The claim

Every material authorisation rests on premises nobody put to a vote: the customer pays in sixty days, welders can be hired locally at the model's rate, the grid holds. Those premises do the load-bearing, and because they are not line items they are never priced, tested or dated.

Our position is arithmetical, not moral. Verifying a load-bearing assumption is a priced option: two weeks of a controller's time, a metered log, a countersigned letter from a supplier. It pays out exactly where the authorisation would otherwise have been wrong. Boards never see these options offered, because nobody wrote the premises down as choices.

The instrument follows: an assumptions register travelling with every material authorisation.

The evidence

Unpriced premises do measurable damage at scale. Flyvbjerg, Holm and Buhl found the decision-stage estimates for 258 transport projects systematically misleading: not incompetent arithmetic, but premises that entered the estimate unexamined.

> EVIDENCE
>
> In 258 transport infrastructure projects worth approximately US$90 billion, cost estimates used to decide whether projects should be built were found highly and systematically misleading, with overruns in nine of ten projects, averaging 44.7% for rail, 33.8% for bridges and tunnels and 20.4% for roads.
>
> Source: Flyvbjerg, B., Holm, M.S. and Buhl, S., "Underestimating costs in public works projects: error or lie?", Journal of the American Planning Association 68(3), 279-295, 2002 · Geography: 20 countries, five continents, transport infrastructure · Method: peer-reviewed statistical study of outcomes against decision-stage estimates · SEG-4 · Caveat: public infrastructure, not corporate investment; the authors also argue deliberate misrepresentation, which we do not carry forward.

The institutional response is a rule about premises: UK central government appraisal treats appraiser optimism as a demonstrated defect and requires explicit, empirically based adjustments drawn from comparable completed projects.

EVIDENCE

HM Treasury's supplementary Green Book guidance on optimism bias records a demonstrated, systematic tendency for appraisers to be over-optimistic and requires explicit, empirically based adjustments to estimates of a project's costs, benefits and duration, using generic uplifts where robust primary evidence is absent; reference-class forecasting has implemented it in UK transport appraisal since 2004.

Source: HM Treasury, "Supplementary Green Book guidance: optimism bias", assets.publishing.service.gov.uk; Flyvbjerg, B., "From Nobel Prize to project management: getting risks right", Project Management Journal 37(3), 5-15, 2006 · Geography: United Kingdom, central government appraisal · Method: official guidance text with a peer-reviewed account of its application · SEG-5 · Caveat: binds UK public appraisal, not boards; a generic uplift adjusts an output and tests no specific premise.

Uplifts correct an output; what a board authorises is a set of inputs. RAND's assumption-based planning treats the assumptions as the planning object. Load-bearing is a test a director can apply without a model: if this premise is false, does the decision reverse?

EVIDENCE

RAND's assumption-based planning identifies the assumptions underlying a plan, classifies those that are load-bearing and vulnerable, assigns each a signpost — an event or measure indicating the assumption has failed — and develops shaping actions to defend the assumption and hedging actions against its failure.

Source: Dewar, J.A., Builder, C.H., Hix, W.M. and Levin, M.H., "Assumption-Based Planning: a planning tool for very uncertain times", RAND MR-114-A, 1993; extended in Dewar, J.A., "Assumption-Based Planning: a tool for reducing avoidable surprises", Cambridge University Press, 2002 · Geography: developed for US Army long-range planning · Method: institutional research documenting a method · SEG-5 · Caveat: a method definition, not an outcome study; we cite no evaluation of what the method changes.

The cheapest surfacing technique is prospective hindsight: state the failure as accomplished, then require reasons. The construct comes from Mitchell, Russo and Pennington (1989), and we grade it down deliberately. The much-quoted claim that it improves identification of reasons by 30 per cent travels through secondary accounts; the reported findings concern outcome certainty, and the first experiment found little effect of temporal perspective. We use it because it is free, not because it is measured.

Our position, graded as interpretation: outcome distributions justify suspicion of premises, an appraisal rule institutionalised that suspicion, and RAND built the register that acts on premises directly. It belongs in the board pack.

Evidence cards

CLM-FLYVBJERG-COST-OVERRUN-DISTRIBUTION · SEG-4. Claim: in 258 transport infrastructure projects worth about US$90 billion, decision-stage cost estimates were systematically misleading; nine in ten overran, averaging 44.7% (rail), 33.8% (bridges and tunnels), 20.4% (roads). Context: peer-reviewed, Journal of the

American Planning Association, 2002. Method: outcomes compared with decision-stage estimates. Contradictory evidence: public infrastructure in one historical window; the authors' misrepresentation thesis is contested and not carried. Causal confidence: none for corporate investment. Transferability: mechanism only. Review date: 2026-08-03.

CLM-GREENBOOK-OPTIMISM-BIAS-UPLIFTS · SEG-5. Claim: UK Treasury appraisal guidance treats appraiser optimism as a demonstrated systematic tendency and requires explicit, empirically based adjustments to cost, benefit and duration, with generic uplifts absent robust primary evidence; UK transport appraisal has applied reference-class forecasting since 2004. Context: supplementary Green Book guidance; Flyvbjerg (2006). Method: official guidance text plus peer-reviewed account. Contradictory evidence: binds public appraisal only; an uplift adjusts an output and tests no premise. Causal confidence: none. Transferability: design precedent. Review date: 2026-08-03.

CLM-RAND-ABP-LOADBEARING-ASSUMPTIONS · SEG-5. Claim: assumption-based planning identifies a plan's assumptions, classifies the load-bearing and vulnerable ones, attaches a signpost to each, and develops shaping and hedging actions. Context: RAND MR-114-A (1993); Dewar, Cambridge University Press, 2002. Method: institutional research documenting a method. Contradictory evidence: no outcome evaluation cited; built for military long-range planning, not board authorisation. Causal confidence: none — a text fact about a method. Transferability: the vocabulary transfers, the effectiveness claim does not. Review date: 2026-08-03.

CLM-PROSPECTIVE-HINDSIGHT-CONSTRUCT · SEG-3. Claim: prospective hindsight, explaining a future event as though it had occurred, is a defined peer-reviewed construct and a practical premise-surfacing technique. Context: Mitchell, Russo and Pennington, Journal of Behavioral Decision Making 2(1), 25-38, 1989. Method: laboratory experiments on explanation generation. Contradictory evidence: material — the quoted 30% improvement is a secondary characterisation; reported results centre on outcome certainty, and experiment one found little effect of temporal perspective. Causal confidence: none. Transferability: facilitation technique only. Review date: 2026-08-03.

CLM-FIRM-ASSUMPTIONS-REGISTER · SEG-2 (firm position). Claim: verifying a load-bearing assumption is a priced option, cheap against the decision it protects, and every material authorisation should carry a register of tested assumptions, open assumptions with named owners, and a falsification condition for each. Context: firm practice in the WAEMU-euro corridor. Method: interpretation anchored on the four cards above; no outcome dataset cited. Contradictory evidence: registers can be padded until load-bearing items are camouflaged; testing costs time and can miss the decision window; some premises are untestable before authorisation. Causal confidence: none. Transferability: bounded to material authorisations with testable premises. Review date: 2026-08-03.

The limits

The register earns its price fastest where assumptions travel: a holding board authorising capital for an operating company in Abidjan, Dakar or Lomé imports payment terms, logistics timings, staffing availability and power continuity from the market where the template was drafted, and where each was a fact rather than an assumption. They fail silently: a stated sixty-day term is also a cash-conversion assumption, absorbed by working capital before anyone reads it as a premise failure. We carry no measured corridor statistic on payment behaviour, logistics reliability or grid availability. We looked, verified none to our standard, and would rather say so than borrow a number.

Sources and limitations

Sources and limitations. The outcome distribution rests on Flyvbjerg, Holm and Buhl (2002), a peer-reviewed study of transport infrastructure and not of corporate investment; the appraisal rule rests on HM Treasury's supplementary Green Book guidance on optimism bias, which binds UK public appraisal and no board; the register instrument rests on RAND's assumption-based planning as documented in MR-114-A (1993) and Dewar (2002), a method definition supported by no outcome evaluation we cite. Prospective hindsight is carried at SEG-3 and marked down on purpose: the "30 per cent" improvement figure attached to it in general circulation is a secondary account, not a finding we can trace to the reported results of Mitchell, Russo and Pennington (1989), and we do not use the number. The corridor section deliberately carries no measured statistic on payment behaviour, logistics reliability or power continuity in WAEMU markets — we did not verify one to a specific citable publication at our standard, and the corridor claims are therefore firm interpretation at SEG-2, not measurement. The step from these anchors to the assumptions register is the firm's position, graded SEG-2: consistent with the cited architecture, not a measured result, and we cite no dataset comparing authorisations made with and without a register because we found none meeting our standard. Nothing here is investment advice, and nothing here claims that a tested assumption cannot still be wrong.

What to do on Monday

1. The CFO: attach an assumptions register to the next material authorisation. Name the load-bearing premises, what each would cost to test, which were tested, and which are carried open and on whose decision.

2. The company secretary: give every open assumption a falsification condition and a named owner in the operating company. An assumption with neither is not being carried; it is being forgotten.

3. The sponsoring executive: mark every premise written in another country as imported, and record the local evidence tested against it. Imported assumptions are the ones nobody examines.