Ambitious but risk averse:

UK manager attitudes and the investment gap

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Abstract

The UK's persistently weak business investment rate relative to peer economies is one of its most enduring economic challenges. A wide range of structural explanations for this gap have been examined. However, whether the attitudes of those who make investment decisions differ systematically from counterparts in comparator economies has not, to our knowledge, been analysed to date. This paper provides that comparison.

Drawing on 34 survey items from five cross-national survey datasets – the Global Preference Survey, the World Values Survey, the European Social Survey, and two modules of the International Social Survey Programme – we compare UK managers to managers in fifteen peer economies across six investment-relevant dispositional constructs: aspiration levels, satisficing, short-termism, risk and loss aversion, ambiguity aversion, and status quo bias. The findings are descriptive rather than causal; we treat consistency across multiple surveys and items as the primary criterion for a robust pattern, rather than relying on any single estimate.

Our headline finding runs counter to a common assumption in UK policy commentary: based on our data, UK managers are not less ambitious than their counterparts. The picture on the remaining constructs is less reassuring: UK managers are more prone to satisficing, consistently more risk and loss averse, and show some evidence of greater ambiguity aversion and short-termism than comparator managers. The risk and loss aversion finding is particularly interesting. It reflects both a consistent directional signal toward greater risk aversion in the UK population and a weaker tendency away from risk aversion in UK managerial selection than in comparator countries. The result is a distinct UK manager profile: ambitious but risk averse.

This finding has potentially important policy implications. First, risk averse managers may amplify the investment-dampening effects of an uncertain operating environment, further emphasising the importance of policy stability. Second, policy instruments that truncate downside losses could be more cost-effective than the return-enhancing subsidies that dominate current UK investment support. Finally, governance, educational, and skills interventions that could shape the UK management cadre towards better-calibrated risk-taking warrant further attention.

1. Introduction

Weak business investment is one of the most persistent features of the UK's economic underperformance (Resolution Foundation and Centre for Economic Performance, 2023). Private non-financial sector gross fixed capital formation as a share of gross value added has lagged peer economies across a broad range of sectors for decades, and this gap is a well-established proximate cause of the UK's productivity shortfall (Alayande and Coyle, 2023; van Ark and O'Mahony, 2024). A wide range of structural factors contribute to the investment gap, spanning demand conditions, policy uncertainty, public investment deficits, financing frictions, and institutional and market failures (Allas and Zenghelis, 2025). This paper examines a complementary possibility: that attitudinal and behavioural factors also play a role.

In a world of rational agents, firms undertake all positive net present value (NPV) projects – investments where the expected returns exceed the cost of capital. Market and coordination failures can drive a wedge between privately and socially optimal investment, and (contrary to theory) financial markets may not always provide fairly priced financing for all NPV-positive projects. Addressing these issues is the focus of most structural economic policy. Indeed, pre-tax average returns on capital in the UK are high compared to peer economies (Brandily et al., 2023) – precisely the conditions that, in a well-functioning market, should attract rather than deter investment[1]. Yet the UK's investment gap persists.

Principal-agent theory highlights incentive misalignment between managers and shareholders as a source of departures from NPV-maximising behaviour (Jensen and Meckling, 1976; Fama and Jensen, 1983), though the predicted effect on investment is ambiguous. A complementary literature points to cognitive biases – systematic deviations from rational choice documented at the individual and organisational level (Kahneman and Tversky, 1979; Ellsberg, 1961; Laibson, 1997; Gavetti et al., 2012; Graham, 2022; Gormsen and Huber, 2025). As we discuss in Section 2.1, our analysis does not depend on distinguishing between these mechanisms. In either case, the result is investment behaviour that departs from pure NPV-maximisation.

Recent research in the UK has started to open the black box of firm investment decisions, moving beyond the assumption that firms consistently maximise NPV. Studies of UK investment appraisal practices find that decision making is often informal (Golubova and Roper, 2026), that firms tend to use above-market hurdle rates in

[1] We acknowledge that ex-post pre-tax average annual returns are only a proxy for positive-NPV investment opportunities, since the latter is calculated ex-ante, post-tax, over the lifetime of an investment project and relative to the weighted average cost of capital of each project. Nevertheless, the UK's higher returns relative to other countries are indicative of attractive investment opportunities. They are also consistent with diminishing returns to investment: if UK firms have only invested in very-high-return projects to date, there are likely to be reasonably-high-return projects left that have positive NPV.

assessing investments (Melolinna et al., 2018; Shah et al., 2024; Xue and Mann, 2026), that many firms use relatively short payback periods as their primary investment decision rule (Cowling and Wilson, 2024), and that there are attitudinal barriers to committing capital (Broughton et al., 2025). This work establishes that within-firm processes and actors matter – but stops short of asking whether UK decision makers differ systematically from their counterparts in higher-investing economies.

The natural locus of investment decisions is the manager (Bertrand and Schoar, 2003; Bloom and Van Reenen, 2007). While managers respond to incentives, steers and signals from their board and stakeholders, a handful of senior staff typically set aspiration levels, define the boundaries of search, frame investment proposals, and decide whether and where to commit capital (Golubova and Roper, 2026). If attitudinal factors constrain investment, they are likely to operate in part through managers[2]. In this paper, we ask whether UK managers exhibit a systematically more investment-constraining attitudinal profile than managers in comparator economies – and hypothesise that such a profile, if it exists, contributes to the UK's investment gap.

The closest existing evidence that attitudes shape aggregate investment outcomes is based on cross-national comparisons at the population level. Patience – the willingness to forgo immediate gains in pursuit of longer-term rewards – is strongly correlated with the accumulation of physical capital and human capital, and total factor productivity across countries (Sunde et al., 2022)[3]. Cross-national variation in risk tolerance shows a positive, if modest, association with TFP (Falk et al., 2018). Trust – a measure of social capital closely related to ambiguity tolerance – is strongly correlated with rates of capital accumulation per worker across countries (Knack and Keefer, 1997). To our knowledge, no study has directly compared UK managers to their counterparts in peer economies on the dispositional constructs most relevant to investment behaviour.

This paper provides that comparison. We draw on five established cross-national survey waves: the Global Preference Survey, the World Values Survey, the European Social Survey, and two modules of the International Social Survey Programme. Our comparator country set comprises fifteen peer economies (coverage varies by survey): Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United States. We examine six constructs with plausible links to investment propensity: low aspiration levels, satisficing, short-termism, risk and loss aversion, ambiguity aversion, and status quo bias. We proxy these constructs using 34 different items from the survey waves.

[2] Cognitive biases also operate at the investor and capital-market level, with a large behavioural finance literature documenting their effects on asset prices and corporate financing choices (Shiller, 2000; Baker and Wurgler, 2002). That channel is distinct from the within-firm managerial channel examined here.
[3] Sunde et al.'s measure of patience captures individual time preferences rather than the institutionally-mediated short-termism that may characterise managerial capital allocation decisions; the macro-level correlation in Sunde et al. (2022) likely reflects both dispositional and contextual influences.

A commonly implied assumption in UK policy commentary is that UK managers are less ambitious than their counterparts in peer economies. Our data do not support this: on aspiration and achievement orientation, UK managers are broadly comparable with managers in peer countries. The picture on the remaining five constructs is less reassuring: UK managers are more prone to satisficing, consistently more risk and loss averse, and show some evidence of greater ambiguity aversion and short-termism. The risk and loss aversion finding is particularly interesting: the UK population shows a consistent directional signal toward greater risk aversion than peer economies, and UK managerial selection shows a weaker tendency away from risk aversion than is apparent in comparator countries. The result is a distinct UK manager profile: ambitious but risk averse. These findings are reported in full in Section 4.

Our work has direct policy implications. Risk averse managers apply larger risk premia to uncertain payoffs and require greater reassurance before committing capital. To the extent that UK managers are more risk averse than their international counterparts, the investment-dampening effects of policy uncertainty – a well-documented feature of the UK environment (Mann, 2024) – may be larger than is typically recognised. Equally, prolonged exposure to an unstable policy environment may itself cultivate greater caution among decision-makers. If so, attitudinal and structural explanations of the investment gap are not merely additive but mutually reinforcing – a feedback loop in which uncertainty breeds risk aversion, which in turn amplifies the investment-dampening effect of subsequent uncertainty.

The paper proceeds as follows. Section 2 sets out the conceptual framework and defines the six constructs. Section 3 describes the data and methodology. Section 4 presents the results for each of five comparison cells – UK population versus comparator populations, UK managers versus the UK population, comparator managers versus their populations, UK managers versus comparator managers (the primary comparison), and a difference-in-differences analysis. Section 5 discusses implications, limitations, and future research directions. Section 6 concludes.

2. Conceptual framework

A substantial literature examines how attitudes, dispositions and cognitive biases affect decision-making. However, it is fragmented across disciplines and rarely applied directly to firm investment propensity. The behavioural theory of the firm addresses aspiration levels and satisficing extensively (Cyert and March, 1963; Gavetti et al., 2012) but does not map these onto investment outcomes in a direct or systematic way. The behavioural economics literature documents deviations from rational choice across a range of constructs – present bias, risk aversion, loss aversion, status quo bias – but

largely in the context of individual consumer and household decisions rather than managerial or corporate ones (DellaVigna, 2009).

Behavioural corporate finance has focused heavily on managerial overconfidence (Malmendier and Tate, 2005; Baker et al., 2007). Overconfidence has directionally ambiguous effects on investment: overconfident managers overinvest relative to the optimum when they have sufficient internal funds but underinvest when external finance is required (Malmendier and Tate, 2005). This ambiguity, and the absence of reliable survey proxies for overconfidence, mean it falls outside the scope of our analysis. The closest existing work to our framework is Kahneman and Lovallo (1993), who argue that loss aversion at the managerial level leads to systematic underinvestment in risky projects. However, this addresses a single construct rather than an integrated set.

Recent applied work has begun to draw these threads together. Broughton et al. (2025) developed a taxonomy of behavioural barriers to investment for UK businesses in the creative, cultural, and related sectors, explicitly identifying short-termism, risk aversion, ambiguity aversion, and status quo bias as investment-constraining constructs – several of which overlap with our framework. What remains absent from the published evidence base is a systematic comparison of managers specifically, and a cross-national design that asks whether attitudinal profiles vary across countries in ways that might help explain differences in investment rates.

This paper takes a first step toward filling that gap, focusing specifically – descriptively rather than causally – on whether UK managers exhibit a more investment-constraining attitudinal profile than their counterparts in peer economies, and whether the findings are consistent across constructs and data sources. We focus on six constructs selected on two criteria: there must be a plausible mechanism linking the disposition or attitude to lower investment propensity, and the construct must be approximable by items in existing cross-national surveys that allow us to look at both population-level and managerial-only dispositions[4]. We discuss the limitations of using existing survey items as proxies for these constructs in Section 5.

[4] We note that deferral of investment is not always sub-optimal: real options theory (Dixit and Pindyck, 1994) shows that when investments are irreversible and the option to wait has value, delay can be value-maximising for a rational agent. That framework assumes known probability distributions. The behavioural mechanisms examined in this paper operate differently: they generate deferral through distorted weighting of outcomes (risk and loss aversion) or through discomfort under genuine uncertainty (ambiguity aversion). They are departures from the rational benchmark rather than expressions of it.

2.1 Constructs relevant to investment decisions

Before defining the constructs, we note that the attitudinal patterns examined here need not reflect cognitive biases in the strict sense of systematic departures from rational optimisation. A manager who applies an above-market hurdle rate or prioritises short-term returns may be rationally responding to misaligned incentives or adapting to a genuinely uncertain policy environment. In either case, the firm forgoes investments that an NPV-maximising decision-maker would undertake. For this paper's question – whether UK managers' attitudinal profiles differ from those of their international counterparts – why they differ matters less than whether they do. We therefore use the terms "attitudes" and "dispositions" throughout to describe the patterns we measure.

In this paper, we examine six constructs, each with a plausible mechanism linking it to lower investment propensity. For each, we describe the mechanism and its grounding in the relevant literature.

Low aspiration / growth ambition. Investment is partly a consequence of ambition: firms invest because managers seek to grow the business, expand market share, pursue new opportunities, or improve performance (e.g., by investing in productivity-enhancing technology). Where managers anchor on unambitious performance targets rather than continuously pursuing growth – what the behavioural theory of the firm calls low aspiration levels (Cyert and March, 1963) – the impetus to identify and scale investment opportunities is reduced. Penrose (1959) argued that firm growth is fundamentally driven by managers' productive imagination – their vision of what the firm could become and their drive to exploit unused resources. Where that imaginative drive is weak, or the targets set are modest, investment opportunities can go unrecognised or unpursued even when the resources to commit capital exist.

Satisficing / limited search. Bounded rationality limits managers' capacity to identify and evaluate the full set of available investment opportunities (Simon, 1955). In practice, search tends to be local – near existing products and processes – and can stop once a "good enough" solution has been found (Cyert and March, 1963). Managers who satisfice – exerting effort sufficient to meet expectations or secure personal rewards, but no more – have little incentive to continue searching for investment opportunities, even if further search would generate value for shareholders. Limited search may thus reduce investment propensity before any formal investment decisions are made.

Short-termism / present bias. Capital investment involves incurring costs now for benefits that accrue in the future. Managers placing disproportionate weight on near-term outcomes apply an implicit discount rate that exceeds the true cost of capital, causing them to reject long-horizon, positive-NPV investments. Present bias is well documented at the individual level (DellaVigna, 2009). There is also evidence of above-market hurdle rates in UK firms (Melolinna et al., 2018; Shah et al., 2024; Xue and Mann,

2026) and relatively short payback periods (Cowling and Wilson, 2024). Cross-nationally, population-level patience is positively correlated with physical capital accumulation, human capital, and total factor productivity (Sunde et al., 2022), though these are aggregate associations rather than evidence of a direct link through corporate investment decisions.

Risk and loss aversion. Risk aversion and loss aversion are conceptually distinct. Risk aversion refers to a preference for lower-variance outcomes: for a given expected return, a risk averse decision-maker favours the option with less dispersion in potential outcomes. Loss aversion, formalised in prospect theory (Kahneman and Tversky, 1979), refers to the asymmetric treatment of losses relative to gains of equivalent magnitude – losses loom larger. In the context of investment, risk aversion raises the effective hurdle rate for projects with more dispersed payoffs; loss aversion makes managers reluctant to commit to an investment where the downside is salient, even when expected value is positive. Together, they can generate systematic under-investment relative to the rational benchmark (Kahneman and Lovallo, 1993).

For the purposes of this analysis, we treat risk and loss aversion as a combined construct. The available survey items do not cleanly separate the two concepts, and the items associated with each are too few to sustain separate constructs. Both operate in the same direction with respect to investment: whether a manager is averse to variance in outcomes, or weights potential losses more heavily than equivalent gains, the implication is a higher effective hurdle rate and a lower propensity to commit capital. At the aggregate level, Falk et al. (2018) find that population-level risk aversion is negatively associated with total factor productivity (TFP) – though the relationship is more modest and less robust than that between patience and capital accumulation (Sunde et al., 2022).

Ambiguity aversion. Knight (1921) distinguished between risk – where the probability distribution of outcomes is known – and uncertainty, where it is not. Many investment decisions, particularly those involving new products, markets, or technologies, involve genuine uncertainty rather than calculable risk. Ambiguity aversion (Ellsberg, 1961) leads managers to prefer options with well-defined probability distributions and to delay or avoid commitment under uncertainty, even in cases where investment would be value-enhancing under a wide range of plausible assumptions.

In cross-national surveys, no item directly measures ambiguity aversion in the Ellsberg sense. The closest available proxies are generalised social trust and openness to novelty. The connection is intuitive rather than exact: returns to investment depend on the cooperation and responses of others – colleagues, employees, stakeholders, and external partners – whose behaviour cannot be fully predicted or contracted upon. Where individuals have lower trust in others' good faith or competence, the perceived ambiguity surrounding investment outcomes is higher, reinforcing the tendency to delay

or avoid commitment (Knack and Keefer, 1997; Guiso et al., 2008). A related but distinct mechanism runs through management quality: high-trust environments enable firms to benefit from good management and organisational capital, with measurable productivity gains particularly in knowledge-intensive industries (Cette et al., 2024).

Status quo bias / inertia. Even where investment is value-enhancing, managers may fail to act due to a systematic tendency to prefer the current state of affairs over alternatives – avoiding the work required to persuade others to change direction, weighting the regret of an active mistake more heavily than the regret of passive inaction, or aiming to maintain authority by exhibiting consistency with past decisions (Samuelson and Zeckhauser, 1988). Status quo bias manifests as a preference for continuation over change, attachment to existing practices, and reluctance to redeploy capital toward new, higher-return uses (Koller, 2025). It is reinforced by loss aversion – any change that is framed as a departure from a reference point activates the asymmetric loss weighting described above – and by strong organisational loyalty that makes reallocation costly to authorise. At the aggregate level, widespread status quo bias among managers produces capital misallocation and under-investment in new opportunities.

2.2 Hypotheses

Our central hypothesis is that UK managers score higher on investment-constraining attitudes across these constructs than managers in comparable peer economies. By "attitudes" we mean the pattern of responses observable in survey data – without distinguishing whether these reflect stable psychological dispositions, culturally conditioned norms, or rational adaptations to the institutional environment (as discussed in Section 2.1).

The hypothesis is motivated by the UK's long-standing private sector investment gap and the puzzle that it persists even when pre-tax returns to capital compare favourably internationally (Brandily et al., 2023). Structural and attitudinal explanations are not mutually exclusive – both may be contributing simultaneously, and as we argue in Section 1, may be mutually reinforcing. This paper does not attempt to decompose the investment gap. It asks a prior question: do UK managers exhibit a systematically more investment-constraining attitudinal profile than their international counterparts, across constructs that are relevant to investment behaviour?

We do not predict that every construct will show a significant UK deficit, nor that any single construct dominates. The hypothesis is directional: across the set of constructs, we expect UK managers to show a pattern consistent with more investment-constraining dispositions. For each construct we report statistical significance and apply a Cohen's d threshold of 0.2 to distinguish meaningful from small effect sizes – a

deliberately conservative standard given the indirect character of the survey proxies. Our primary robustness criterion is convergence: a finding that recurs across multiple items within a construct, and across multiple independent surveys, is more credible than any single estimate, and more informative than isolated statistical significance.

3. Data and methodology

3.1 Survey data

Measuring manager dispositions across countries requires data that is representative, internationally comparable, and sufficiently granular to identify occupational sub-groups. Five established cross-national surveys, used in combination, provide such an evidence base. Together they cover a wide range of comparator countries and provide validated survey instruments with items that serve as proxies for each of the six behavioural constructs identified in Section 2.

Global Preferences Survey (GPS, 2012–13). The GPS (Falk et al., 2018) surveyed approximately 80,000 individuals across 76 countries, with roughly 1,000 respondents per country. It provides six preference indices – patience, risk-taking, trust, positive reciprocity, negative reciprocity, and altruism – derived from a combination of survey items and incentivised experimental tasks, making them among the most methodologically rigorous dispositional measures available at cross-national scale. For our purposes, the patience index provides a cross-national proxy for short-termism, while risk-taking and trust inform the risk and loss aversion and ambiguity aversion constructs, respectively.

World Values Survey, Wave 7 (WVS, 2017–22). The WVS Wave 7 (Haerpfer et al., 2022) surveyed approximately 97,000 individuals across 66 countries, with sample sizes of roughly 1,000–2,000 per country. It covers a broad range of values, beliefs, and attitudes spanning work orientation, social trust, attitudes towards competition, and views on inequality and social mobility. It provides wide thematic coverage, with items relevant to four constructs: low aspiration, short-termism, ambiguity aversion, and status quo bias.

European Social Survey, Round 11 (ESS, 2022–23). ESS Round 11 (ESS ERIC, 2025) covers 30 European countries with approximately 50,000 respondents. It provides particularly strong construct coverage through its inclusion of the Portrait Values Questionnaire (PVQ-21), a validated psychometric instrument measuring personal values across ten dimensions, with acquiescence-adjusted scores used throughout. The PVQ-21 yields well-validated survey items for low aspiration, short-termism, risk and loss aversion, ambiguity aversion, and status quo bias.

International Social Survey Programme Work Orientations IV (ISSP WO, 2015). The fourth wave of the ISSP Work Orientations module (ISSP Research Group, 2017) covers

37 countries with approximately 52,000 respondents. It provides the richest set of direct work-related items in our analysis, covering job preferences, work centrality, and organisational commitment. It is particularly valuable for the risk and loss aversion and status quo bias constructs, where it offers behavioural intention items – such as willingness to stay with an employer or adapt to new conditions – that go beyond stated values to capture likely decision-making patterns.

International Social Survey Programme Social Inequality V (ISSP SI, 2019). The fifth wave of the ISSP Social Inequality module (ISSP Research Group, 2022) covers 29 countries with approximately 45,000 respondents. Its thematic focus on attitudes towards inequality and social mobility yields items relevant to aspiration, while also providing an independent cross-national measure of social trust – one of the most consistently measured constructs in our analysis, appearing across four survey waves.

3.2 Defining managers

In each survey wave, we select the broadest standard "manager" category available, combined with an employment filter restricting the analysis to those in active paid work – whether as employees, self-employed, or those working in a family business. We include the last group deliberately: given the predominance of small businesses, family businesses, and owner-managers in the UK and comparator countries, excluding them would risk understating attitudes likely to influence aggregate investment outcomes.

For the ESS and both ISSP modules – which use the international standard occupational classification ISCO-08 – we define managers as those in Major Group 1, which encompasses legislators, senior officials, and managers across all sectors. For the WVS, which uses a bespoke ten-category occupational scheme, we use category Q281=2 ("Higher administrative or managerial"), deliberately excluding category Q281=1 ("Professional and technical") as too broad and occupationally heterogeneous. For the GPS, no occupational classification is available in the public release data; GPS therefore contributes to population-level comparisons only.

These classifications are broad: ISCO-08 Major Group 1 – roughly 10–14% of employed respondents across surveys – spans senior executives alongside middle managers with no capital expenditure authority. The available survey data do not permit narrower cuts. The breadth introduces noise, but two features limit its consequences: we apply the same definition across countries, so differences reflect cross-national variation; and organisational culture tends to be transmitted across hierarchical levels through selection and socialisation, which should nevertheless make the broader managerial population informative about senior decision-makers. We note, however, that the UK manager share tends to run somewhat higher than comparator countries in ISCO-based

surveys, suggesting that individuals in supervisory roles may classify themselves as managerial more readily in the UK. We return to these limitations in Section 5.3.

3.3 Country coverage and sample sizes

For the analysis in this paper, we selected comparator countries on two criteria: structural and economic comparability with the UK as a high-income OECD economy, and a sufficient number of valid manager responses to support reliable sub-group analysis. The comparators are the OECD's core high-income liberal democracies – the peer group against which UK economic performance is conventionally benchmarked. We exclude Ireland because measured investment rates are likely distorted by multinational activity, and South Korea because its industrial structure and investment model make it less comparable to the UK. The effective comparator group varies by survey wave and item, reflecting differences in country participation, sample sizes, and valid responses. Table 3.1 shows the comparator group for each survey wave for manager-level comparisons when comparator country results are pooled, with full detail in Tables A1 and A2 in the Appendix.

We apply a single item-level minimum valid response criterion: a country contributes to the pooled comparator mean for a specific item only if it has at least 30 valid manager responses for that item. In practice, this leads to Austria being excluded from six items in the ISSP Work Orientations survey, while contributing to the remaining five. For country-level breakdowns – where a named country's result is shown separately (e.g., in charts) – we apply a higher threshold of 50 valid manager responses. We also note that the UK manager sample in the WVS Wave 7 is 89–92 valid responses per item – a relatively small number, and readers should bear this in mind when interpreting WVS-based findings.

Table 3.1: Country comparator groups by survey wave for pooled comparisons between UK managers and comparator group managers

Survey wave	Comparator countries included
GPS	N/A – no occupational variable available in public release data, so data only used for population-level (not manager-level) comparisons
ESS Round 11	Austria, Belgium, Finland, France, Germany, Netherlands, Norway, Sweden, Switzerland
WVS Wave 7	Australia, Canada, Germany, Japan, Netherlands, New Zealand, United States
ISSP WO IV	Austria, Australia, Belgium, Denmark, Finland, France, Germany, Japan, New Zealand, Norway, Sweden, Switzerland, United States
ISSP SI V	Austria, Australia, Denmark, Finland, France, Germany, Japan, New Zealand, Norway, Sweden, Switzerland, United States

Notes: Denmark did not participate in ESS Round 11. Full details of country coverage and number of valid responses for the population and the manager sub-groups are provided in Tables A1 and A2.

3.4 Item selection

The five survey waves together contain over 2,000 variables. From this pool, we identified 34 items as relevant to our six constructs and meeting our criteria for cross-national comparability and data quality. Item selection followed three criteria: theoretical relevance to a specific construct; cross-national comparability of question wording and response scale; and a sufficient number of valid responses among the manager sub-group.

Where a quality issue was identified in the survey documentation, items were investigated before a decision was taken. One such case arose in ESS Round 11, where the codebook flags missing data for 30 UK interviews on the PVQ-21 module. Since this affects fewer than 2% of UK respondents and the remaining data is valid, the relevant PVQ-21 items were retained.

The multi-survey design means that all constructs are proxied by items from at least two independent survey waves. We treat this cross-wave coverage as a central feature of the analytical design: a finding that holds consistently across survey waves with different sampling frames, time periods, and question wordings is considered more robust than a finding resting on a single source.

A further layer of external validation is available for selected items. Falk et al. (2018) show that the WVS trust question – used here as a proxy for ambiguity aversion – is significantly positively correlated with its GPS counterpart at country level, providing independent support for its cross-national validity. Conversely, the WVS thrift item, which we use as one proxy for short-termism, correlates only weakly with GPS patience at country level, consistent with the view that it captures cultural orientations toward

prudence and long-term thinking more broadly rather than individual time preference per se – a caveat we note in the relevant findings.

A full list of included items – with survey wave, construct assignment, simplified question wording, response scale, and coding direction – is provided in Table A3 in the Appendix. Table 3.2 below provides examples of survey items mapped to each construct.

Table 3.2: Examples of survey items mapped to constructs

Survey wave	Survey item*	High raw score means**	High raw score indicates**
Construct: Low aspiration / growth ambition			
WVS	Competition is good – Competition is harmful	"Competition is harmful"	More investment-constraining
ISSP SI	For getting ahead in life, how important is hard work?	"Not important at all"	More investment-constraining
Construct: Satisficing / limited search			
ESS	How much control do you feel you have over your life in general nowadays?	"Complete control"	Less investment-constraining
ISSP WO	A job is just a way of earning money – no more	"Strongly disagree"	Less investment-constraining
Construct: Short-termism / present bias			
GPS* **	How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future?	"Very willing to do so"	Less investment-constraining
WVS	In the long run, hard work usually brings a better life – Hard work doesn't generally bring success–it's more a matter of luck and connections	"Luck and connections"	More investment-constraining
Construct: Risk and loss aversion			
ESS	It is important to live in secure surroundings and to avoid anything that might endanger safety.	"Not like me at all"	Less investment-constraining
ISSP WO	In order to avoid unemployment, I would be willing to accept a position with lower pay.	"Strongly disagree"	Less investment-constraining
Construct: Ambiguity aversion			
ESS	Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?	"Most people can be trusted"	Less investment-constraining
ISSP SI	Generally speaking, would you say that people can be trusted or that you can't be too careful in dealing with people?	"Can't be too careful"	More investment-constraining

Construct: Status quo bias / inertia			
ESS	Tradition is important. [One tries to] follow the customs handed down by religion or family.	"Not like me at all"	Less investment-constraining
ISSP WO	I would turn down another job that offered quite a bit more pay in order to stay with this organization.	"Strongly disagree"	Less investment-constraining

* Survey items are shown in abbreviated or simplified form. The exact wording, question format, and response scale vary across survey waves and items. For example, some WVS items present two opposing statements on a 1–10 scale, ESS PVQ-21 items ask respondents how similar they feel to a described person, and other items ask respondents how much they agree or disagree with a statement.

** The table shows the label corresponding to the highest value on the original response scale. Where this indicates a less investment-constraining attitude – for example, "strongly disagree" with a statement that work is just a means to earn money, or "complete control" over one's life – the item is reversed before analysis so that higher rescaled scores always indicate more investment-constraining attitudes. Coding directions for all 34 items are provided in Table A3.

*** In our analysis, we use the GPS composite indices. The example shown in the table above is an input into the patience index. The index itself combines the self-assessed survey measure with a staircase elicitation procedure; the resulting composite indices are validated against incentivised experiments (Falk et al., 2016; Falk et al., 2018).

3.5 Analytical approach

This section describes the analytical steps taken to transform raw survey responses into comparable, interpretable estimates of attitudinal differences between population groups.

Rescaling. Raw item responses are rescaled to a common 0–1 interval using linear min-max normalisation, where 0 represents the least investment-constraining attitude and 1 the most. For items where a high raw score corresponds to a more investment-constraining attitude – for example, high importance placed on job security as a proxy for risk and loss aversion – the rescaled value is used directly. For items where a high raw score corresponds to a less investment-constraining attitude – for example, high self-reported risk tolerance – the rescaled value is inverted. This convention ensures that higher rescaled scores always indicate more investment-constraining attitudes.

Weighting. Each survey wave provides sampling weights designed to make respondents representative of the national population. We use these weights as supplied but normalise them within each country so that they sum to one. This ensures that each country contributes equally to pooled estimates regardless of differences in sample size – a deliberate choice given that our primary interest is in cross-national attitudinal differences rather than population-weighted global averages.

Comparison cells. We organise results around five comparison cells, each providing quantitative information about a distinct, relevant comparison between two specific population groups:

- **Cell A:** UK general population vs comparator country general population – establishing whether any UK distinctiveness is a society-wide phenomenon rather than specific to managers.
- **Cell B:** UK managers vs UK general population – characterising how the UK manager population group differs from the domestic baseline.
- **Cell C:** Comparator country managers vs comparator country general population – the equivalent characterisation to Cell B, but for the comparator countries.
- **Cell D:** UK managers vs comparator country managers – the primary comparison, interpreted in the context of population-level and manager-population differences.
- **Cell E:** Difference-in-differences – testing whether the gap between managers and their national population differs between the UK and the comparator group.

Results are presented for all cells, with the most emphasis placed on Cell D, and the other cells providing context and enabling careful interpretation.

Metrics. For each item and each comparison cell we compute three quantities. *First*, for each population group we report the weighted rescaled mean on the 0–1 scale, providing an absolute indication of where each group sits on the investment-constraining spectrum. These per-group means are not adjusted for the dispersion of responses, but they are directionally comparable across items, though not formally equivalent measures of construct magnitude. For all items, a number closer to 1 indicates a more investment-constraining attitude. The rescaled mean difference between two groups provides the initial measure of whether one group exhibits more investment-constraining dispositions than another.

Second, we report Cohen's d – the difference in rescaled means between the two groups being compared, divided by their pooled standard deviation. Cohen's d adjusts for the underlying dispersion of responses: a given mean difference carries more evidential weight when respondents are tightly clustered than when attitudes are widely dispersed. This makes Cohen's d the preferred basis for comparing the magnitude of attitudinal differences across items and constructs. We follow conventional benchmarks: we treat $|d| < 0.2$ as negligible, $|d| \geq 0.2$ as meaningful, and $|d| \geq 0.5$ as large. In practice, no estimate in our analysis exceeds 0.5, so the relevant interpretive threshold throughout the paper is whether differences clear the 0.2 boundary. In cross-

national attitudinal research, consistent differences in this range can be important even where they fall short of conventional benchmarks for medium effects.

Third, we compute the standard error of the rescaled mean difference using the Kish effective sample size to account for design weighting and derive 95% confidence intervals for every item–comparison-cell combination. These confidence intervals are expressed in 0–1 rescaled units and test whether the difference between the two group means is distinguishable from zero. Construct-level rescaled means and Cohen's d averages are computed across all items regardless of whether individual items reach statistical significance.

Statistical significance serves as a narrative filter: discussion in the main text focuses on items where the 95% confidence interval excludes zero, but non-significant items are not discarded – consistent directionality across items and survey waves provides corroborating weight beyond what any single estimate establishes, as set out in Section 2.2. Construct-level summary tables report the total number of items, the number reaching statistical significance, and – among significant items – the number pointing in each direction, distinguishing those that support the hypothesised pattern from those that run against it. Full item-level results for Cell D are reported in Table A4 in the Appendix.

4. Results

This section presents our results across the five comparison cells. We begin with Cell A, which establishes whether UK managers belong to a population with a more investment-constraining attitudinal profile than comparator country populations (Section 4.1). We then turn to the within-country manager profiles (Cells B and C) – whether managers in the UK and in other countries are more or less investment-constrained than the broader working-age population (Section 4.2). The primary comparison (Cell D) – UK managers versus comparator country managers – is presented in Section 4.3, and Section 4.4 presents the findings of the difference-in-differences analysis (Cell E).

4.1 Cell A – UK population vs comparator country populations

4.1.1 Prior evidence

Existing evidence on distinctive UK population-level attitudes, values, and preferences is limited in scope. Most comparative claims draw on one of the surveys used in our research, typically the World Values Survey, and none examine the full range of constructs considered in our analysis.

On ambition and growth orientation, the most consistent prior finding concerns work centrality: in the World Values Survey, covering a broad range of countries including many outside the OECD, UK respondents attach lower importance to work as a domain of life and are less likely to believe that hard work reliably produces rewards (Duffy et al., 2023b). Expert assessments of the extent to which social and cultural norms encourage new business methods and wealth creation – a proxy for societal ambition and growth orientation – place the UK well below the upper-income economy average, ranking 17th of 27 (Global Entrepreneurship Monitor (GEM), 2026), and significantly lower than the United States (Hart et al., 2025).

Evidence on short-termism is suggestive but mixed: Hofstede's Long-Term Orientation index places the UK towards the short-term end of the distribution, below Japan, the Netherlands, Sweden, and Germany, though many of the Anglophone comparator countries score similarly to the UK (Hofstede et al., 2010). House et al. (2004) categorise countries into bands based on their Future Orientation, with the UK towards the upper end of Band B – indicating a relatively high preference for planning for the future, but below countries in Band A, such as the Netherlands, Denmark, and Canada.

On risk and loss aversion, GEM data show that the proportion of adults who would not start a business for fear it might fail is higher in the UK than in the United States, Germany, and France (Hart et al., 2025). We are not aware of direct cross-national evidence on ambiguity aversion. However, there are studies on cross-country variations in generalised societal trust, which we use as a proxy for ambiguity aversion (Knack and Keefer, 1997). One such recent comparison places the UK mid-table among advanced economies: 46% of Britons say most people can be trusted, placing the UK above Italy, France, Germany, Japan, and the United States, but below the Nordic countries, Canada, and Australia (Duffy et al., 2023a).

To our knowledge, no published cross-national evidence exists on satisficing or status quo bias at the population level.

4.1.2 Findings

Table 4.1 presents our construct-level results for Cell A, comparing the UK population to comparator countries' populations. Throughout, higher scores indicate more investment-constraining attitudes. Where prior evidence exists, our findings are broadly consistent with it, though our broader item coverage adds nuance – most notably on aspiration levels.

Table 4.1 Construct-level summary for Cell A: UK population vs comparator country population

Construct	Rescaled mean, UK population	Rescaled mean, comparator population	Average Cohen's d*	Statistically significant** items / Total items	Statistically significant items by direction***
Low aspiration / growth ambition	0.37	0.38	-0.07	7/10	3↑ / 4↓
Satisficing / limited search	0.43	0.36	0.25	3/3	3↑ / 0↓
Short-termism / present bias	0.67	0.63	0.11	1/3	1↑ / 0↓
Risk and loss aversion	0.57	0.56	0.05	5/7	4↑ / 1↓
Ambiguity aversion	0.39	0.38	0.06	3/7	3↑ / 0↓
Status quo bias / inertia	0.50	0.53	-0.09	3/4	0↑ / 3↓

* Cohen's d averaged across all items within the construct (including non-significant ones).

** An item is statistically significant if its rescaled mean difference is different from zero at the 95% confidence level.

*** ↑ = First group scores higher (more investment-constraining); ↓ = First group scores lower (less investment-constraining).

Low aspiration / growth ambition produces the most complex picture. Seven of the ten items are statistically significant, but they divide in opposing directions, yielding an average close to zero (d = −0.07). On items measuring work centrality – the importance of work as a life domain, and whether work should come first – UK respondents are less likely to prioritise work, consistent with the prior literature.

Yet on several other items the pattern runs the other way: UK respondents are more likely to endorse hard work as a route to getting ahead in life, to value opportunities for career advancement, and to report willingness to go beyond what their job strictly requires. These are among the larger effects in the construct, and they do not support an assumption of low aspiration.

The divergence from the prior literature partly reflects item coverage – Duffy et al. (2023b) and GEM's expert assessments of cultural norms focus primarily on work centrality and societal-level attitudes toward business creation and wealth, including the relative importance of work versus leisure. Our items capture orientations within work itself: valuing advancement and willingness to exert effort beyond what is required. The differences also partly reflect our more restricted comparator set of OECD peers, within which the UK's relative position on work centrality is less pronounced.

Taken together, our results do not support a simple aspiration deficit. They suggest instead a more complex picture: on a personal level and in the context of work, UK

respondents appear to embrace effort and ambition as a means to advancement while, societally, work and wealth creation are considered less central to life.

Satisficing / limited search shows a consistent directional pattern across all three items (average d = +0.25). UK respondents are more likely to report staying in an unsatisfying job, more likely to treat work as purely instrumental (see also Figure 2 in Section 4.2), and score lower on sense of personal control. We note this pattern without over-interpreting it: the proxies are imperfect, and each reflects a range of possible mechanisms beyond satisficing and limited search.

Short-termism / present bias is measured by three items, of which one reaches significance: UK respondents attach less importance to thrift and saving as values to instil in children (d = +0.27). The GPS patience index – a more direct proxy for individual time preferences – points in the same direction, though it does not reach significance. Both proxies are consistent with a modest short-termism tendency among the UK population relative to comparator countries, but the result should be read as suggestive rather than conclusive[5], in line with the mixed prior evidence (Hofstede et al., 2010; House et al., 2004).

Risk and loss aversion shows a predominantly security-oriented pattern, though not uniformly across all items. UK respondents express greater concern about job loss, attach more importance to job security, and score higher on safety orientation than comparator countries' general population. Items specifically about risk taking are statistically insignificant[6]. On the adventure-seeking item, UK respondents score in the opposite direction, suggesting greater openness to excitement and novelty. These findings point to a security orientation among the UK population that is specific to job, income, and safety contexts, but not necessarily a generalised aversion to risk. This pattern is broadly consistent with GEM data (Hart et al., 2025).

Ambiguity aversion shows a weak and inconsistent signal. Two trust measures – the ESS and ISSP Social Inequality items – indicate that UK respondents are less trusting than comparator populations (d ≈ +0.17 to +0.19), but neither the WVS nor the GPS trust measures reach significance, and the GPS points in the opposite direction. These mixed results are broadly consistent with the UK's mid-table positioning among advanced economies identified by Duffy et al. (2023a). The remaining items – openness to new ideas, willingness to try new things, and acceptance of jobs requiring new skills – are marginal or non-significant.

[5] Falk et al. (2018) find that the WVS thrift item correlates only weakly with their directly-elicited GPS patience measure at country level, noting that it may capture cultural orientations toward prudence and long-term thinking more broadly rather than individual time preference per se.

[6] The GPS risk-taking index points in the same direction as the security-oriented items, suggesting modestly higher risk aversion among the UK population, but does not reach statistical significance. We treat this as directionally consistent but do not place interpretive weight on it.

Status quo bias / inertia runs counter to the hypothesis: all three statistically significant items suggest that UK respondents are, if anything, more open to change than their comparator counterparts – more likely to endorse the need for societal change, more willing to consider changing their type of work, and more likely to consider leaving their current employer for a better offer. The effects are modest in magnitude, however.

4.1.3 Conclusions

Overall, our Cell A analysis reveals a mixed picture. The items on satisficing and limited search point consistently in the same direction, though – as noted above – the proxies are imperfect. UK respondents also show a modest security orientation. Contrary to the common prior, they do not appear less aspirational and are, if anything, more willing to embrace change. The UK general population does not, on balance, appear to be markedly more investment-constrained in its attitudes than comparator populations.

4.2 Cells B and C: The manager selection effect

4.2.1 Prior evidence

A long-standing proposition in organisational psychology and labour economics is that individuals sort into managerial occupations in part because of their attitudinal and dispositional characteristics (Schneider, 1987; Holland, 1997)[7]. This sorting operates through two reinforcing channels: on the supply side, individuals with certain dispositions are more likely to seek out and pursue managerial roles; on the demand side, organisations tend to recruit, retain, and promote individuals whose traits are associated with managerial performance. Both channels predict that managers, as a group, are likely to differ from the general population on at least some of the constructs this study examines[8].

Prior evidence on managerial attitudes, as distinct from the general population, is strongest for low aspiration / growth ambition, risk and loss aversion, and ambiguity aversion.

[7] Individual sorting into managerial roles also reflects a wide range of factors beyond attitudinal and dispositional characteristics, including cognitive ability, age, gender, social background, education, and networks. Our focus on attitudes and dispositions reflects the constructs most relevant to investment behaviour, not a claim that these are the primary determinants of who becomes a manager.

[8] We note that cross-sectional data cannot establish whether observed attitudinal differences preceded managerial selection or partly reflect survivorship: successful individuals are more likely to hold, and report, beliefs consistent with their own success. However, for the purposes of this paper, what matters is that these are the attitudes managers currently hold.

On low aspiration / growth ambition, the selection hypothesis predicts that managers should score lower than the general population – that is, they should be more ambitious, more growth-oriented, and more driven to succeed. McClelland (1961) argued that those who seek positions of economic responsibility are characterised by a high need for achievement – a disposition toward personal responsibility, a preference for clear performance feedback, and energetic, future-oriented engagement with challenging tasks. Collins et al. (2004) meta-analysed 41 studies and found that achievement motivation differentiates entrepreneurs from managers ($r = 0.14$) less strongly than from other professions ($r = 0.35$) – consistent with the prediction that managers score above the general population on drive and ambition. Furnham and Crump (2015), in a UK sample, find that Achievement Striving is among the most strongly differentiating personality facets across management levels, providing UK-specific support for the selection hypothesis.

On risk and loss aversion, the selection hypothesis predicts that managers should be more risk-tolerant and less loss averse than the general population. Bonin et al. (2007) show that individuals with higher willingness to take risks sort into occupations with greater earnings variability. Dohmen et al. (2011), drawing on a representative sample of approximately 22,000 German individuals, find that private-sector white-collar managers score significantly higher on risk tolerance than the population average across general, financial, and career domains – with the career-domain gap particularly pronounced. Graham et al. (2013) provide the starkest direct comparison: administering a lottery-based risk aversion measure to 1,011 US CEOs, benchmarked against the Barsky et al. (1997) Health and Retirement Survey of a similarly-aged general population, they find that only 9.8% of CEOs displayed high risk aversion compared with 64% of the general population. Notably, non-US CEOs were significantly more risk averse than their US counterparts (16.7%), though still far below the population benchmark.

For ambiguity aversion, the management psychology literature consistently finds that ambiguity tolerance increases with management level and managerial experience. The theoretical logic is intuitive: managerial decision-making involves Knightian uncertainty, and individuals averse to such conditions are likely to self-select out of, or be less successful in, roles that routinely require it. Cuppello et al. (2023), in a sample of over 10,000 individuals undergoing workplace assessment, find that ambiguity acceptance is among the traits most clearly differentiating senior managers from non-managers; Howard and Bray (1988) document rising ambiguity tolerance over managerial careers; and Judge et al. (1999) find that a dispositional factor combining ambiguity tolerance and risk tolerance significantly predicts managerial coping with organisational change. Generalised trust is often used as a proxy for ambiguity aversion and on this measure, Ipsos (2025) find that company senior executives, decision-makers and leaders are 11 percentage points more likely than others to say that most people can be trusted.

Evidence is less extensive for the remaining constructs. Miller et al. (1982) find that top executives with an internal locus of control pursue strategies characterised by four qualities: innovation, risk-taking, proactiveness – a tendency to lead rather than follow competition – and futurity, meaning greater use of forward planning. Each of these is consistent with active, goal-directed behaviour rather than passive acceptance, supporting the prediction that managerial roles select against satisficing. Furnham and Crump (2015) find that Impulsivity shows no significant variation across management levels, consistent with an absence of selection on short-termism.

4.2.2 Findings

Tables 4.2A and 4.2B present our construct-level results for Cells B and C, comparing managers to the broader population within the UK and within comparator countries, respectively. Throughout, higher scores indicate more investment-constraining attitudes; therefore, a negative Cohen's d indicates that managers are less investment-constrained than the general population.

Across three of the six constructs, a selection effect is present and broadly similar in both settings – managers tend to differ from the wider population in similar ways whether they are in the UK or elsewhere. A fourth construct – risk and loss aversion – shows no meaningful selection effect in either setting, though comparator countries show a weak directional signal (d = -0.09) that falls below our threshold.

Table 4.2A Construct-level summary for Cell B: UK managers vs UK population

Construct	Rescaled mean, UK managers	Rescaled mean, UK population	Average Cohen's d*	Statistically significant** items / Total items	Statistically significant items by direction***
Low aspiration / growth ambition	0.31	0.37	-0.24	6/10	0↑ / 6↓
Satisficing / limited search	0.38	0.43	-0.18	2/3	0↑ / 2↓
Short-termism / present bias	0.77	0.72	0.11	0/2	0
Risk and loss aversion	0.59	0.59	0.00	1/6	1↑ / 0↓
Ambiguity aversion	0.35	0.41	-0.19	4/6	0↑ / 4↓
Status quo bias / inertia	0.54	0.50	0.13	1/4	1↑ / 0↓

* Cohen's d averaged across all items within the construct (including non-significant ones).

** An item is statistically significant if its rescaled mean difference is different from zero at the 95% confidence level.

*** ↑ = First group scores higher (more investment-constraining); ↓ = First group scores lower (less investment-constraining).

Note: The UK manager sub-sample in WVS Wave 7 comprises 89–92 valid responses per item – smaller than in other survey waves. WVS-based findings should be interpreted with this in mind.

Table 4.2B Construct-level summary for Cell C: Comparator country managers vs comparator country population

Construct	Rescaled mean, comparator managers	Rescaled mean, comparator population	Average Cohen's d*	Statistically significant** items / Total items	Statistically significant items by direction***
Low aspiration / growth ambition	0.32	0.38	-0.24	8/10	0↑ / 8↓
Satisficing / limited search	0.31	0.36	-0.17	2/3	0↑ / 2↓
Short-termism / present bias	0.70	0.67	0.04	2/2	1↑ / 1↓
Risk and loss aversion	0.56	0.58	-0.09	5/6	1↑ / 4↓
Ambiguity aversion	0.33	0.39	-0.19	6/6	0↑ / 6↓
Status quo bias / inertia	0.55	0.53	0.06	2/4	2↑ / 0↓

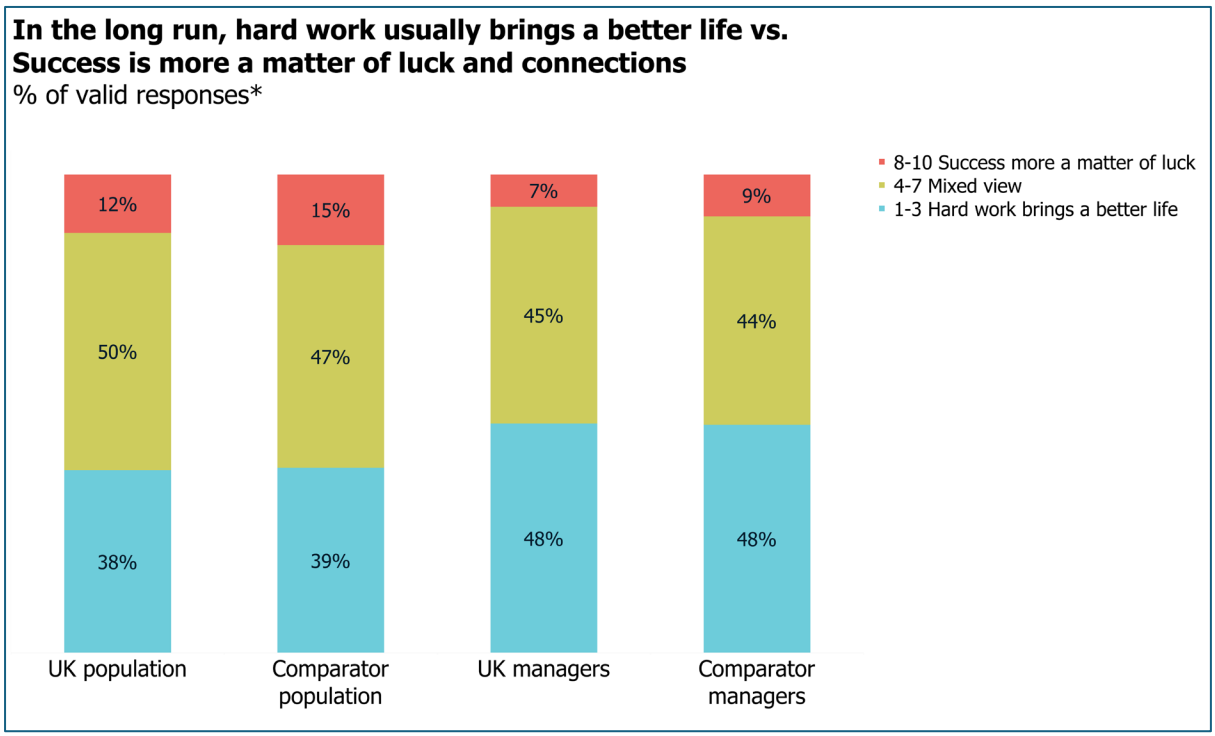
* Cohen's d averaged across all items within the construct (including non-significant ones).

** An item is statistically significant if its rescaled mean difference is different from zero at the 95% confidence level.

*** ↑ = First group scores higher (more investment-constraining); ↓ = First group scores lower (less investment-constraining).

Low aspiration / growth ambition. Managers score lower than their respective general populations on this construct in both cells – that is, they are more ambitious on average. This is the largest and most consistent effect across all six constructs, and one squarely in line with McClelland's (1961) achievement motivation thesis, the Collins et al. (2004) meta-analysis, and Furnham and Crump's (2015) findings on Achievement Striving. UK managers score 0.24 Cohen's d below the UK population (6 of 10 items significant, all negative), with comparator managers showing an identical gap relative to their populations (d = −0.24; 8 of 10 items significant, all negative). The items driving this effect are intuitive: managers are more likely to say they enjoy leading others, that work is central to their lives, that they are willing to put in effort beyond what is strictly required, and that competition is beneficial. In both ISSP SI and WVS, managers consider hard work important for getting ahead in life (see Figure 1). The overall finding is clear: high-ambition, work-oriented individuals select into managerial roles, in the UK and across comparator countries.

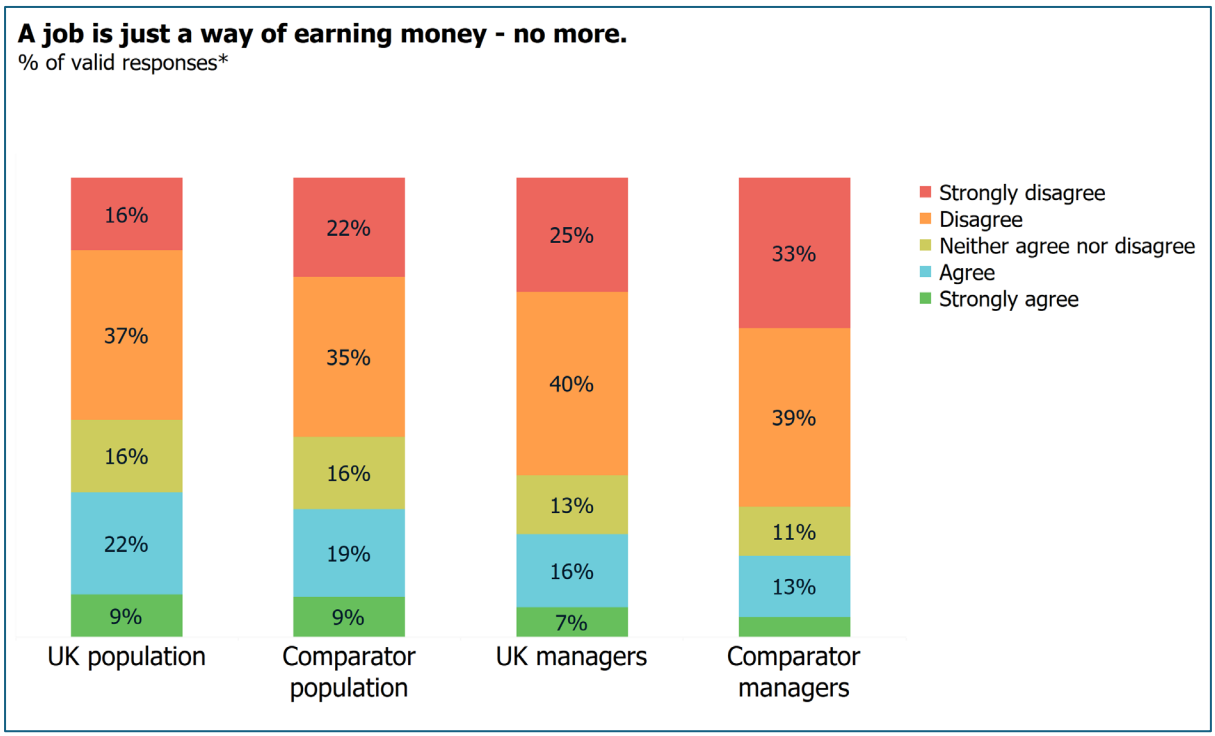
Figure 1: Managers are more likely than the general population to say that success is down to hard work rather than luck and connections



* Variable Q110, World Values Survey Wave 7 (2017–2022). UK: approximately 2,500 population respondents and 91 manager respondents. Comparator group (pooled): 7 countries, approximately 13,500 population respondents and 628 manager respondents.

Satisficing / limited search. A consistent directional pattern is evident for satisficing, falling just below our threshold in both settings: UK managers score d = −0.18 below the UK population (2 of 3 items significant, both negative), with comparator managers showing a near-identical gap (d = −0.17; 2 of 3 items significant, both negative). Managers are less likely to describe work as just a way of earning money (see Figure 2), and report a greater sense of control over their lives – consistent with the theoretical expectation that managerial roles select for individuals who engage actively in shaping decisions and with Miller et al.'s (1982) finding that CEOs with a strong internal locus of control are associated with greater innovation and proactiveness in strategy-making.

Figure 2: Managers are less likely than the general population to say that a job is just a way of earning money



* Variable v1, ISSP Work Orientations IV (2015). UK: 1,625 population respondents and 185 manager respondents. Comparator group (pooled): 13 countries, approximately 14,900 population respondents and 1,500 manager respondents.

Short-termism / present bias. The data do not support a selection hypothesis for this construct. Among UK managers, neither item reaches significance. Among comparator managers, both items are significant but in opposite directions: managers appear more short-termist on one measure – less likely to cite thrift and saving as values to instil in children[9] – yet less short-termist on the other, placing less importance on seeking fun and immediate pleasure. These effects largely cancel out (d = +0.04). The thrift finding may partly reflect a straightforward income effect: higher-earning managers are less likely to cite financial prudence as a value to instil in children, irrespective of their time preferences. These patterns could also reflect institutional pressures overriding any underlying tendency towards patience. For example, as Graham et al. (2005) document, 78% of predominantly US-based executives would sacrifice long-term value to smooth short-term earnings – a potentially rational response to the incentives managers face.

Risk and loss aversion. Neither setting shows a meaningful selection effect on risk and loss aversion: average d = −0.09 among comparator managers and d = 0.00 among UK

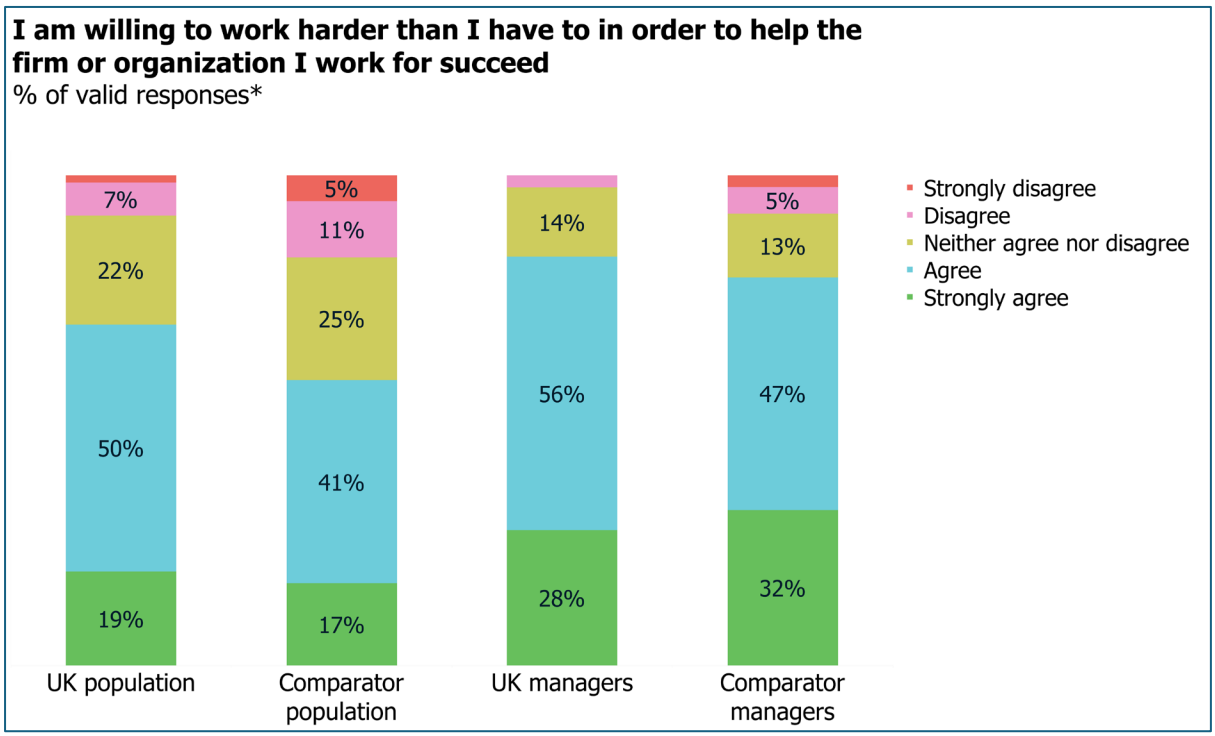
[9] On the limitations of the WVS thrift item as a proxy for individual time preference, see footnote 5 in Section 4.1.

managers, both below our threshold. A directional contrast is nonetheless apparent – 5 of 6 items point in the expected direction among comparator managers, while only one reaches significance among UK managers. Among the significant items, managers in comparator countries are more likely to say they enjoy taking risks, place less importance on job security and safety, and are more drawn to adventure and excitement – weakly consistent with the sorting predictions of Bonin et al. (2007), Dohmen et al. (2011) and Graham et al. (2013). Among UK managers, only one item reaches significance: greater willingness to accept a lower-paid position to avoid unemployment. This item is also significant among comparator managers, suggesting it may reflect managers' stronger work centrality rather than loss aversion per se.

Ambiguity aversion. A consistent selection effect is evident for this construct: both UK and comparator managers score lower than their respective general populations (d = −0.19 in both), indicating greater openness to uncertainty. UK managers score significantly lower on 4 of 6 items; comparator managers on all 6. The items driving this effect span multiple dimensions: managers are more trusting of others, more willing to accept a job requiring new skills, and more likely to value thinking up new ideas and being creative. The uniformly negative direction across both country groups is consistent with Cuppello et al. (2023), Howard and Bray (1988), and Judge et al. (1999), and points clearly to occupational sorting on ambiguity tolerance.

Status quo bias / inertia. The pattern here is weak and counterintuitive: rather than selecting away from status quo orientation, managerial roles appear associated with slightly higher scores on this construct among both UK managers (d = +0.13; 1 of 4 items significant) and comparator managers (d = +0.06; 2 of 4 items significant), though neither reaches our threshold for a meaningful effect. The significant items are driven by job loyalty – managers are more likely to turn down a better-paid offer to stay with their current employer, and comparator managers are also less likely to want to change the type of work they do. Items measuring broader orientations toward societal change and tradition are not significant in either country group. This pattern plausibly reflects managers' stronger work-orientation and organisational loyalty – evident in the aspiration findings above (see Figure 3) – rather than a generalised preference for inertia.

Figure 3: Managers are more likely than the general population to say that they are willing to go beyond what their job strictly requires



* Variable v45 (Q24a), ISSP Work Orientations IV (2015). Only asked if respondent working for pay or on leave but in an employment relationship. UK: 898 population respondents and 130 manager respondents. Comparator group (pooled): 12 countries, approximately 10,500 population respondents and 1,000 manager respondents. Austria excluded (29 valid manager responses, below the item-level inclusion threshold of n≥30).

4.2.3 Conclusions

Overall, the findings confirm that managers differ from the broader population in ways broadly consistent with expectations. Managers are, on average, more ambitious, with a consistent directional lean away from satisficing, and more tolerant of ambiguity. This selection pattern is broadly similar in the UK and in comparator countries.

There are nuances, however. No meaningful selection effect is apparent for short-termism. For status quo bias, a small directional signal exists but runs counter to expectations: managers appear somewhat more status quo-oriented than the general population. This most plausibly reflects stronger work orientation and organisational loyalty rather than a preference for inertia.

On risk and loss aversion, neither country group shows a meaningful selection effect by our threshold. A weak directional signal is present among comparator managers – 5 of 6 items point in the expected direction – while among UK managers the signal is essentially absent. This is somewhat surprising given the strong prior in the literature:

Graham et al. (2013) find that only 9.8% of CEOs display high risk aversion compared with 64% of the general population. The difference likely reflects our broader manager definition, which spans senior executives and middle managers across all sectors.

The near-zero UK signal is nonetheless notable and may partly reflect the fact that the UK manager share in ISCO-based surveys tends to run somewhat higher than comparator countries; this is consistent with supervisory roles being classified as managerial more readily in the UK, which would further dilute any selection effect. We now turn to Cell D, which compares UK and comparator managers directly.

4.3 Cell D – UK managers vs comparator country managers

4.3.1 Prior evidence

To our knowledge, no published evidence directly compares managers across countries on validated attitudinal and dispositional measures[10].

The existing literature approaches this question – how managers in different countries compare on the attitudinal and dispositional measures most relevant to investment – from two directions, but neither delivers a direct answer. Cross-national cultural studies – most notably Hofstede's cultural dimensions[11] (Hofstede et al., 2010) and the GLOBE project, which surveyed over 17,000 middle managers across 62 societies (House et al., 2004; Javidan et al., 2006) – use managerial samples to draw conclusions about societal and organisational culture. Population-level surveys measure individual-level attitudes and preferences but do not isolate managers. Neither provides strong priors on how UK managers might differ from managers in other countries. This is the gap the present study addresses.

A further consideration is the degree to which individual managerial attitudes translate into firm-level investment and performance outcomes. Crossland and Hambrick (2011),

[10] The Ipsos (2025) survey provides country-level data on trust among senior executives and decision-makers but does not discuss country differences in detail. Among the comparator countries covered by Ipsos, Great Britain ranks second highest on the proportion of people who say "Most people can be trusted" (54%), behind only the Netherlands (61%) and ahead of the United States (45%), Australia (45%), Germany (41%), France (38%), Canada (37%), Belgium (28%) and Japan (24%). This is consistent with lower ambiguity aversion among UK managers on this measure. Ipsos's population-level data points in the same direction, though this sits in some tension with other sources – notably Duffy et al. (2023a), who place the UK mid-table among advanced economies on generalised trust.

[11] Hofstede's cultural dimensions are derived in part from surveys of IBM managers and employees across subsidiaries worldwide. The two dimensions most relevant to our constructs – Uncertainty Avoidance Index (UAI) and Long-Term Orientation (LTO) – are each composed of items that sit at some remove from the underlying preferences: UAI items include feelings of nervousness, self-reported health, and attitudes towards rule-breaking at work; LTO items include civic pride and performing services for friends. Falk et al. (2018) conclude that both dimensions "include individual items that seem distant from either time or risk preference." We therefore treat Hofstede's dimensions as broad cultural signals rather than precise proxies for the constructs examined in this paper.

across 15 countries, show that CEOs in institutional environments characterised by common-law legal systems, dispersed ownership, and high individualism – all features of the UK – have measurably larger effects on firm performance and strategic outcomes than counterparts in more constrained settings such as Germany and Japan. This amplifies the stakes of the comparison: attitudinal differences between UK and comparator managers, if they exist, are more likely to translate into investment decisions in the UK than in more institutionally constrained economies.

Against this backdrop, the findings below represent, to our knowledge, the most direct available cross-national comparison of managers on the attitudinal and dispositional constructs identified in our framework.

4.3.2 Findings

Table 4.3 presents our construct-level results for Cell D, the primary comparison between UK managers and their counterparts in comparator countries. Throughout, higher scores indicate more investment-constraining attitudes; therefore, a positive Cohen's d indicates that UK managers are more investment-constrained in their attitudes than comparator managers.

We find some directional support for short-termism, consistent with the cultural literature, but the evidence does not support the common prior that UK managers have lower aspirations than managers in comparator countries. UK managers do score meaningfully higher on satisficing measures (d = 0.24), though the proxies used are imperfect and the gap largely reflects the population-level difference identified in Cell A.

The most item-consistent finding is on risk and loss aversion, with five of six items pointing in the same direction and suggesting that UK managers are more risk and loss averse than those in comparator countries. This is reinforced by two upstream patterns: the UK population shows a consistent directional signal toward greater risk aversion than comparator populations (Cell A), and UK managerial selection shows a weaker tendency away from risk aversion than is apparent in comparator countries (Cells B and C).

Figure 4 presents the full item-level picture, showing the rescaled mean difference and 95% confidence interval for each item; statistically significant differences are those whose confidence interval does not include zero.

Table 4.3 Construct-level summary for Cell D: UK managers vs comparator country managers

Construct	Rescaled mean, UK managers	Rescaled mean, comparator managers	Average Cohen's d*	Statistically significant** items / Total items	Statistically significant items by direction***
Low aspiration / growth ambition	0.31	0.32	-0.08	4/10	1↑ / 3↓
Satisficing / limited search	0.38	0.31	0.24	3/3	3↑ / 0↓
Short-termism / present bias	0.77	0.70	0.18	1/2	1↑ / 0↓
Risk and loss aversion	0.59	0.56	0.14	6/6	5↑ / 1↓
Ambiguity aversion	0.35	0.33	0.08	2/6	2↑ / 0↓
Status quo bias / inertia	0.54	0.55	-0.03	0/4	0

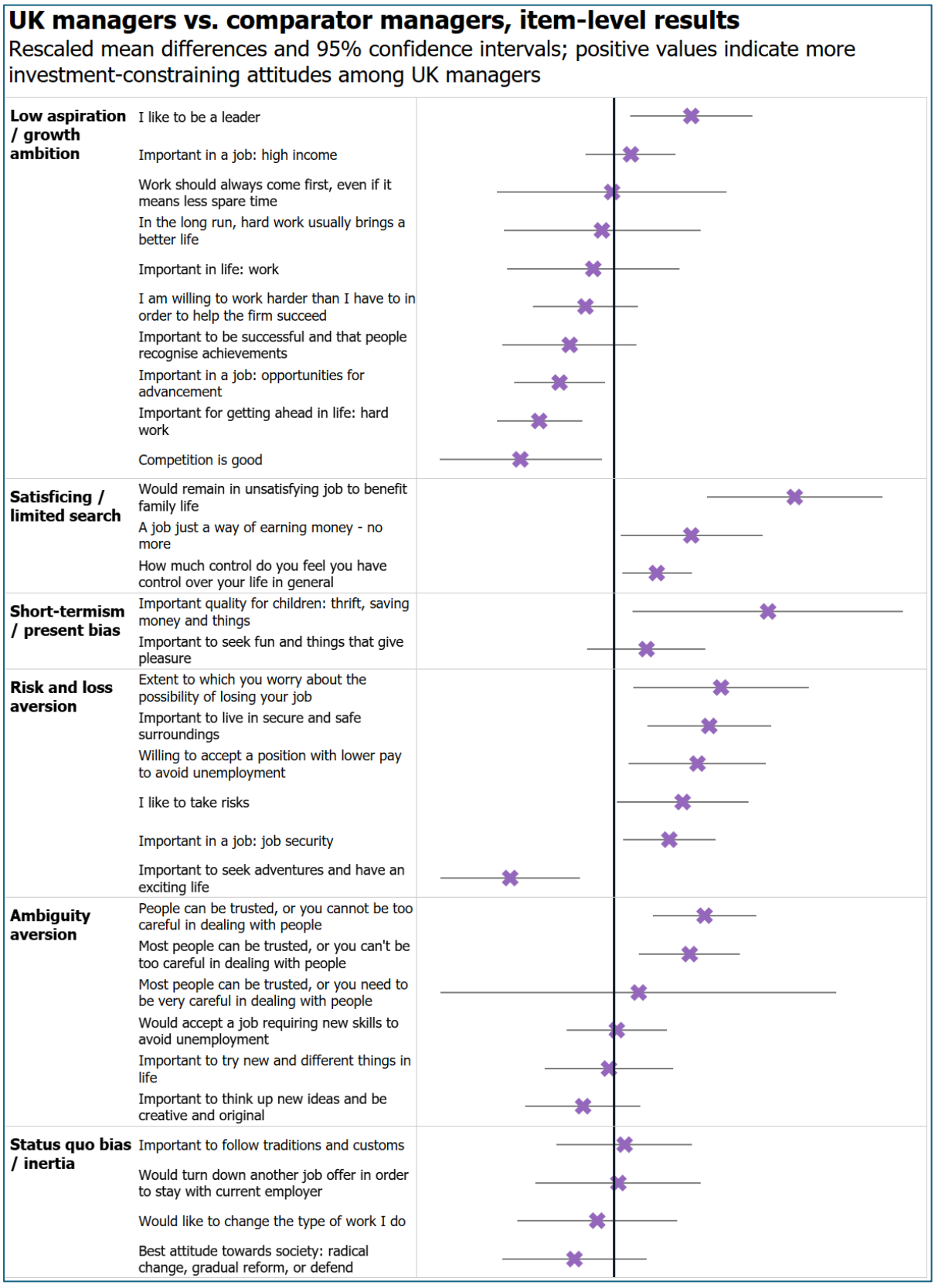
* Cohen's d averaged across all items within the construct (including non-significant ones).

** An item is statistically significant if its rescaled mean difference is different from zero at the 95% confidence level.

*** ↑ = First group scores higher (more investment-constraining); ↓ = First group scores lower (less investment-constraining).

Note: The UK manager sub-sample in WVS Wave 7 comprises 89–92 valid responses per item – smaller than in other survey waves. WVS-based findings should be interpreted with this in mind.

Figure 4: UK managers are overall not less ambitious than comparator managers – but are consistently more risk averse



Notes: Each point shows the rescaled mean difference (UK managers minus pooled comparator

managers, 0–1 scale) with a 95% confidence interval. Positive values indicate more investment-constraining attitudes among UK managers. Statistically significant differences are those whose confidence interval excludes zero. Items are grouped by construct in the order used throughout the paper and sorted within each construct by mean difference. Countries contributing to the pooled comparator vary by survey and item; only countries with at least 30 valid manager responses on a given item are included. The wide confidence interval on the WVS trust item (3rd item under "Ambiguity aversion") reflects the smaller UK manager sample in that survey (92 valid responses). Note that in a separate dataset that combines the WVS data with a European Values Survey (Joint EVS/WVS (ZA7505) dataset v5.0.0), expanding the country coverage, both the UK population and UK managers score as significantly lower-trust than comparator countries. The EVS/WVS dataset has not been used for this paper other than as a sensitivity check.

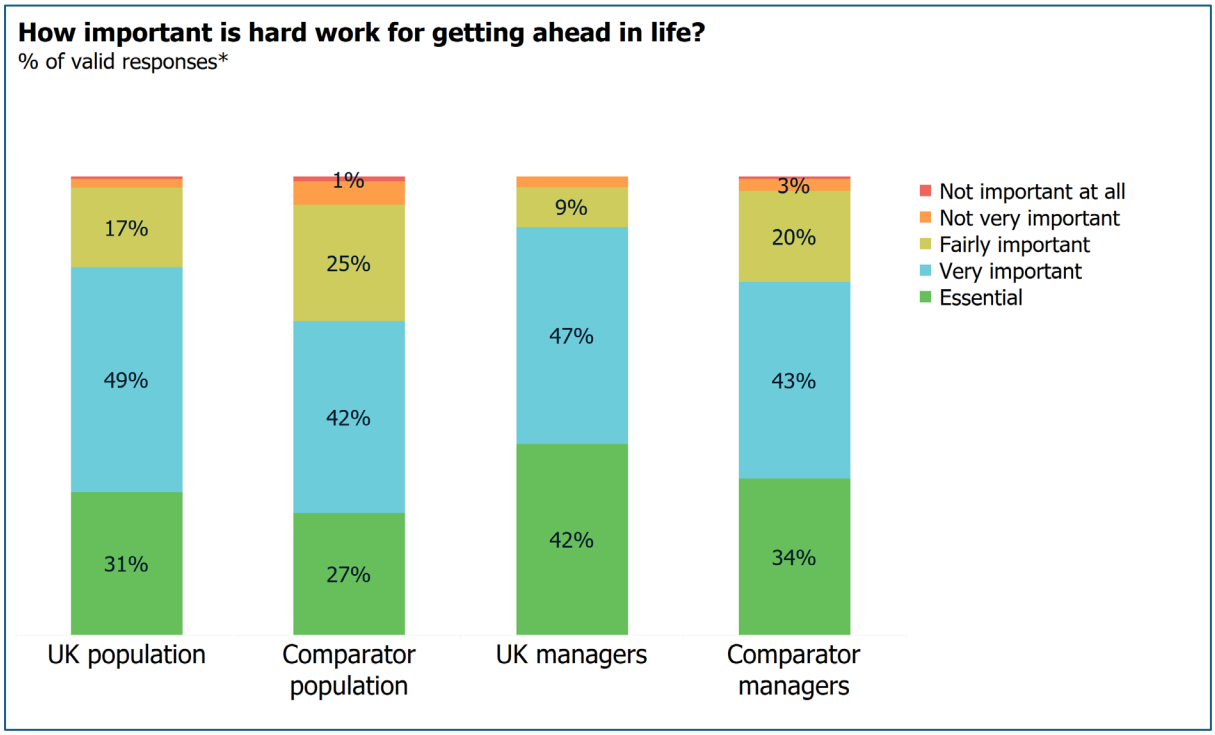
Low aspiration / growth ambition. The evidence here does not support the commonly implied assumption in UK policy commentary that UK managers are less ambitious than their international counterparts. On this construct, the evidence points to no meaningful or consistent difference: UK managers show broadly equivalent aspiration and growth orientation to their comparator country counterparts. The overall score (d = −0.08, indicating UK managers are marginally more ambitious[12]) averages across items where no meaningful difference exists alongside those where it does. Among the latter, three of the four statistically significant items show that UK managers are more likely than comparator managers to say that competition is beneficial[13], to place high importance on opportunities for career advancement, and to believe that hard work is important for getting ahead in life (see Figure 5).

The one item running the other way – UK managers expressing a weaker desire to lead than comparator managers – suggests that leadership orientation is more strongly selected for in comparator managerial pipelines than in the UK. (At the population level, there is no significant difference on this item between the UK and comparator countries.) Items capturing work's centrality in life, willingness to work beyond what is required (see also Figure 3 in the earlier section 4.2), and success orientation show no significant difference. This finding extends our Cell A conclusion, challenging the narrative that UK people are less ambitious than their peers in comparable economies: at the population level, UK respondents broadly embrace work as a means to personal advancement; at the managerial level, the evidence points in the same direction.

[12] As explained in section 3.5, all item responses have been rescaled to a common 0–1 interval, where 0 represents the least investment-constraining attitude and 1 the most. For items where a high raw score in the original survey wave corresponds to a less investment-constraining attitude – for example, a high self-reported willingness to take risk – the rescaled value is inverted. This convention ensures that higher rescaled scores always indicate more investment-constraining attitudes.

[13] Note that in a separate dataset which combines the WVS data with a European Values Survey (Joint EVS/WVS (ZA7505) dataset v5.0.0), and hence expands the comparator country set, the difference between UK and comparator managers becomes statistically insignificant. The EVS/WVS dataset has not been used for this paper other than as a sensitivity check.

Figure 5: UK managers are more likely than comparator managers to say that hard work is important for getting ahead in life



* Variable v4, ISSP Social Inequality V (2019). UK: 1,683 population respondents and 205 manager respondents. Comparator group (pooled): 12 countries, approximately 17,400 population respondents and 1,800 manager respondents.

Satisficing / limited search. UK managers score higher than comparator managers on this construct (d = +0.24; all three items significant and consistent in direction), indicating attitudes that could be more constraining for investment. UK managers are more likely to describe work as merely a way of earning money (see also Figure 2 in section 4.2), to report remaining in a job they find unsatisfying for family reasons, and to feel less in personal control over their lives. Each item proxies a different facet of satisficing: treating work as purely instrumental suggests a low aspiration threshold at which search stops; accepting an unsatisfying role rather than seeking alternatives is a direct expression of limited search; and a weaker sense of personal agency is associated in the literature with more passive behaviour. That said, none of these items directly measures search behaviour, and each admits alternative interpretations.

The overall direction is nonetheless consistent: UK managers show a greater tendency toward accepting good-enough outcomes than their international counterparts. This gap largely reflects underlying population-level differences – UK respondents are already more satisficing at the population level (Cell A, d = +0.25), and managers in both

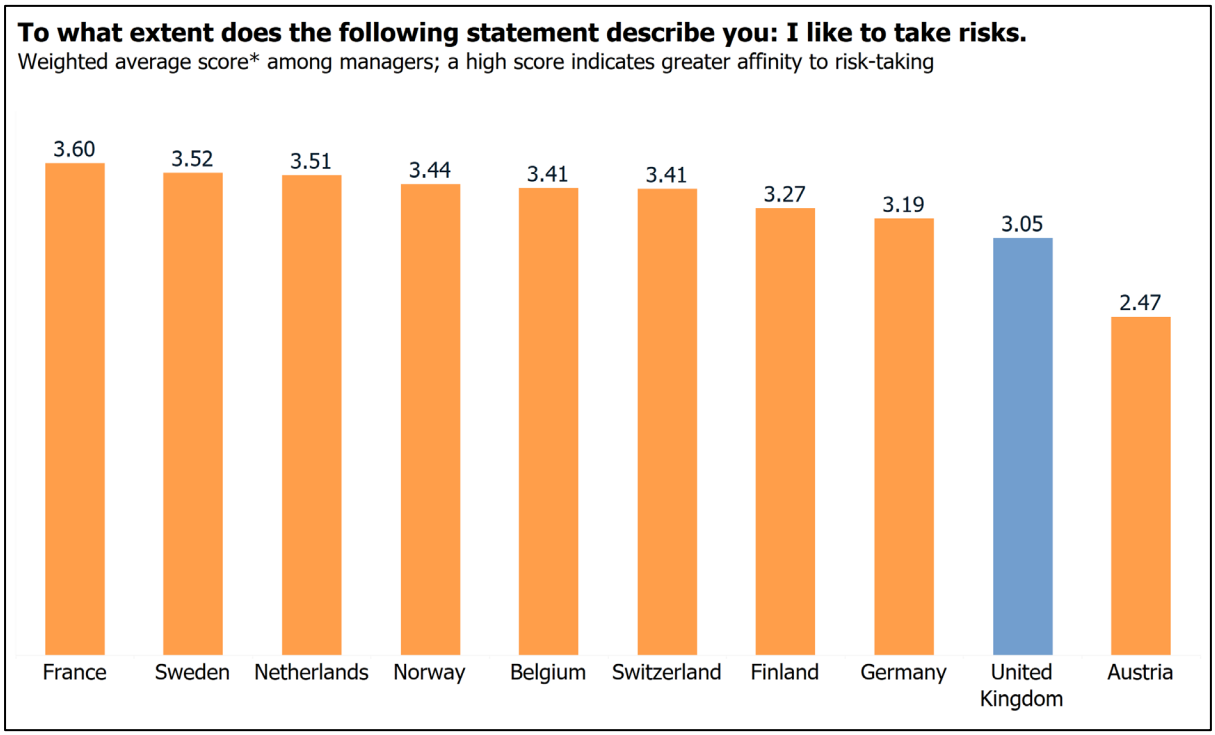
settings select away from satisficing by virtually identical margins (Cell B, d = −0.18; Cell C, d = −0.17) – making this as much a societal characteristic as a managerial one.

Short-termism / present bias. The evidence here is limited to a single significant item: UK managers are less likely than comparator managers to say that thrift and saving are important values to instil in children (d = +0.27; based on WVS Wave 7, 92 valid UK manager responses)[14]. The item measuring importance of seeking fun and immediate pleasure shows no significant difference. The finding is best understood as a carry-through from the broader population: the same thrift item showed a near-identical gap at the population level in Cell A (d = +0.27), and – as explained in Section 4.2 – neither country group exhibits a selection effect on this dimension, meaning managers are no more or less short-termist than their respective national populations.

Risk and loss aversion. The evidence here points consistently in one direction, though the overall magnitude is modest (d = +0.14). On five of six statistically significant items, UK managers score as more risk and loss averse than comparator managers: placing greater importance on safety and security, reporting a lower appetite for risk-taking generally (see Figure 6), valuing job security more highly, worrying more about job loss, and being more willing to accept a lower position or pay to avoid unemployment. The single exception is an item on valuing adventure and excitement: UK managers place greater importance on this than comparator managers, suggesting a less risk averse attitude in this respect – though this may partly reflect orientations outside work rather than workplace risk-taking. The net picture is nonetheless consistent: UK managers are more risk and loss averse than comparator managers.

[14] As noted in Section 4.1, Falk et al. (2018) find that the WVS item on thrift correlates only weakly with the GPS patience index at country level, suggesting it captures a cultural orientation toward long-term thinking rather than individual time preference per se. Whether this holds at the manager level cannot be tested, as GPS does not include an occupational variable in its public release data.

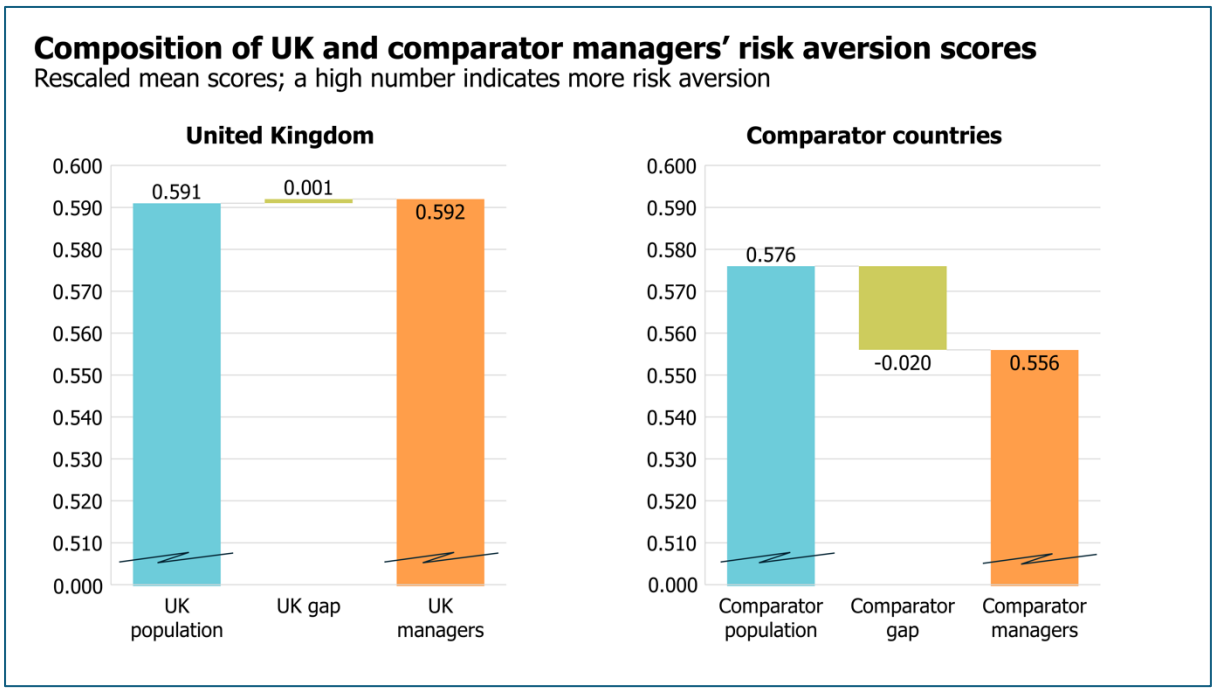
Figure 6: UK managers say that they are less keen to take risks than managers in most comparator countries



* Variable *likrisk*, European Social Survey Round 11 (2022–23), edition 4.1. Bars show weighted average scores among manager respondents (ISCO-08 Major Group 1, in paid work). Scale: 0 = Not at all [like me]; 6 = Completely [like me]. Manager valid responses: France 129; Sweden 87; Netherlands 187; Norway 133; Belgium 83; Switzerland 165; Finland 80; Germany 135; United Kingdom 216; Austria 141. Denmark did not participate in ESS Round 11.

It is interesting to consider where this gap comes from (see Figure 7). As Section 4.2 showed, neither country group produces a meaningful selection effect on risk tolerance – both fall below our threshold. A directional contrast is nonetheless apparent: comparator managers show a weak tendency away from risk aversion relative to their populations (Cell C, d = −0.09), while UK managers show essentially no such tendency (Cell B, d = 0.00). At the population level, the UK also shows a consistent directional signal toward greater risk aversion, though again sub-threshold (Cell A, d = +0.05). These upstream patterns – a slight population-level difference and a weaker directional tendency in UK managerial selection – are consistent with the difference in managerial attitudes. For investment behaviour, where committing capital under uncertainty is central to the job, this pattern could be consequential.

Figure 7: UK's population is slightly more risk averse, and UK managers exhibit slightly weaker selection away from risk aversion, than comparators



Ambiguity aversion. The evidence here is limited and mixed. Of six items, only two are statistically significant – both measuring social trust, and both indicating that UK managers are less trusting than comparator managers. UK and comparator managers show virtually identical shifts toward trust relative to their populations (Cells B and C), so the Cell D gap largely reflects population-level differences, which are themselves mixed across surveys. On the remaining items – including aspiration to try new things and valuing new ideas – UK and comparator managers show no significant difference. Even so, the trust gap can be consequential for investment: many of the relationships on which capital commitment depends – with financiers, partners, suppliers, customers, and employees – involve acting under uncertainty about others' intentions.

Status quo bias. None of the four items on this construct show a statistically significant difference between UK and comparator managers. Status quo bias, measured here through attitudes to societal change, traditions and customs, and attachment to the respondent's current role, does not appear to contribute to the attitudinal gap.

4.3.3 Conclusions

Overall, our findings in Cell D support the view that UK managers are more investment-constrained in their attitudes than comparator managers, though the pattern is not uniform. Specifically, we find little consistent evidence that UK managers have lower aspirations or are less ambitious than comparator managers. However, we find evidence that UK managers are more prone to satisficing, are consistently more risk and loss averse, show some evidence of greater ambiguity aversion through lower general trust levels, and exhibit some signs of greater short-termism.

These differences may matter for investment, particularly in their cumulative and directional effect. Satisficing, risk and loss aversion, and low trust bear directly on the willingness to commit capital – to search for and pursue growth opportunities, to accept uncertainty, and to enter the relationships with financiers, partners, suppliers, and customers on which investment depends. The risk and loss aversion finding is particularly interesting. It reflects both a consistent directional signal toward greater risk aversion in the UK population and a weaker tendency away from risk aversion in UK managerial selection than in comparator countries.

4.4 Cell E – Difference-in-differences

Cell E asks a different question from Cell D: not whether UK and comparator managers differ in their attitudes, but whether the gap between managers and their national populations differs between the two country groups. Throughout, higher scores indicate more investment-constraining attitudes. A significant result here indicates that the selection of individuals into managerial roles operates differently in the UK than in comparator countries. The metric is a z-score rather than Cohen's d.

A positive z-score means the UK manager–population gap is larger than the comparator manager–population gap – UK managers are more investment-constrained relative to their population than comparator managers are relative to theirs. A negative z-score means the opposite. An item is statistically significant if its Difference-in-Differences z-score has a 95% confidence interval that excludes zero. Table 4.4 presents our construct-level results for Cell E.

Table 4.4 Construct-level summary for Cell E: Difference-in-differences

Construct	Rescaled mean difference, UK managers vs. UK population	Rescaled mean difference, comparator managers vs. comparator population	Average Difference-in-Differences z-score*	Statistically significant** items / Total items	Statistically significant items by direction***
Low aspiration / growth ambition	-0.06	-0.06	0.25	2/10	2↑ / 0↓
Satisficing / limited search	-0.04	-0.05	-0.41	1/3	0↑ / 1↓
Short-termism / present bias	0.04	0.03	0.71	0/2	0
Risk and loss aversion	0.00	-0.02	0.86	0/6	0
Ambiguity aversion	-0.06	-0.06	0.03	0/6	0
Status quo bias / inertia	0.04	0.02	0.62	0/4	0

* Average DiD z-score across all items within the construct (including non-significant ones). The z-score for each item is the difference between the UK manager–population gap and the comparator manager–population gap, divided by the combined standard error of those two gaps.

** An item is statistically significant if its DiD z-score has a 95% confidence interval that excludes zero.

*** ↑ = UK manager–population gap is larger than comparator manager–population gap (more investment-constraining); ↓ = UK manager–population gap is smaller than comparator manager–population gap (less investment-constraining).

Note: The UK manager sub-sample in WVS Wave 7 comprises 89–92 valid responses per item – smaller than in other survey waves. WVS-based findings should be interpreted with this in mind.

The Cell E results are sparse: only three items are statistically significant across all six constructs. Two fall under low aspiration: comparator countries are more likely than the UK to select into managerial roles individuals who value opportunities for advancement and are willing to work beyond what is required. The remaining significant item falls under satisficing: individuals who feel more in control of their lives are more likely to be selected into managerial roles in the UK than in comparator countries.

On risk and loss aversion – the primary finding in Cell D – no item reaches significance in Cell E, despite the consistent directional pattern. This reflects the inherent power limitations of a difference-in-differences test: the DiD requires detecting a difference between two estimated gaps, and the sample sizes available do not support statistical detection of such differences for most items.

The Cell E results should therefore be read as broadly consistent with the Cell D findings, viewed through a different analytical lens.

5. Discussion

5.1 What the findings mean

The central finding of this paper is that UK managers are consistently more risk and loss averse than their counterparts in peer economies. There is also evidence of greater satisficing: UK managers are more likely to describe work in purely instrumental terms and to report lower perceived control over their lives. UK managers also exhibit lower general trust, and weaker, more mixed differences on short-termism. Taken together, these dispositional patterns suggest that UK managers' attitudes are more investment-constraining than those of comparator countries' managers.

By contrast, the data do not support the common prior that UK managers are less ambitious than managers in comparator countries: on aspiration and achievement orientation, the evidence is mixed at the item level, and the overall picture is broadly neutral. What the data do show is that UK managers are more ambitious than the UK general population – a selection effect present with equal strength in other countries. We characterise this profile as ambitious but risk averse.

The findings on ambition and risk aversion are not in contradiction. Managers can be high-achieving and strive for growth while still preferring safer, more incremental approaches to get there. Indeed, if the signals and incentives facing managers reward steady operational performance over uncertain capital commitments – as governance structures, short-term shareholder pressure, or career norms may do – then being ambitious but risk averse is not a paradox but a rational response. That combination may tilt decision-making away from investment, with its typically more dispersed and uncertain reward profile.

An interesting finding of this paper is not just that UK managers are consistently more risk and loss averse than managers in comparator countries, but that this gap reflects two upstream patterns. At the population level, the UK shows a consistent directional signal toward greater risk aversion than comparator countries. Moreover, comparator managers show a weak tendency away from risk aversion relative to their populations, while UK managers do not. For investment behaviour, where committing capital under uncertainty is central to the job, this pattern could be consequential.

5.2 How much this might matter

This paper does not quantify how much of the UK investment gap these attitudinal differences explain. But the evidence suggests they are unlikely to be trivial.

Research links managerial risk or loss aversion to investment outcomes at the firm level: loss aversion leads managers to reject projects with positive expected value,

forgoing worthwhile investments (Kahneman and Lovallo, 1993); lower corporate risk-taking is associated with investment being less responsive to the quality of opportunities, suggesting distortions in capital allocation (Faccio et al., 2016); and less risk-tolerant executives are significantly less likely to make acquisitions (Graham et al., 2013). Evidence from UK firms points directly to attitudinal barriers to committing capital (Broughton et al., 2025), and UK firms apply hurdle rates above their cost of capital (Melolinna et al., 2018; Shah et al., 2024) – with firm-level evidence confirming that this wedge depresses investment (Xue and Mann, 2026). The average expected payback period for an investment – in both SMEs and larger corporates – is less than 4 years which, in addition to implying short-termism, can be seen as an impulse to only invest in projects where returns are relatively certain (Cowling and Wilson, 2024)[15].

Our core risk-aversion result appears consistently, though modestly, across multiple independent surveys with different designs, question wordings, and country sets. That does not establish causality, but it makes it less likely that the pattern is a quirk of any one dataset or proxy. Nor does the argument depend on UK managers being uniformly cautious. Firm-level data confirm that investment propensity varies enormously within the UK – in 2019, 40 per cent of businesses in Great Britain made no investment at all (Department for Business and Trade, 2024)[16]. The aggregate finding is not that all UK managers lack appetite for risk, but that the overall distribution appears systematically, if slightly, shifted towards greater caution than in comparator economies.

The investment gap is also not confined to high-risk or speculative decisions. UK business investment lags peer economies across multiple asset types – including machinery and equipment, ICT, and intangible investment (Van Reenen and Yang, 2024; Brandily et al., 2023; Alayande and Coyle, 2023) – many of which involve relatively predictable returns rather than frontier uncertainty. An attitudinal profile that discourages investment even in these areas could therefore affect aggregate performance well beyond a narrow set of high-risk decisions.

Finally, attitudinal and structural explanations for the UK's investment gap may interact in ways that amplify the aggregate effect. Risk averse managers are more sensitive to uncertainty – they apply larger risk premia and require greater certainty before committing capital. If UK managers are systematically more risk and loss averse than their counterparts elsewhere, a given level of policy or macroeconomic uncertainty will generate a larger investment-dampening response in the UK than in comparator countries. Stabilisation and credibility gains may therefore yield larger investment

[15] Cowling and Wilson (2024) report broadly similar average payback periods across SMEs and larger corporates. The drivers may well differ: for SMEs, short payback requirements may reflect personal wealth at risk and constrained access to patient capital; for larger firms, they may be due to Board and shareholder pressure for near-term returns.

[16] The analysis covers firms with at least one employee and with a positive gross value added in 2019.

dividends here than elsewhere – not just because uncertainty falls, but because the managerial profile that amplifies its effect becomes less binding.

5.3 Limitations of the analysis

Five limitations warrant particular attention.

The most fundamental limitation is measurement. The surveys used were fielded between 2012 and 2022; to the extent that UK manager attitudes have shifted, the data may not fully reflect the current position. The items were not designed to capture investment decisions directly[17]; all are proxies for deeper constructs and vary in how closely they track what they are intended to measure[18]. Items measuring general risk tolerance – such as appetite for risk-taking or preference for security – capture personal dispositions rather than managerial decision-making in a firm context. General trust items proxy for ambiguity aversion rather than measuring it directly. Patience items reflect personal time preferences rather than the discount rates embedded in business investment appraisal. Apparently similar questions may carry somewhat different connotations across cultures, introducing noise into cross-national comparisons. A further layer of uncertainty concerns the link between survey responses and behaviour. Items capture what respondents report about themselves, which may diverge from their actual psychological dispositions – people do not always have accurate insight into their own risk tolerance or ambition – and may diverge from how they would act in the context of real investment decisions. The constructs examined have clear but indirect theoretical links to investment behaviour: the case for their relevance rests on the plausibility of the mechanism, not on direct measurement of investment attitudes.

A second set of constraints is methodological, and common to virtually all cross-national survey comparison work. Survey items use Likert and similar ordinal scales; treating them as approximately interval for the purposes of means and Cohen's d metrics is standard practice but remains an assumption. Min-max rescaling standardises direction and range across items but does not guarantee that equal

[17] The use of general population survey items, while limiting in some respects, also has an advantage: respondents cannot have anticipated that their answers would be analysed in the context of managerial investment behaviour, eliminating an aspect of the social desirability bias that can affect responses in purpose-designed surveys on topics such as risk appetite or growth ambition.

[18] The six constructs examined here are not exhaustive. The literature documents additional factors with plausible links to investment. Overconfidence has directionally ambiguous effects on investment – overconfident managers overinvest when internal funds are available but underinvest when external finance is required (Malmendier and Tate, 2005) – with UK-specific evidence suggesting optimistic managers are more likely to invest (Elgebeily et al., 2021). Fear of failure (relating to social shame and regret, as distinct from pure loss aversion) is a well-documented brake on entrepreneurial activity (Cacciotti and Hayton, 2015) and plausibly extends to capital investment decisions within firms. These additional factors likely overlap with the constructs we measure and represent potentially interesting avenues for future cross-national research.

numerical intervals represent equal underlying attitudinal differences. Construct-level scores are unweighted averages of items that differ in wording, response format, and scale properties; they summarise directional convergence rather than assuming formal measurement equivalence. These constraints bear on the magnitude of observed effects: the differences between UK and comparator managers are in most cases small and are best read as evidence of a systematic attitudinal tilt rather than a stark divide. The multi-survey, multi-item design is the primary defence against these concerns.

Third, the manager classification is necessarily broad. The surveys rely on occupation-based proxies – principally ISCO-08 Major Group 1 – which spans senior executives, middle managers, supervisors, and other managerial workers with varying levels of capital expenditure authority, covering roughly 10–14% of employed respondents across surveys. The available survey data do not permit narrower cuts. The UK manager share also tends to run somewhat higher than comparator countries in ISCO-based surveys, suggesting that individuals in supervisory roles may classify themselves as managerial more readily in the UK context. If the UK's broader managerial population includes a higher proportion of lower-level supervisors – who may plausibly be more risk-averse than senior decision-makers – this compositional difference could inflate the apparent attitudinal gaps. The degree of bias is unknown, but this is the most technically significant threat to the findings, and cross-national comparisons of managerial attitudes should be interpreted with this caveat in mind.

Fourth, our comparisons are unconditional. The analysis does not control for observable differences in the composition of manager samples across countries, including differences in industry mix, firm size distribution, listed versus unlisted companies, public versus private sector employment, age, sex, or educational attainment. Age, sex, and education are all well-documented predictors of risk preferences (Dohmen et al., 2011), and differences in sample composition on these dimensions could account for part of the observed attitudinal gaps. Some differences may also reflect structural features of the UK economy rather than independent managerial attitudes. Even where control variables are available across surveys, manager sub-samples – typically around 100–200 respondents per country per survey – are too small to support meaningful conditional analyses without collapsing to cell sizes that would be statistically uninformative.

Fifth, and most fundamentally, the analysis is descriptive. It establishes that UK managers report attitudes consistent with greater investment-constraining tendencies than their counterparts in higher-investment comparator economies; it does not establish that these attitudes cause lower investment. Reverse causality is plausible: managers operating in a persistently low-investment environment may develop more cautious attitudes because of the environment. Structural factors – including planning constraints and corporate governance arrangements – could independently explain

both investment outcomes and, through endogenous adaptation, the attitudinal patterns observed here. The contribution of this paper is to document a systematic attitudinal pattern that sits alongside existing structural accounts of the UK investment gap, and to motivate further work on how managerial attitudes and structural conditions interact.

For these reasons, the paper places more weight on patterns that recur across multiple items and surveys than on any single estimate.

5.4 Policy implications

The central policy implication of these findings concerns not whether to support business investment, but how.

Standard investment-support instruments – capital allowances, accelerated depreciation, tax credits, and grants – operate by raising the expected (probability-weighted) returns to investment. If managers were rational NPV-maximisers, this would be a logical approach. But if UK managers are systematically more risk and loss averse than their international peers, standard instruments could be less cost-effective in the UK than in other countries.

Government-commissioned research finds that capital allowances "tended not to be a key driver of investment decisions," affecting mainly the timing of investment rather than whether investment takes place at all (HM Revenue and Customs, 2025). Analysis of full expensing of qualifying plant and machinery investment reaches a similar conclusion, arguing that even generous allowances primarily bring forward investment that would have happened anyway rather than raising investment levels overall (Adam and Miller, 2023).

A risk averse or loss averse manager who perceives an investment as exposed to significant downside risk will be less likely to be moved by an improvement in the expected outcome and more likely to be moved by a reduction in the downside[19]. Instruments that truncate losses – loan guarantees, first-loss public co-investment, revenue floors, and similar structures – could in principle be more powerful per unit of fiscal cost for a risk averse management population.

The UK does have instruments of this kind, notably through the British Business Bank. Evaluation of the Enterprise Finance Guarantee found that supported firms grew turnover and employment significantly faster than matched comparators (British

[19] Our survey measures capture risk and loss aversion jointly and we treat them as a combined construct throughout. The policy implication – that reducing downside exposure is potentially more cost-effective than raising expected returns – holds for both: what deters a cautious manager more is the prospect of a bad outcome, not the absence of a good one.

Business Bank, 2017), and the case for combining downside-protection instruments with return-enhancing tools within a single policy framework is increasingly made in policy circles (Gordon and Valero, 2023).

The inferential step from our findings to instrument design is our own – no existing study directly evaluates whether guarantees outperform subsidies specifically because managers are risk averse – but the case for scaling downside-protection instruments relative to return-enhancing alternatives appears stronger than is typically recognised. The limited success of return-enhancing policy alone to close the investment gap is also consistent with this interpretation.

A second implication follows from the double pattern on risk and loss aversion. Peer countries appear to end up with a consistently, if modestly, less risk averse management cadre – whether through selection, development, or compositional differences – than their overall working-age population. UK managers, by contrast, closely mirror the general population in their risk attitudes. This points to patterns of selection, development, and governance that may not be optimally calibrated for risk-taking – and not simply to national culture as an immovable constraint.

Shareholders, boards, and executive teams should scrutinise whether their incentive structures for managers inadvertently reward caution and penalise well-judged risk-taking. The asymmetry can be stark: a manager who pursues a bold investment that fails bears a visible, personal cost; one who is overly cautious and forgoes a worthwhile investment is rarely held accountable, because the counterfactual is unobservable. Financial and non-financial rewards, such as public recognition, alongside hiring, firing, and promotion decisions, send powerful signals about what behaviour is valued.

The issue extends beyond individual firms. There is a broader and under-explored question about whether the UK's corporate governance framework – regulatory codes, director liability provisions, and the accumulated culture of compliance (Financial Reporting Council, 2016; Kay, 2012) – has produced incentive systems and decision-making processes that are more risk averse than those in comparator countries. This warrants further analytical attention from policymakers and governance regulators. Assessing performance at portfolio rather than project level – and over longer horizons – would reduce the personal career risk of any single investment decision. Explicitly recognising calibrated risk-taking in promotion and reward systems could shift managerial behaviour even without changing underlying preferences. Affecting such changes may require reform at the framework level, not only within individual firms.

Third, and with a longer lag, the directional population-level pattern points toward possible opportunities for earlier-stage intervention – the most tentative of the three implications. If the pool from which UK managers are drawn is itself more risk averse than peer-country populations, then management development and selection may not

be sufficient on their own. The goal is not risk-taking per se – poorly calibrated or excessive risk-taking destroys value – but the capacity to evaluate uncertain investment decisions and act on that assessment. Evidence suggests that firms with more structured management practices make significantly more accurate forecasts of their own sales and of macroeconomic conditions, reporting lower subjective uncertainty around their predictions (Bloom et al., 2021) – suggesting that better management reduces the uncertainty that risk-averse managers face, not merely their tolerance for it.

This points toward management skills, not just disposition, as a potential lever: a manager who can assess investment risk more accurately is better placed to act on positive-NPV opportunities without requiring excessive reassurance about the downside. Expanding individuals' exposure to entrepreneurship, experimentation, and decision-making under uncertainty – through schools, universities, vocational pathways, and continued professional development, including the government's Help to Grow programme – could help build a pipeline of future managers with both the disposition and the know-how for well-calibrated investment decisions.

There is evidence that entrepreneurship education can positively affect risk-taking attitudes and entrepreneurial intentions, though the effects are not consistently attributable to specific programmes (Department for Business, Innovation and Skills, 2013). Broader frameworks increasingly define entrepreneurship education as developing broad competencies – including initiative, self-efficacy, and the capacity to act under uncertainty – rather than focusing narrowly on venture creation (Lackéus, 2015). The evidence that such interventions translate into subsequent management behaviour or firm-level investment remains thin, but the potential returns – if they materialise – are broad-based and cumulative, warranting further attention[20].

5.5 Future research directions

The findings reported here open several productive avenues for further investigation.

Confirming the findings. The most immediate need is replication with more targeted data. The items used here come from general-purpose social surveys not designed with business investment in mind, and manager sub-samples in several comparator countries are small, limiting the reliability of country-level estimates. Dedicated cross-national manager surveys – purpose-designed, with validated psychometric scales and larger samples – would allow country-by-country comparisons, regression analysis

[20] The regional and local dimension of this argument is also under-explored. Entrepreneurship education delivered through universities outside the Golden Triangle could plausibly help build more dynamic local management pipelines – addressing both the investment gap and longstanding geographic imbalances in firm performance and growth. This remains a hypothesis rather than an established finding, but one that warrants further consideration.

conditioning on individual characteristics (age, sex, education), and investigation of within-country heterogeneity. For risk and loss aversion, incentivised experimental tasks would offer greater measurement precision than survey proxies. Large-scale text analysis of manager-generated corporate communications – annual reports, earnings calls, investor conferences – offers an alternative data strategy for extracting attitudinal signals and matching them to firm-level investment outcomes, though this approach is necessarily restricted to listed companies. Ultimately, linking individual-level attitudinal measures to firm-level investment data would allow direct testing of whether the attitudinal dispositions documented here translate into measurable differences in investment behaviour. For UK-focused work, the Longitudinal Small Business Survey and the SME Finance Monitor both offer ownership identifiers and investment variables that could support such tests.

Quantifying the attitudinal contribution. A potentially valuable extension would be to test whether country-level attitudinal differences have explanatory power for observed differences in investment rates. Regressing country-level construct scores against actual investment intensity, controlling for structural and institutional factors, would allow assessment of whether any attitudinal variable survives as an independent predictor and, if so, some quantification of its contribution to the investment gap. The dependent variable could be private-sector or whole-economy investment intensity; the attitudinal regressors could be manager scores, population scores, or the manager-population gap. This approach requires additional controls and considerable caution in interpretation. With only sixteen country-level observations, statistical power would be limited regardless of the strength of the underlying relationship, and the results might well disappoint even if the effect is real. A related test would be to condition country-level comparisons on known structural differences and assess whether a UK coefficient remains significant, which would provide stronger evidence that UK distinctiveness is attitudinal rather than compositional.

Heterogeneity among managers. The analysis treats UK managers as a single group, though the aggregate picture may conceal considerable variation that is both analytically interesting and practically important. If the risk and loss aversion gap is concentrated in particular industries – tradeable sectors versus domestically-oriented services, for instance, or capital-intensive versus knowledge-intensive firms – the policy implications would differ from a finding that is broadly distributed. Firm size and ownership structures matter too: the governance arrangements, incentive structures and selection processes facing managers of listed companies differ significantly from those facing owner-managers of SMEs, and the groups may exhibit different attitudinal profiles. Foreign-owned or foreign-managed firms operating in the UK represent a potentially interesting comparison group: differences in investment behaviour between UK-managed and foreign-managed UK firms could shed light on whether management characteristics play an independent role, though disentangling this from other

differences in firm type, ownership structure, and strategic mandate would require careful analysis. Perhaps most consequentially for UK policy, regional variation deserves attention. If the attitudinal differences are concentrated geographically, this would strengthen the case for place-based interventions targeting management development and governance alongside more conventional regional industrial policy. Current sample sizes do not permit these breakdowns, but a purpose-designed survey would.

The dataset assembled for this paper is itself a resource for researchers wishing to pursue these directions or to extend the analysis to country-by-country comparisons. A summary of country-level results by construct is provided in Table A5 in the Appendix.

6. Conclusion

This paper asks whether UK managers' attitudes differ from those of managers in comparator countries in ways that may constrain investment. Drawing on 34 items from five cross-national surveys and a structured framework of six behavioural constructs, we compare the UK working-age population and UK managers with the corresponding groups across fifteen peer economies. To our knowledge, this is the first study to do so.

A widespread assumption in UK policy commentary is that UK managers are less ambitious than their counterparts in higher-investing comparator countries. Our analysis does not support this hypothesis. On aspiration and achievement orientation, UK managers score similarly to managers in comparator countries.

The picture on the remaining five constructs is less reassuring. Where differences emerge, they consistently suggest more investment-constraining attitudes among UK managers: they are more prone to satisficing, consistently more risk and loss averse, and show some evidence of greater ambiguity aversion and short-termism. The risk and loss aversion finding is particularly interesting. It reflects both a consistent directional signal toward greater risk aversion in the UK population and a UK managerial cadre that shows no meaningful shift away from the population's risk aversion. In comparator countries, managers show a consistent tendency to be less risk averse than their wider populations. The result is a distinct UK manager profile: ambitious but risk averse.

The population-level comparisons add important context: the UK general population is not, on balance, markedly more investment-constrained in its attitudes than comparator populations. This finding shifts the explanatory burden toward managerial selection, development, incentives, and governance – patterns that, unlike national culture broadly conceived, are tractable to policy intervention.

For a management population that is more risk and loss averse than that in comparator countries, policy instruments that truncate downside losses should in principle be

better value for money than the return-enhancing subsidies that dominate current investment support in the UK. Governance and educational interventions that shape the management cadre towards better-calibrated risk-taking deserve serious attention, alongside fiscal and financial investment support.

Our analysis is descriptive rather than causal, and the constructs are proxied rather than purpose-designed. But patterns that recur across five independent surveys, six constructs, and more than thirty items are harder to dismiss than any single estimate. Much of the existing analysis of the UK's investment gap has focused on structural factors. This paper suggests that the attitudes of those who make investment decisions are not a residual curiosity, but a neglected part of the UK investment puzzle: tractable, policy-relevant, and consequential for economic performance.

Use of generative AI tools: The authors used generative AI tools during the preparation of this manuscript, including ChatGPT (OpenAI; GPT-5.4 Thinking as labelled in the ChatGPT interface), Claude Code in Visual Studio Code (Anthropic; Claude Sonnet 4.6), and the Claude.ai web interface (Anthropic; Claude Opus 4.6). These tools were used for support with literature discovery, source synthesis, drafting and redrafting text, improving exposition, and selected coding and analytical workflow tasks. The authors did not treat AI-generated outputs as citable sources or as substitutes for direct engagement with the relevant literature and evidence. All substantive judgments, interpretations, references, and final text were reviewed by the authors, who assume full responsibility for the manuscript and any remaining errors. AI-generated suggestions were adopted only where the authors independently agreed with the reasoning or, where applicable, verified them against original sources.

Appendix

Table A1: Investment rate of non-financial corporations (S11): gross fixed capital formation (P51G) as a share of gross value added (B1G), %

	Average for years					
Country	2010-2019*	2015-2019	2022-2024	2023-2024	Keep in comparator set?	Reason for exlusion
Ireland	32.4	42.4	21.1	21.0	No	Likely distorted by MNC presence
Korea	32.4	30.6	33.2	32.5	No	Structurally different to UK
Chile	29.4	28.8	30.6	29.6	No	Structurally different to UK
Türkiye	27.7	29.4	37.4	36.9	No	Structurally different to UK
Croatia	27.1	27.8	26.8	27.5	No	Structurally different to UK
Czechia	27.0	26.4	28.5	28.2	No	Structurally different to UK
Slovak Republic	26.2	25.9	25.3	25.0	No	Structurally different to UK
Hungary	25.9	27.0	30.0	28.6	No	Structurally different to UK
Romania	25.9	23.5	22.4	22.5	No	Structurally different to UK
Austria	25.9	26.5	25.5	25.2	Yes	
Colombia	25.8	25.9	21.0	18.1	No	Structurally different to UK
Estonia	25.6	24.8	21.9	21.6	No	Structurally different to UK
Belgium	25.6	26.5	26.6	26.7	Yes	
Sweden	25.1	25.8	26.8	26.9	Yes	
Mexico	23.9	27.6	25.4	24.3	No	Structurally different to UK
Spain	23.7	25.8	24.2	24.3	No	Structurally different to UK
Latvia	23.6	22.0	24.0	23.6	No	Structurally different to UK
Portugal	22.7	24.0	27.4	27.1	No	Structurally different to UK
Finland	22.6	23.1	24.5	24.3	Yes	
Denmark	22.0	23.4	26.0	26.6	Yes	
Poland	22.0	22.7	18.0	18.0	No	Structurally different to UK
Italy	21.9	22.1	22.4	22.0	No	Structurally different to UK
Norway	21.6	22.6	15.1	#N/A	Yes	
Slovenia	21.6	21.2	21.4	21.1	No	Structurally different to UK
Luxembourg	21.2	19.0	16.5	16.3	No	Structurally different to UK
France	20.8	21.1	22.3	22.0	Yes	
South Africa	20.8	19.7	17.6	18.1	No	Structurally different to UK
Germany	20.0	20.3	19.4	19.1	Yes	
New Zealand	19.6	20.1	22.3	#N/A	Yes	
United States	19.3	19.7	19.4	19.9	Yes	
United Kingdom	18.7	19.8	19.8	19.9		
Lithuania	17.7	19.2	22.3	22.6	No	Structurally different to UK
Netherlands**	17.6	18.3	16.9	16.8	Yes	
Greece	17.3	18.5	25.0	25.1	No	Structurally different to UK
Australia***	#N/A	#N/A	#N/A	#N/A	Yes	
Canada***	#N/A	#N/A	#N/A	#N/A	Yes	
Japan***	#N/A	#N/A	#N/A	#N/A	Yes	
Switzerland***	#N/A	#N/A	#N/A	#N/A	Yes	

** Column used for sorting*

*** Included as a close structural comparator to the UK despite having a lower S11 investment rate than the UK.*

**** Data for sector S11 not available. High investment rate countries at the whole-economy (S1) level, based on World Bank data.*

Source: OECD, National Accounts, GDP and non-financial accounts by institutional sector; World Bank, Gross fixed capital formation (% of GDP)

Table A2: Country data availability and inclusion by survey wave

Country	Lowest number of valid population responses across items					Lowest number of valid manager* responses across items				
	GPS	ESS	WVS	ISSP WO	ISSP SI	GPS	ESS	WVS	ISSP WO	ISSP SI
United Kingdom	1,017	1,512	2,500	879	1,629	-	204	89	128	205
Austria	984	2,312	-	588	1,253	-	141	-	26	70
Australia	995	-	1,736	698	1,033	-	-	74	94	147
Belgium	-	1,574	-	1,092	-	-	82	-	91	-
Canada	1,000	-	4,018	-	-	-	-	191	-	-
Denmark	-	-	-	685	1,022	-	-	-	140	163
Finland	993	1,522	-	588	940	-	78	-	35	32
France	987	1,739	-	631	1,563	-	128	-	62	185
Germany	985	2,373	1,479	981	1,291	-	135	59	72	103
Japan	991	-	1,098	898	1,304	-	-	56	49	102
Netherlands	996	1,676	1,675	-	-	-	186	80	-	-
New Zealand	-	-	962	542	1,156	-	-	46	51	162
Norway	-	1,317	-	1,050	1,284	-	131	-	98	182
Sweden	986	1,198	-	650	1,603	-	87	-	55	148
Switzerland	987	1,360	-	783	2,979	-	163	-	74	304
United States	1,065	-	2,554	927	1,740	-	-	100	92	170

Country	Included in pooled comparisons**				
	GPS	ESS	WVS	ISSP WO	ISSP SI
United Kingdom					
Austria	A	A, C, D, E	-	A, C, D, E***	A, C, D, E
Australia	A	-	A, C, D, E	A, C, D, E	A, C, D, E
Belgium	-	A, C, D, E	-	A, C, D, E	-
Canada	A	-	A, C, D, E	-	-
Denmark	-	-	-	A, C, D, E	A, C, D, E
Finland	A	A, C, D, E	-	A, C, D, E	A, C, D, E
France	A	A, C, D, E	-	A, C, D, E	A, C, D, E
Germany	A	A, C, D, E	A, C, D, E	A, C, D, E	A, C, D, E
Japan	A	-	A, C, D, E	A, C, D, E	A, C, D, E
Netherlands	A	A, C, D, E	A, C, D, E	-	-
New Zealand	-	-	A, C, D, E	A, C, D, E	A, C, D, E
Norway	-	A, C, D, E	-	A, C, D, E	A, C, D, E
Sweden	A	A, C, D, E	-	A, C, D, E	A, C, D, E
Switzerland	A	A, C, D, E	-	A, C, D, E	A, C, D, E
United States	A	-	A, C, D, E	A, C, D, E	A, C, D, E

* Employed respondents with occupational classification of "Higher administrative" (WVS) or ISCO-08 Major Group 1 (ESS, ISSP)

** Table shows which comparison cells (from A to E) a country is included in for each specific survey-wave.

*** Austria excluded from the comparator group for the following ISSP WO items: v45, v47, v48, v52, v53, and v54.

Source: GPS, ESS Round 11, WVS Wave 7, ISSP Work Orientations IV, ISSP Social Inequality V

Table A3: Details of survey items used in the analysis

Construct	Survey	Variable ID	Question or statement*	Original response scale*	Coding direction**
Low aspiration / growth ambition	WVS	Q109	Competition is good	1 Competition is good, 10 Competition is harmful	K
	WVS	Q110	In the long run, hard work usually brings a better life	1 Brings a better life, 10 matter of luck	K
	WVS	Q41	Work should always come first, even if it means less spare time	1 Agree strongly, 5 Disagree strongly	K
	WVS	Q5	Important in life: work	1 Very important, 4 Not at all important	K
	ESS	ipsucesa	Important to be successful and that people recognise achievements	1 Very much like me, 6 Not like me at all	K
	ESS	liklead	I like to be a leader	0 Not at all, 6 Completely	R
	ISSP WO	v4 (Q2b)	Important in a job: high income	1 Very important, 5 Not important at all	K
	ISSP WO	v45 (Q24a)	I am willing to work harder than I have to in order to help the firm succeed	1 Strongly agree, 5 Strongly disagree	K
	ISSP WO	v5 (Q2c)	Important in a job: opportunities for advancement	1 Very important, 5 Not important at all	K
	ISSP SI	v4	Important for getting ahead in life: hard work	1 Essential, 5 Not important at all	K
Satisficing / limited search	ESS	ctrlife	How much control do you feel you have control over your life in general	0 No control at all, 10 Complete control	R
	ISSP WO	v1	A job just a way of earning money - no more	1 Strongly agree, 5 Strongly disagree	R
	ISSP WO	v13	Would remain in unsatisfying job to benefit family life	1 Yes, have done and would do again, 4 No, probably would not do so	R
Short-termism / present bias	GPS	patience	How willing are you to give up something today to benefit from it in the future***	00 Completely unwilling, 10 Very willing	R
	WVS	Q13	Important quality for children: thrift, saving money and things	1 Important, 2 Not mentioned	K
	ESS	impfuna	Important to seek fun and things that give pleasure	1 Very much like me, 6 Not like me at all	R
Risk and loss aversion	GPS	risktaking	In general, how willing or unwilling are you to take risks***	00 Completely unwilling, 10 Very willing	R
	ESS	impsafea	Important to live in secure and safe surroundings	1 Very much like me, 6 Not like me at all	R
	ESS	ipadvnta	Important to seek adventures and have an exciting life	1 Very much like me, 6 Not like me at all	K
	ESS	likrisk	I like to take risks	0 Not at all, 6 Completely	R
	ISSP WO	v3 (Q2a)	Important in a job: job security	1 Very important, 5 Not important at all	R
	ISSP WO	v52 (Q28)	Extent to which you worry about the possibility of losing your job	1 I worry a great deal, 4 I don't worry at all	R
	ISSP WO	v54 (Q29b)	Willing to accept a position with lower pay to avoid unemployment	1 Strongly agree, 5 Strongly disagree	R
Ambiguity aversion	GPS	trust	I assume that people have only the best intentions***	00 Does not describe me at all, 10 describes me perfectly	R
	WVS	Q57	Most people can be trusted, or you need to be very careful in dealing with people	1 Most people can be trusted, 2 Need to be very careful	K
	ESS	impdiffa	Important to try new and different things in life	1 Very much like me, 6 Not like me at all	K
	ESS	ipcrtiva	Important to think up new ideas and be creative and original	1 Very much like me, 6 Not like me at all	K
	ESS	ppltrst	Most people can be trusted, or you can't be too careful in dealing with people	0 Can't be too careful, 10 Most people can be trusted	R
	ISSP WO	v53 (Q29a)	Would accept a job requiring new skills to avoid unemployment	1 Strongly agree, 5 Strongly disagree	K
	ISSP SI	v56 (Q19)	People can be trusted, or you cannot be too careful in dealing with people	1 People can almost always be trusted, 4 You almost always can't be too careful in dealing with people	K
Status quo bias / inertia	WVS	Q42	Best attitude towards society: radical change, gradual reform, or defend	1 Must be radically changed, 2 Gradually improved, 3 Valiantly defended	K
	ESS	imptrada	Important to follow traditions and customs	1 Very much like me, 6 Not like me at all	R
	ISSP WO	v47 (Q24c)	Would turn down another job offer in order to stay with current employer	1 Strongly agree, 5 Strongly disagree	R
	ISSP WO	v48 (Q25a)	Would like to change the type of work I do	1 Strongly agree, 5 Strongly disagree	K

* Simplified wording. For full details, see relevant codebooks.

** All items rescaled to a 0–1 scale and coded such that a higher value indicates a more investment-constraining attitude. K = original direction kept; R = original direction reversed.

*** In our analysis, we use the GPS composite indices for patience, risk taking, and trust. The items shown in this table are the survey questions that contributed to the indices. The GPS patience and risk-taking indices used also incorporate a staircase elicitation procedure and the resulting composite indices are validated against incentivised experiments.

Table A4: Item level summary for Cell D: UK managers vs. comparator country managers

Construct	Survey	Variable ID	Question or statement*	UK managers**	Comparator managers	Difference	95% confidence interval	Cohen's d	Number of comparator countries
Low aspiration / growth	WVS	Q109	Competition is good	0.210	0.275	-0.065	[-0.122, -0.008]	-0.291	7
	WVS	Q110	In the long run, hard work usually brings a better life	0.325	0.333	-0.008	[-0.077, +0.061]	-0.033	7
	WVS	Q41	Work should always come first, even if it means less spare time	0.615	0.616	-0.001	[-0.082, +0.079]	-0.005	7
	WVS	Q5	Important in life: work	0.195	0.209	-0.014	[-0.075, +0.046]	-0.073	7
	ESS	ipsucesa	Important to be successful and that people recognise	0.425	0.456	-0.031	[-0.078, +0.016]	-0.114	9
	ESS	liklead	I like to be a leader	0.331	0.276	0.054	[+0.011, +0.097]	0.222	9
	ISSP WO	v4 (Q2b)	Important in a job: high income	0.312	0.300	0.012	[-0.020, +0.044]	0.063	13
	ISSP WO	v45 (Q24a)	I am willing to work harder than I have to in order to help the firm	0.229	0.248	-0.020	[-0.057, +0.017]	-0.087	12
	ISSP WO	v5 (Q2c)	Important in a job: opportunities for advancement	0.238	0.276	-0.038	[-0.070, -0.006]	-0.181	13
	ISSP SI	v4	Important for getting ahead in life:	0.180	0.232	-0.052	[-0.082, -0.022]	-0.254	12
Satisficing / limited search	ESS	ctrlife	How much control do you feel you have control over your life in	0.245	0.215	0.030	[+0.006, +0.055]	0.198	9
	ISSP WO	v1	A job just a way of earning money -	0.349	0.294	0.055	[+0.005, +0.104]	0.189	13
	ISSP WO	v13	Would remain in unsatisfying job to benefit family life	0.555	0.428	0.127	[+0.065, +0.189]	0.335	13
Short-termism / present bias	GPS	patience	How willing are you to give up something today to benefit from it	-	-	-	-	-	-
	WVS	Q13	Important quality for children: thrift, saving money and things	0.883	0.775	0.108	[+0.013, +0.203]	0.266	7
	ESS	impfuna	Important to seek fun and things that give pleasure	0.647	0.624	0.023	[-0.018, +0.065]	0.095	9
Risk and loss aversion	GPS	risktaking	In general, how willing or unwilling are you to take risks	-	-	-	-	-	-
	ESS	impsafea	Important to live in secure and safe surroundings	0.723	0.656	0.067	[+0.024, +0.111]	0.252	9
	ESS	ipadvnta	Important to seek adventures and have an exciting life	0.470	0.542	-0.072	[-0.121, -0.023]	-0.261	9
	ESS	likrisk	I like to take risks	0.492	0.443	0.048	[+0.002, +0.095]	0.173	9
	ISSP WO	v3 (Q2a)	Important in a a job: job security	0.867	0.827	0.039	[+0.007, +0.071]	0.199	13
	ISSP WO	v52 (Q28)	Extent to which you worry about the possibility of losing your job	0.321	0.245	0.075	[+0.014, +0.137]	0.262	12
	ISSP WO	v54 (Q29b)	Willing to accept a position with lower pay to avoid unemployment	0.681	0.622	0.059	[+0.011, +0.107]	0.204	12
Ambiguity aversion	GPS	trust	I assume that people have only the best intentions	-	-	-	-	-	-
	WVS	Q57	Most people can be trusted, or you need to be very careful in dealing	0.388	0.371	0.017	[-0.121, +0.156]	0.036	7
	ESS	impdiffa	Important to try new and different	0.384	0.387	-0.003	[-0.048, +0.042]	-0.011	9
	ESS	ipcrtiva	Important to think up new ideas and be creative and original	0.241	0.263	-0.022	[-0.062, +0.019]	-0.095	9
	ESS	ppltrst	Most people can be trusted, or you can't be too careful in dealing with	0.432	0.379	0.053	[+0.018, +0.088]	0.260	9
	ISSP WO	v53 (Q29a)	Would accept a job requiring new skills to avoid unemployment	0.183	0.181	0.002	[-0.033, +0.037]	0.011	12
	ISSP SI	v56 (Q19)	People can be trusted, or you cannot be too careful in dealing	0.473	0.409	0.064	[+0.028, +0.100]	0.268	12
Status quo bias / inertia	WVS	Q42	Best attitude towards society: radical change, gradual reform, or	0.493	0.520	-0.028	[-0.078, +0.023]	-0.119	7
	ESS	imptrada	Important to follow traditions and	0.602	0.595	0.008	[-0.040, +0.055]	0.027	9
	ISSP WO	v47 (Q24c)	Would turn down another job offer in order to stay with current	0.510	0.507	0.003	[-0.055, +0.061]	0.010	12
	ISSP WO	v48 (Q25a)	Would like to change the type of	0.559	0.571	-0.012	[-0.067, +0.044]	-0.038	12

* Simplified wording. For full details, see relevant codebooks.

** All items rescaled to a 0–1 scale and coded such that a higher value indicates a more investment-constraining attitude. For original response scales and coding directions, see Table A3.

Table A5: Manager rescaled mean scores by country and construct

	Construct					
Country	Low aspiration /	Satisficing / limited search	Short-termism /	Risk and loss aversion	Ambiguity aversion	Status quo bias / inertia
United Kingdom	0.31	0.38	0.77	0.59	0.35	0.54
Australia	0.27	0.46	0.77	0.61	0.31	0.51
Austria	0.31	0.14	0.62	0.64	0.34	0.67
Belgium	0.31	0.33	0.67	0.56	0.30	0.54
Canada	0.39	-	0.77	-	0.35	0.45
Denmark	0.31	0.31	-	0.55	0.21	0.53
Finland	0.37	0.25	0.60	0.64	0.32	0.56
France	0.37	0.33	0.60	0.55	0.36	0.50
Germany	0.33	0.32	0.63	0.59	0.36	0.56
Japan	0.35	0.50	0.71	0.48	0.56	0.63
Netherlands	0.39	0.23	0.74	0.50	0.30	0.58
New Zealand	0.21	0.36	-	0.57	0.27	0.52
Norway	0.31	0.23	0.59	0.53	0.33	0.55
Sweden	0.30	0.28	0.70	0.50	0.32	0.50
Switzerland	0.31	0.30	0.61	0.57	0.32	0.60
United States	0.24	0.47	0.76	0.58	0.42	0.54

Notes: Items have been rescaled to a 0-1 scale and coded such that a higher value indicates a more investment-constraining attitude. The figures shown are rescaled means across all items within a construct, with items weighted equally. The colour coding has been applied within each column; scores are comparable across countries within a construct but not across constructs. Averages shown in this table only include items for which a country had more than 50 valid manager responses. A dash (–) indicates no items met the threshold for that country and construct. The pooled comparator mean used in the main paper uses a lower threshold of a minimum of 30 valid manager responses; minor discrepancies between the pooled figures and country-level averages reflect this difference. The number of items contributing to each cell varies by country and construct; see item count table below.

Table A6: Number of survey items contributing to each construct-level score by country in Cell B and C

	Construct					
Country	Low aspiration /	Satisficing / limited search	Short-termism /	Risk and loss aversion	Ambiguity aversion	Status quo bias / inertia
United Kingdom	10	3	2	6	6	4
Australia	8	2	1	3	3	3
Austria	3	1	1	3	4	1
Belgium	5	3	1	6	4	3
Canada	4	0	1	0	1	1
Denmark	4	2	0	3	2	2
Finland	4	3	1	4	3	1
France	6	3	1	6	5	3
Germany	10	3	2	6	6	4
Japan	8	2	1	3	2	3
Netherlands	6	1	2	3	4	2
New Zealand	4	2	0	3	2	2
Norway	6	3	1	6	5	3
Sweden	6	3	1	6	5	3
Switzerland	6	3	1	6	5	3
United States	8	2	1	3	3	3

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