adoption of nudging and the rise of behavioural insights entailed manoeuvres which scholars of economic ideas have previously observed in other instances of policymaking. Behavioural ideas were not new. Academic work had established a niche for behavioural perspectives in economics decades prior to 2008 (Heukelom, 2012). Yet, prior to 2008, ‘policy entrepreneurs’ failed to achieve the adoption of a behavioural programme, with scepticism of the approach being widespread (Halpern, 2015). However, following Kingdon (2003), behavioural ideas did not remain static, with some (e.g. Thaler and Sunstein, 2003, 2008) evolving the perspective to appeal to the initiative of policymakers.

The GFC initiated a contest of authority amongst economic policymakers (Green and Hay, 2015), as failures to predict or interpret the nature of the crisis by the dominant paradigm created opportunities for others to define the crisis and thus their solutions to it (Hall, 1993; Blyth, 2013B). As shown, a major narrative which emerged around the crisis was that poor assumptions about human behaviour meant industry and government alike failed to see the crisis coming (Santos, 2011). Following Blyth (2013B) and Kingdon (2003), this definition of the crisis aligned with the solutions that nudging presented, allowing behavioural advocates to present a coherent narrative of a problem (unrealistic behavioural assumptions) with a solution (cutting-edge behavioural research).

The Conservative Party, too, levered the idea of poor understanding of human behaviour to attack the Labour Government’s actions and advocate for fiscal austerity. The election of the Tory-led Coalition Government in 2010 made austerity a central

<sup>12</sup> This comment is attributed to Miliband, speaking at the cited 2009 Fabian Conference, by Sparrow’s (2009) reporting in the *Guardian*. The official transcript (Miliband, 2009) of the speech does not feature this quote.

<sup>13</sup> Halpern and Sanders (2016).

component of the political landscape. Rohan Silva, a Conservative adviser, acted as a policy entrepreneur for nudging, coupling the idea to ‘favorable political forces’ (Kingdon, 2003, p. 20) by emphasising how nudging offered political solutions to various policymaking challenges which austerity was likely to bring (Eaglesham, 2008; Osborne and Thaler, 2010). In suggesting that policy could be made without the traditional levers of tax and spend, behavioural insights quickly captured the imagination of the government (e.g. House of Lords, 2011). The behavioural programme had won its share of the ‘locus of authority over policy’ (Hall, 1993, p. 280).

While perturbations of both the GFC and austerity can be seen in the political economy of the UK today (Loneragan and Blyth, 2020), the UK’s political economy has evolved since the events discussed here. Not only has a generation passed (it has been 15 years since *Nudge* was published) but also substantial political economic events have occurred in the UK in that period, such as Brexit and the coronavirus pandemic. If one accepts the arguments presented here that a particular set of circumstances drove the adoption of behavioural insights, one may hypothesise that a change in these circumstances would see a change in policy approach, perhaps away from behavioural insights. Evidence in support of this hypothesis would also support this article’s argument. It is thus worthwhile to spend some time reflecting on the political economic aspects of behavioural insights today.

The UK faces several substantial challenges. Boris Johnson’s Conservatives were elected in 2019 on a platform of ‘Get[ting] Brexit Done’ and ‘Levelling Up’ the regions of the UK beyond the South-East (Conservative Party, 2019). Three months after this election, much of the world—including the UK—faced the COVID-19 pandemic. The macroeconomic fallout of the pandemic, coupled with geopolitical conflicts, has led to inflation and a squeeze in living standards not seen for generations (Partington, 2022). Public health appears to be deteriorating, with rising waiting times in hospitals and for operations (Specia, 2022), and a substantial chunk of the UK workforce seemingly ‘missing’ from the economy (Financial Times, 2022). UK productivity remains limited, while the UK economy is undergoing a period of zero or even negative growth (Strauss, 2022). Industrial action is at its highest point for several decades (Wall, 2022). Also, the impact of climate change looms larger than ever.

It would likely be wrong to suggest that behavioural insights cannot contribute *in some capacity* to policy resolutions to these challenges. For instance, a recent report on the role of behavioural insights in relation to the Levelling Up agenda finds that some behaviourally informed compensation packages may yield small productivity boosts in the short term (Mills, 2022). However, greater scepticism is shown towards long-term benefits. The pandemic was an event where behavioural insights played a substantial role (Halpern, 2023). Yet, behavioural insights also faced substantial criticism after the influence of organisations such as BIT was linked to the UK delaying stricter lockdown policies (Hutton, 2020; Sodha, 2020). A consortium of academic behavioural scientists even signed an open letter criticising the way that behavioural insights were being levered during the pandemic (UK Behavioural Scientists, 2020).

Criticism of the effectiveness of behavioural insights to meet current challenges is also rising. Nisa *et al.* (2019) noted that the effect sizes of various behavioural interventions appear to be too small to tackle various climate concerns, while Kohler-Hausmann (2020) argues—from a US perspective—that behavioural interventions appear to be inadequate to address criminal justice reform. Harford (2022, para. 1), writing in the *Financial Times*, has recently asked, ‘Is behavioural public policy a distraction from finding systemic solutions?’



This question was inspired by the work of [Chater and Loewenstein \(2023\)](#), who argue that over the past decade, behavioural insights have been used more for political and commercial benefits—as a way of forestalling more substantive political action—than for positive social change. One may look to [Kingdon \(2003\)](#) to find some sympathy with the argument that some policies are used (at least partially) to obstruct others.

Such criticisms of behavioural insights may thus reflect a less advantageous political–economic landscape for the programme, given the abovementioned political crises and changing political agenda. Though, following [Kingdon \(2003\)](#), such observations are more likely to point to ways in which nudging might evolve as a policy approach, rather than to pronounce the death of nudging. As [Thaler \(2021\)](#) notes, nudging is always likely to be part of the policy solution, but it is no longer *the* policy solution.

## 8. Conclusion

This article has argued that the events of the GFC, and the adoption of fiscal austerity by the Coalition Government, allowed nudging and behavioural insights to become prominent within the UK’s political agenda between 2008 and 2014. This article suggests that these factors demand greater attention in academic interpretations of nudging and behavioural public policy and that ascribing the success of these ideas to their scientific merits alone would be to offer an incomplete account.

The GFC initiated a contest of authority over the economic ideas used in government and in everyday life. Behavioural advocates were able to successfully couple their solutions to an emerging explanation of the crisis as being the result of unrealistic rationality assumptions in economics. Academic policy entrepreneurs presented behavioural ideas in an accessible way which appealed to policymaker initiative, as embodied by *Nudge*. This time, behavioural advocates had a policy window in which to push their ideas which previous attempts had been lacking.

The election of the Conservative-led Coalition Government in 2010 brought with it a political agenda of fiscal austerity. Policy entrepreneurs, such as Rohan Silva, successfully coupled nudging with austerity and the emerging political environment, presenting the approach as an amenable solution to various problems that the new administration was to face. This article argues that it was these events, rather than the scientific merits of nudging alone, which allowed behavioural advocates to win their share of the ‘locus of authority’ over UK policies in the early 2010s.

The necessary conditions for the rapid genesis of nudging may not align again. Nevertheless, in appreciating how the political economy of the UK shaped the ascension of nudging, economists and others may be better placed to interrogate how an idea like nudging is likely to evolve in the future, the relationship between a changing political–economic landscape and the rise and fall of different economic ideas.

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## Bibliography

- Algate, F. 2022. *How Behavioural Insights Has Transformed Public Policy, and What Next*, University of Manchester Original Thinking Podcast [Online], <https://pod.co/original-thinkers-podcast> (date last accessed 1 March 2022)
- Asensio, A. 2014. The Achilles’ heel of the mainstream explanations of the crisis and a post Keynesian alternative, *Journal of Post Keynesian Economics*, vol. 36, no. 2, 355–80

- Blyth, M. 2013A. *Austerity: The History of a Dangerous Idea*, UK, Oxford University Press
- Blyth, M. 2013B. Paradigms and paradox: the politics of economic ideas in two moments of crisis, *Governance*, vol. 26, no. 2, 197–215
- British Academy. 2009. The global financial crisis – why didn’t anybody notice? *British Academy Review*, vol. 14, 8–10.
- Brown, A. and Spencer, D. 2014. Understanding the global financial crisis: sociology, political economy and heterodox economics, *Sociology*, vol. 48, no. 5, 938–53
- Camerer, C., Issacharoff, S., Loewenstein, G., O’Donoghue, T. and Rabin, M. 2003. Regulation for conservatives: behavioural economics and the case for ‘asymmetric paternalism’, *University of Pennsylvania Law Review*, vol. 151, no. 3, 1211–54
- Carney, M. 2021. *From Credit Crisis to Resilience*, Reith Lecture, 2 [Online], <https://www.youtube.com/watch?v=CTZKraxwQ2s> (date last accessed 1 March 2022)
- Chater, N. and Loewenstein, G. 2023. The i-frame and the s-frame: how focusing on individual-level solutions has led behavioral public policy astray, *Behavioral and Brain Sciences*, vol. 46, e. 147.
- Colander, D., Föllmer, H., Haas, A., Goldberg, M., Juselius, K., Kirman, A., Lux, T. and Sloth, B. 2009. ‘The Financial Crisis and the Systemic Failure of Academic Economics’, Kiel Working Papers 1489, Kiel Institute for the World Economy
- Colander, D., Howitt, P., Kirman, A., Leijonhufvud, A. and Mehrling, P. 2008. Beyond DSGE models: toward an empirically based macroeconomics, *American Economic Review*, vol. 98, no. 2, 236–40
- Conservative Party. 2019. *Get Brexit Done, Unleash Britain’s Potential. The Conservative and Unionist Party Manifesto 2019* [Online], <https://www.conservatives.com/our-plan/conservative-party-manifesto-2019> (date last accessed 8 January 2023)
- Della Vigna, S. and Linos, E. 2022. RCTs to scale: comprehensive evidence from two nudge units, *Econometrica*, vol. 90, no. 1, 81–116
- Department for Business, Energy and Industrial Strategy. 2019. *Business Basics: Nudging Firms to Improve Productivity*, BEIS [Online], <https://assets.publishing.service.gov.uk/media/5d9f4397e5274a595bf5daec/nudging-firms-to-improve-productivity.pdf> (date last accessed 28 March 2024)
- Dolan, P., Hallsworth, M., Halpern, D., King, D., Metcalfe, R. and Vlaev, I. 2012. Influencing behaviour: the mindspace way, *Journal of Economic Psychology*, vol. 33, no. 1, 264–77
- Eaglesham, J. 2008. *Nudging not nannying to Achieve Social Goals* [Online], <https://www.ft.com/content/0e6f1088-6280-11dd-9a1e-000077b07658> (date last accessed 31 January 2022)
- Earle, J., Moran, C. and Ward-Perkins, Z. 2016. *The Econocracy: The Perils of Leaving Economics to the Experts*, UK, Manchester University Press
- Erta, K., Hunt, S., Iscenko, Z. and Brambley, W. 2013. *Applying Behavioural Economics at the Financial Conduct Authority*, The FCA [Online], <https://www.fca.org.uk/publication/occasional-papers/occasional-paper-1.pdf> (date last accessed 28 March 2024)
- Evans, M. and Walker, B. 2020. The beginning of ‘the age of austerity’: a critical stylistic analysis of David Cameron’s 2009 Spring Conference Speech, *Critical Approaches to Discourse Analysis across Disciplines*, vol. 11, no. 2, 169–86
- Ewert, B. 2020. Moving beyond the obsession with nudging individual behaviour: towards a broader understanding of Behavioural Public Policy, *Public Policy and Administration*, vol. 35, no. 3, 337–60
- Financial Times. 2022. The mystery of Britain’s missing workers, *The Financial Times* [Online], <https://www.ft.com/content/dee332d0-0c1d-4590-bad5-2c37006d9b90> (date last accessed 8 January 2023)
- Gallagher, R. 2024. *Moving on from BIT: Reflections on 14 Years of Misbehaving* [Online], <https://www.linkedin.com/pulse/moving-from-bit-reflections-14-years-misbehaving-rory-gallagher-ryvge/?trackingId=sKhIvvdgCIlzHjTvLwd9g%3D%3D> (date last accessed 22 March 2024)
- Gigerenzer, G. 2004. Striking a blow for sanity in theories of rationality in Augier, M. and March, J. G. (eds.), *Models of a Man: Essays in Memory of Herbert A. Simon*, USA, MIT Press
- Gigerenzer, G. 2008. *Gut Feelings: Short Cuts to Better Decision Making*, UK, Penguin
- Green, J. and Hay, C. 2015. Towards a new political economy of the crisis: getting what went wrong right, *New Political Economy*, vol. 20, no. 3, 331–41

- Gunter, T. 2023. *Using Behavioural Insights to Improve School Attendance*, The Behavioural Insights Team [Online], <https://www.bi.team/blogs/using-behavioural-insights-to-improve-school-attendance/> (date last accessed 28 March 2024)
- Hall, P. A. 1993. Policy paradigms, social learning, and the state: the case of economic policy-making in Britain, *Comparative Politics*, vol. 25, no. 3, 275–96
- Hallsworth, M. 2023. A manifesto for applying behavioural science, *Nature Human Behaviour*, vol. 7, 310–22.
- Hallsworth, M. and Kirkman, E. 2020. *Behavioural Insights*, USA, MIT Press
- Hallsworth, M., List, J. A., Metcalfe, R. D. and Vlaev, I. 2017. The behavioralist as tax collector: using natural field experiments to enhance tax compliance, *Journal of Public Economics*, vol. 148, 14–31.
- Halpern, D. 2015. *Inside the Nudge Unit: How Small Changes Can Make a Big Difference*, UK, W. H. Allen
- Halpern, D. 2023. *UK COVID-19 Inquiry: Witness Statement of David Halpern*, COVID-19 Inquiry [Online], <https://covid19.public-inquiry.uk/wp-content/uploads/2023/11/01172222/INQ000188738.pdf> (date last accessed 27 March 2024)
- Halpern, D., Bates, C., Mulgan, G., Aldridge, S., Beales, G. and Heathfield, A. 2004. *Personal Responsibility and Changing Behaviour: The State of Knowledge and Its Implications for Public Policy*, The National Archives [Online], <https://webarchive.nationalarchives.gov.uk/ukgwa/+,http://www.cabinetoffice.gov.uk/media/cabinetoffice/strategy/assets/pr2.pdf> (date last accessed 24 January 2022)
- Halpern, D. and Sanders, M. 2016. Nudging by government: progress, impact, and lessons learned, *Behavioural Science and Policy*, vol. 2, no. 2, 52–65
- Harford, T. 2022. What nudge theory got wrong, *The Financial Times* [Online], <https://www.ft.com/content/a23e808b-e293-4cc0-b077-9168cff135e4> (date last accessed 6 May 2022)
- Hay, C. 1996. Narrating crisis: the discursive construction of the ‘Winter of Discontent’, *Sociology*, vol. 30, no. 2, 253–77
- Hay, C. 2004. Ideas, interests, and institutions in the comparative political economy of great transformations, *Review of International Political Economy*, vol. 11, no. 1, 204–26
- Haynes, L., Service, O., Goldacre, B. and Torgerson, D. 2012. *Test, Learn, Adapt: Developing Public Policy with Randomised Controlled Trials*, Cabinet Office [Online], [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/62529/TLA-1906126.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/62529/TLA-1906126.pdf) (date last accessed 14 March 2022)
- Hertwig, R. and Grüne-Yanoff, T. 2017. Nudging and boosting: steering or empowering good decisions, *Perspectives on Psychological Science*, vol. 12, no. 6, 973–86
- Heukelom, F. 2012. Three explanations for the Kahneman-Tversky Programme of the 1970s, *The European Journal of the History of Economic Thought*, vol. 19, no. 5, 797–828
- House of Lords. 2011. ‘Behavior Change’, HL Paper 179, House of Lords [Online], <https://publications.parliament.uk/pa/ld201012/ldselect/ldsctech/179/179.pdf> (date last accessed 22 March 2024)
- Hutton, R. 2020. *Keep Calm and Wash Your Hands: Britain’s Strategy to Beat Virus*, Bloomberg [Online], <https://www.bloomberg.com/news/articles/2020-03-11/keep-calm-and-wash-your-hands-britain-s-strategy-to-beat-virus> (date last accessed 1 June 2022)
- Jolls, C., Sunstein, C. R. and Thaler, R. H. 1998. A behavioral approach to law and economics, *Stanford Law Review*, vol. 50, 1471–550.
- Kahneman, D. 2011. *Thinking, Fast and Slow*, UK, Penguin
- Kahneman, D., Knetsch, J. L. and Thaler, R. H. 1991. Anomalies: the endowment effect, loss aversion, and status quo bias, *Journal of Economic Perspectives*, vol. 5, no. 1, 193–206
- Kahneman, D. and Tversky, A. 1979. Prospect theory: an analysis of decision under risk, *Econometrica*, vol. 47, no. 2, 263–92
- Kaletsy, A. 2008. It’s an emergency. long-term cures must wait, *The Times*, 13 November
- Kingdon, J. W. 2003. *Agendas, Alternatives, and Public Policies*, USA, Pearson
- Kirman, A. 2009. The Economic Crisis Is a Crisis for Economic Theory. CESifo Economic Studies Conference on ‘What’s Wrong with Modern Macroeconomics?’, Munich, 6–7 November 2009
- Kohler-Hausmann, I. 2020. Nudging people to court, *Science*, vol. 370, no. 6517, 658–9

- Krugman, P. 2009. How did economists get it so wrong? *The New York Times Magazine* [Online], <https://www.nytimes.com/2009/09/06/magazine/06Economic-t.html> (date last accessed 28 March 2024)
- Kuhn, T. S. 2012. *The Structure of Scientific Revolutions*, USA, University of Chicago Press
- Loneragan, E. and Blyth, M. 2020. *Angrynomics*, USA, Agenda
- Loewenstein, G., Chater, N. 2017. Putting nudges in perspective. *Behavioural Public Policy*, vol. 1, no. 1, 26–53
- Lucas, R. E. 2003. Macroeconomic priorities, *American Economic Review*, vol. 93, no. 1, 1–14
- Lux, T. and Westerhoff, F. 2009. Economics crisis, *Nature Physics*, vol. 5, no. 2, 2–3
- Maier, M., Bartoš, F., Stanley, T. D. and Wagenmakers, E. 2022. No evidence for nudging after adjusting for publication bias, *Proceedings of the National Academy of Sciences of the United States of America*, vol. 119, no. 31, e. 2200300119
- Marshall, A. 1890. *Principles of Economics*, UK, Macmillan
- Miliband, E. 2009. *Miliband Speech on Climate Change*, The Fabian Society [Online], <https://web.archive.org/web/20090710132020/>, <https://fabians.org.uk/events/speeches/miliband-speech-on-climate-change> (date last accessed 7 April 2024)
- Mills, S. 2022. *The Role of Behavioural Science in Promoting Productivity and Innovation in Regional and Local Government*, PERN [Online], [https://yorkshireuniversities.ac.uk/wp-content/uploads/sites/15/2022/10/The-Role-of-Behavioural-Science-in-Promoting-Productivity-and-Innovation-in-Regional-and-Local-Govt\\_-\\_PERN.pdf](https://yorkshireuniversities.ac.uk/wp-content/uploads/sites/15/2022/10/The-Role-of-Behavioural-Science-in-Promoting-Productivity-and-Innovation-in-Regional-and-Local-Govt_-_PERN.pdf) (date last accessed 6 January 2023)
- Nisa, C. F., Bélanger, J. J., Schumpe, B. M. and Fallor, D. G. 2019. Meta-analysis of randomized controlled trials testing behavioural interventions to promote household action on climate change, *Nature Communications*, vol. 10, no. 4545, 1–13
- OECD. 2018. *Behavioural Insights*, OECD [Online], <https://www.oecd.org/gov/regulatory-policy/behavioural-insights.htm> (date last accessed 2 March 2022)
- Oliver, A. 2017. Nudges, shoves and budes: behavioural economic policy frameworks, *International Journal of Health Planning Management*, vol. 33, 272–5.
- Osborne, G. 2008. Nudge, nudge, win, win, *The Guardian* [Online], <https://www.theguardian.com/commentisfree/2008/jul/14/conservatives.economy> (date last accessed 1 February 2022)
- Osborne, G. and Thaler, R. H. 2010. We can make you behave, *The Guardian* [Online], <https://www.theguardian.com/commentisfree/2010/jan/28/we-can-make-you-behave> (date last accessed 25 January 2022)
- Partington, R. 2022. UK living standards ‘to fall at fastest rate since mid-1950s’, *The Guardian* [Online], <https://www.theguardian.com/uk-news/2022/mar/23/uk-living-standards-fall-sunak> (date last accessed 8 January 2023)
- Pendleton, A., Lupton, B., Rowe, A. and Whittle, R. 2019. Back to the shop floor: behavioural insights from workplace sociology, *Work, Employment and Society*, vol. 33, no. 6, 1039–57
- Petracca, E. 2021. On the origins and consequences of Simon’s modular approach to bounded rationality in economics, *The European Journal of the History of Economic Thought*, vol. 28, no. 5, 708–32
- Salomon, S., Bellatin, P., Tublin, L., Silva, M. W. and Demergasso, F. 2023. *Behavioral Science Can Help Prevent the Spread of Fake News*, The Behavioural Insights Team [Online], <https://www.bi.team/blogs/behavioral-science-can-help-prevent-the-spread-of-fake-news/> (date last accessed 28 March 2024)
- Santos, A. C. 2011. Behavioural and experimental economics: are they really transforming economics?, *Cambridge Journal of Economics*, vol. 35, no. 4, 705–28
- Schultz, P. W., Nolan, J. M., Cialdini, R. B., Goldstein, N. J. and Griskevicius, V. 2007. The constructive, destructive, and reconstructive power of social norms, *Psychological Science*, vol. 18, no. 5, 429–34
- Schumpeter, J. A. 1940. The meaning of rationality in the social sciences, *Journal of Institutional and Theoretical Economics*, vol. 140, no. 4, 577–93
- Sen, A. K. 1977. Rational fools: a critique of the behavioral foundations of economic theory, *Philosophy and Public Affairs*, vol. 6, no. 4, 317–44
- Shiller, R. J. 2017. *Narrative Economics*, USA, Princeton University Press
- Simon, H. A. 1996. *Models of My Life*, USA, MIT Press
- Simon, H. A. 1997. *An Empirically Based Microeconomics*, UK, Cambridge University Press



- Sodha, S. 2020. Nudge theory is a poor substitute for hard science in matters of life or death, *The Observer* [Online], <https://www.theguardian.com/commentisfree/2020/apr/26/nudge-theory-is-a-poor-substitute-for-science-in-matters-of-life-or-death-coronavirus> (date last accessed 1 June 2024)
- Solow, R. 2008. The state of macroeconomics, *Journal of Economic Perspectives*, vol. 22, no. 1, 243–6
- Sparrow, A. 2009. Fabian conference – live, *The Guardian* [Online], <https://www.theguardian.com/politics/blog/2009/jan/17/fabian-conference-blog> (date last accessed 7 April 2024)
- Specia, M. 2022. One day with an ambulance in Britain: long waits, rising frustration, *The New York Times* [Online], <https://www.nytimes.com/2022/12/20/world/europe/uk-ambulance-delay-nhs-strike.html> (date last accessed 8 January 2023)
- Stiglitz, J. 2010. Needed: a new economic paradigm, *The Financial Times* [Online], <https://www.ft.com/content/d5108f90-abc2-11df-9f02-00144feabdc0> (date last accessed 19 August 2022)
- Strange, S. 1986. *Casino Capitalism*, UK, Basil Blackwell
- Strauss, D. 2022. UK’s growth prospects worst among top economies, warns OECD, *The Financial Times* [Online], <https://www.ft.com/content/d6b84faf-f556-4 added-ac27-65c2d514aa2f> (date last accessed 8 January 2023)
- Streeck, W. 2014. *Buying Time: The Delayed Crisis of Democratic Capitalism*, UK, Verso Books
- Sugden, R. 2018. *Community of Advantage: A Behavioural Economist’s Defence of the Market*, UK, Oxford University Press
- Summers, D. 2008. No return to boom and bust: what Brown said when he was chancellor, *The Guardian* [Online], <https://www.theguardian.com/politics/2008/sep/11/gordonbrown.economy> (date last accessed 17 February 2022)
- Sunstein, C. R. 2013. *Why Nudge: The Politics of Libertarian Paternalism*, USA, Yale University Press
- Thaler, R. H. 1985. Mental accounting and consumer choice, *Marketing Science*, vol. 4, no. 3, 199–214
- Thaler, R. H. 2015. *Misbehaving: The Making of Behavioural Economics*, UK, Penguin
- Thaler, R. H. 2021. *Nudge: The Final Edition | LSE Online Event*, London School of Economics and Political Science [Online], <https://www.youtube.com/watch?v=FEkfqQAP6wk> (date last accessed 24 January 2022)
- Thaler, R. H. and Benartzi, S. 2004. Save more tomorrow: using behavioral economics to increase employee saving, *Journal of Political Economy*, vol. 112, no. 1, S164–87
- Thaler, R. H. and Sunstein, C. R. 2003. Libertarian Paternalism. *American Economic Review*, vol. 93, no. 2, 175–79
- Thaler, R. H. and Sunstein, C. R. 2008. *Nudge: Improving Decisions About Health, Wealth, and Happiness*, UK, Penguin
- Tversky, A. and Kahneman, D. 1974. Judgment under uncertainty: heuristics and biases, *Science*, vol. 185, no. 4157, 1124–31
- UK Behavioural Scientists. 2020. *Open Letter to the UK Government Regarding COVID-19* [Online], <https://sites.google.com/view/covidopenletter/home> (date last accessed 27 November 2024)
- UK Coalition Government. 2010. *The Coalition: Our Programme for Government*, The Cabinet Office [Online], [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/78977/coalition\\_programme\\_for\\_government.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/78977/coalition_programme_for_government.pdf) (date last accessed 22 March 2024)
- US House of Representatives. 2008. *The Financial Crisis and the Role of Federal Regulators* [Online], <https://oversightdemocrats.house.gov/sites/democrats.oversight.house.gov/files/migrated/20081024163819.pdf> (date last accessed 28 March 2024)
- Wall, T. 2022. Industrial disputes in the UK at highest in five years as inflation hits pay, *The Guardian* [Online], <https://www.theguardian.com/uk-news/2022/apr/02/strikes-in-uk-at-highest-in-five-years-as-pay-is-hit-by-inflation> (date last accessed 8 January 2023)
- Williams, Z. 2018. How language duped us into austerity, *The Guardian* <https://www.theguardian.com/commentisfree/2018/feb/16/anguage-austerity-economic-policy> (date last accessed 1 June 2022)