

The Role of Vendor Negotiation in Reducing Construction Project Costs

Research Scholar: Hasan Zoboun.

Abstract:

Vendor negotiation can influence construction expenditure through prices, payment arrangements, delivery commitments, scope clarification and the allocation of commercial risk. Nevertheless, a reduction in the purchase order value does not necessarily produce an equivalent reduction in the completed project cost. This focused narrative review examines how negotiation can contribute to cost control while protecting quality and delivery requirements. Selected research on construction procurement, supply chain modelling, supplier evaluation and value management is combined with professional procurement guidance. The analysis distinguishes competitive bargaining from joint problem solving and separates predicted savings from savings demonstrated at financial closeout. A proposed framework connects technical preparation, comparable quotations, negotiation planning, contractual documentation and post-award verification. An illustrative procurement calculation shows how a supplier with the larger price discount can generate the higher risk-adjusted package cost. The review argues that negotiation effectiveness depends on the quality of the baseline, credible alternatives, supplier capacity and coordination between procurement and project delivery teams. Its contribution is a practical analytical framework for evaluating commercial concessions against their effects on total package expenditure. The framework is suitable for further testing in construction portfolios, including Saudi projects, but is not presented as an empirically validated savings model.

Keywords: vendor negotiation; construction procurement; cost control; supplier selection; total cost; commercial risk; supply chain resilience.

34 **1 Introduction**

35 Construction procurement converts design requirements into commitments with manufacturers,
36 distributors, specialist subcontractors and service providers. Each commitment combines a price with
37 conditions governing what is supplied, when it becomes available, how it is accepted and who bears the
38 consequences of change. Negotiation therefore influences several components of project expenditure. Its
39 contribution cannot be assessed adequately by comparing the first quotation with the final agreed price
40 alone.

41 Construction procurement involves multiple preferences and possible trade-offs. A negotiation plan can
42 compare price, delivery, payment and service obligations together. Evaluators should distinguish a useful
43 decision method from evidence of actual savings. The proposed approach examines feasible
44 combinations of terms without assuming a universal reduction in project expenditure.

45 The practical problem is attribution. A purchasing team might report a saving after obtaining a lower
46 price, while the delivery team subsequently incurs additional storage, rework or acceleration expenditure.
47 Conversely, a vendor that accepts a modest price reduction but guarantees an appropriate delivery
48 sequence may contribute more to the project outcome. The distinction between negotiated price and
49 realised cost is therefore central to this paper.

50 This review develops a framework for understanding those relationships. It addresses materials and
51 specialist work packages rather than claiming that all construction expenditure is negotiable. Labour
52 availability, design development, client changes and site productivity can alter final expenditure
53 independently of vendor behaviour. The proposed approach locates negotiation within the wider cost-
54 control process and identifies the records required to test whether the intended commercial benefit
55 survives implementation.

56 **2 Background and Literature Review**

57 **2.1 Negotiation as a multi-issue decision**

58 Price bargaining seeks an acceptable division of commercial value between buyer and vendor. Joint
59 problem solving examines whether changes in packaging, scheduling or responsibilities can reduce the
60 cost of delivering the required outcome. These approaches can coexist. For example, a contractor may
61 seek a unit-rate reduction while offering a more predictable release schedule that reduces the supplier's
62 production uncertainty. The concession is economically credible only if the promised schedule can be
63 maintained.

64 Construction packages have interdependent attributes. Negotiators rarely have complete information
65 about the other party's preferences, and material sourcing involves terms beyond price. Teams should
66 specify acceptable combinations of commercial terms before bargaining begins. Digital tools can support
67 comparison and documentation, but their use alone does not demonstrate savings.

68 **2.2 Supplier capability and supply uncertainty**

69 Supplier selection determines whether a negotiated promise is deliverable. Capacity, technical suitability
70 and financial resilience should be evaluated alongside price. A low quotation from a vendor unable to

71 meet the required production window is not an equivalent alternative to a technically acceptable and
72 available supplier. Prequalification should precede detailed comparison of concessions.

73 Supply uncertainty should be included in procurement analysis. Supplier capacity, material demand,
74 inventory and backup sourcing can change the cost of an agreement. Teams should test alternative
75 delivery and demand scenarios rather than assuming that every contractual promise will be fulfilled
76 exactly as planned. These considerations inform the evaluation without isolating negotiation as the sole
77 cause of project performance.

78 **2.3 Evaluation quality and behavioural limitations**

79 Procurement decisions depend on how evaluators interpret information. A favourable supplier history
80 should not substitute for checking current workload, available capacity or the specific delivery
81 commitment under consideration. Teams should assess each criterion separately and record the evidence
82 behind their judgements to reduce the influence of unsupported assumptions.

83 Supplier evaluation can consider social sustainability and other requirements beyond immediate cost.
84 Weighted rankings depend on the selected criteria and judgements, so their assumptions should be
85 transparent. Mandatory technical requirements should be assessed before discretionary trade-offs so that
86 a high commercial score cannot compensate for an unacceptable safety or performance condition.

87 **2.4 Procurement governance and whole-life value**

88 Commercial preparation, supplier engagement and project delivery should be coordinated. Procurement
89 decisions need to reflect the required project outcomes and the organisation's governing procedures.
90 Teams should determine which terms can be negotiated, who has approval authority and how changes
91 will be recorded before discussions begin.

92 Life-cycle analysis extends the relevant cost boundary beyond the purchase price. For equipment with a
93 long operating life, negotiation should consider maintenance, energy consumption, service support and
94 replacement availability where these materially affect the owner's expenditure. A cheaper purchase does
95 not demonstrate economy if it shifts greater expenditure into operation.

96 **3 Research Aim Objectives and Questions**

97 The aim is to develop an evidence-informed framework explaining how vendor negotiation can reduce
98 construction package costs without weakening required performance. Five objectives guide the analysis:
99 identify the commercial mechanisms through which negotiation affects expenditure; distinguish price
100 reductions from changes in total cost; assess the importance of supplier capability and project timing;
101 propose a transparent method for evaluating competing agreements; and define measures for verifying
102 savings after award.

103 The review addresses three research questions. RQ1 asks which negotiable terms influence construction
104 expenditure beyond the quoted price. RQ2 asks how procurement teams should compare concessions
105 when delivery, quality and financial consequences differ. RQ3 asks what evidence is required to
106 demonstrate that negotiated benefits have become realised project savings. The questions concern
107 mechanisms and measurement; they do not assume a universal relationship between bargaining intensity
108 and project success.

109 **4 Review Methodology**

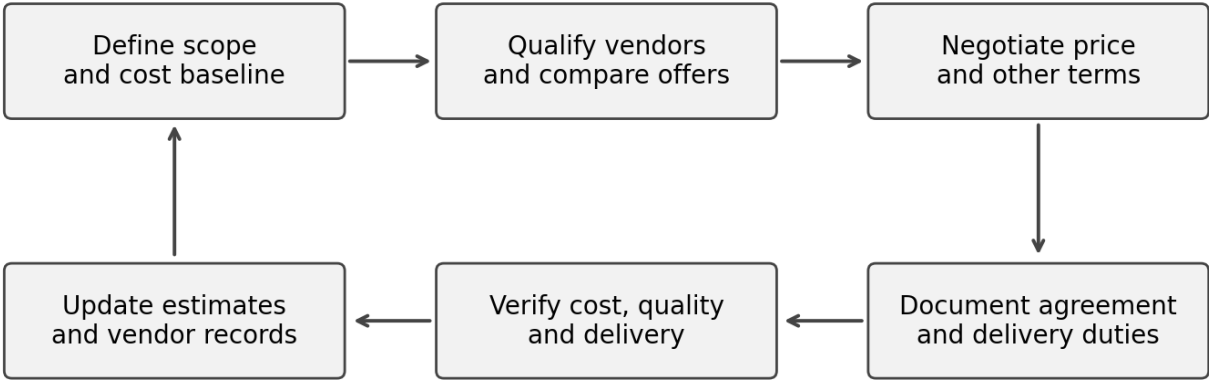
110 This paper uses a focused narrative review with conceptual synthesis and an illustrative calculation.
111 Publicly accessible publisher pages, abstracts, institutional research records and professional guidance
112 were consulted on 17 September 2026. Searches combined construction procurement, vendor negotiation,
113 supplier selection, supply chain uncertainty, value management and life-cycle costing. Recent literature
114 from 2020–2025 was prioritised, with two earlier construction-negotiation studies retained because of
115 their direct relevance to the research question.

116 Sources were selected for their explicit connection to negotiation, construction purchasing, supplier
117 evaluation or the assessment of procurement consequences. General promotional claims about guaranteed
118 savings were excluded. Academic studies and professional guidance were treated separately: the former
119 informed concepts and reported research findings, while the latter informed practical controls. Where
120 access was limited to an abstract or institutional summary, interpretation was restricted to the information
121 available.

122 The synthesis compared each source's purpose, method, context and relevance to the three research
123 questions. Attention was given to whether evidence came from a model, experiment, survey, review or
124 guidance document. No exhaustive database search, duplicate screening exercise or formal risk-of-bias
125 scoring was undertaken. Accordingly, the paper makes no systematic-review completeness claim and
126 provides no invented screening counts or pooled effect estimate. The numerical example is constructed
127 for explanation and is not a record of an actual project.

128 **5 Thematic Findings and Analysis**

129 The proposed analytical process in Figure 1 connects preparation and negotiation with verification. The
130 following themes explain its main decisions.



Proposed framework • feedback informs the next decision

131
132 **Figure 1. Proposed negotiation and cost-verification process.**

133 **5.1 Establishing a comparable commercial baseline**

134 Meaningful negotiation begins with a stable definition of the purchased outcome. Drawings, quantities,
135 specification revisions, inspection obligations and interfaces should be sufficiently clear to identify what
136 a quotation includes. Where uncertainty remains, it should be recorded as an assumption or provisional
137 item. Treating an exclusion as a discount produces a misleading baseline and encourages disputes after
138 award.

139 A comparison sheet should normalise taxes, delivery responsibilities, installation, testing, training and
140 warranty support. Currency and quotation validity also require consistent treatment. For a specialist
141 package, an apparently higher quotation may include items that the lowest quotation leaves to the
142 contractor. The negotiating team should first reconcile those differences, then assess price and non-price
143 concessions. This is an analytical recommendation derived from the multi-issue character of construction
144 procurement.

145 The starting quotation is not automatically the correct savings baseline. An inflated opening offer can
146 make an ordinary market price appear to represent exceptional purchasing performance. A defensible
147 baseline can combine a contemporaneous estimate with technically comparable offers, provided its date
148 and assumptions are recorded. Any subsequent design reduction should be separated from the effect of
149 bargaining. This prevents procurement savings from absorbing changes generated by other project
150 functions.

151 **5.2 Matching negotiating strategy to the package**

152 Standardised products with several technically acceptable suppliers permit different tactics from
153 proprietary equipment or specialist subcontract work. When alternatives are available, the contractor can
154 use a competitive comparison to test prices and service commitments. For a package with limited
155 available capacity, the more productive discussion may concern production slots, inspection timing,
156 partial delivery or an alternative approved configuration.

157 The buyer's fallback option must be practicable. A lower quotation has little negotiating value if that
158 supplier cannot pass approval or deliver within the required programme. Switching costs should include
159 redesign, testing, unfamiliar installation requirements and additional supervision where relevant. The
160 recommended reservation position is therefore based on the best feasible total-cost alternative rather than
161 the lowest price collected during market research.

162 Supplier incentives also matter. A vendor may place greater value on forecast certainty or prompt
163 certification than on a small change in nominal price. A contractor may place greater value on staged
164 deliveries than on extended credit. Exploring these differences can identify mutually acceptable
165 combinations. The framework does not assume that collaboration eliminates competing interests; it treats
166 information exchange as a way to discover concessions whose cost to one party is lower than their value
167 to the other.

168 **5.3 Payment terms and delivery commitments**

169 Payment arrangements influence the distribution of working-capital requirements. A longer payment
170 period may benefit the contractor's cash position but lead the vendor to include financing costs in the
171 price. Early payment may support a discount, although the buyer then carries funding and performance

172 exposure. The appropriate comparison uses the actual financing assumptions of the parties where these
173 are available, rather than classifying longer credit as an automatic saving.

174 Delivery commitments should identify dates, batch sizes, notification requirements and the conditions
175 under which the receiving site will be ready. A vendor cannot reliably price a delivery sequence that the
176 contractor repeatedly changes without notice. Conversely, early delivery may create storage and handling
177 expenditure. The supply-chain studies reinforce the need to evaluate inventory and delivery consequences
178 alongside acquisition expenditure, while the specific contract decision remains project dependent.

179 For long-lead equipment, procurement and planning teams should examine the activities affected by
180 delivery. A delay estimate must distinguish an actual critical-path effect from a local inconvenience that
181 can be absorbed. Commercial remedies should be documented, but expected recoveries should not be
182 treated as certain cash receipts. This approach prevents both underestimation of disruption and
183 exaggeration of the cost associated with every late delivery.

184 **5.4 Risk allocation and supplier sustainability**

185 An agreement can transfer an obligation without removing its economic consequences. If a supplier
186 prices uncertain quantities, unclear interfaces or exceptionally demanding obligations, the quotation may
187 contain a risk allowance. Alternatively, the supplier may accept the requirement without adequate
188 provision, increasing the chance of later disputes or delivery difficulties. The recommended analysis asks
189 which party can control each risk and what evidence supports the proposed allocation.

190 Price pressure is particularly problematic when it removes the resources necessary to perform the work.
191 A procurement team should test how the vendor intends to achieve a lower cost. Improved utilisation,
192 standardisation and reduced waste differ materially from omitted testing or insufficient supervision.
193 Technical compliance and acceptable execution plans are constraints on negotiation. They are not
194 benefits that can be traded away through a weighted commercial score.

195 Table 1 summarises the proposed mechanisms and the evidence needed to assess them. The entries are
196 analytical propositions, not measured effect sizes from the reviewed studies. They can be adapted to
197 material orders, subcontract packages and equipment purchases, with responsibility assigned for both the
198 concession and its later verification.

199 ***Table 1. Proposed negotiation mechanisms and verification evidence.***

Negotiable term	Potential cost effect	Evidence to verify
Unit price and scope	Lower comparable acquisition cost	Normalised quotations and final scope
Delivery sequence	Reduced handling or delay exposure	Approved programme and delivery records
Payment terms	Changed funding cost and exposure	Cash-flow assumptions and paid invoices
Testing and warranty	Changed rectification and support costs	Acceptance results and service obligations
Volume commitment	Economies offset by inventory exposure	Call-offs, storage and unused quantities

201 **5.5 Illustrative comparison of two negotiated offers**

202 Consider a hypothetical package with a normalised initial price of SAR 1,000,000. Supplier A offers a
203 final price of SAR 950,000, while Supplier B offers SAR 975,000. Judged solely against the initial price,
204 A appears to provide twice the discount. Both offers are assumed technically compliant, but their
205 logistical and risk assumptions differ. Table 2 presents all inputs in SAR thousands; Figure 2 displays the
206 resulting cost components.

207 For illustration, define evaluated package cost as the negotiated price plus buyer-borne logistics,
208 financing, expected disruption and expected rectification expenditure. Supplier A's additional amounts
209 are 35, 15, 70 and 20 respectively, producing an evaluated cost of 1,090. Supplier B's corresponding
210 amounts are 15, 10, 20 and 10, producing an evaluated cost of 1,030. Under these assumptions, B is
211 lower by SAR 60,000 despite its higher purchase price.

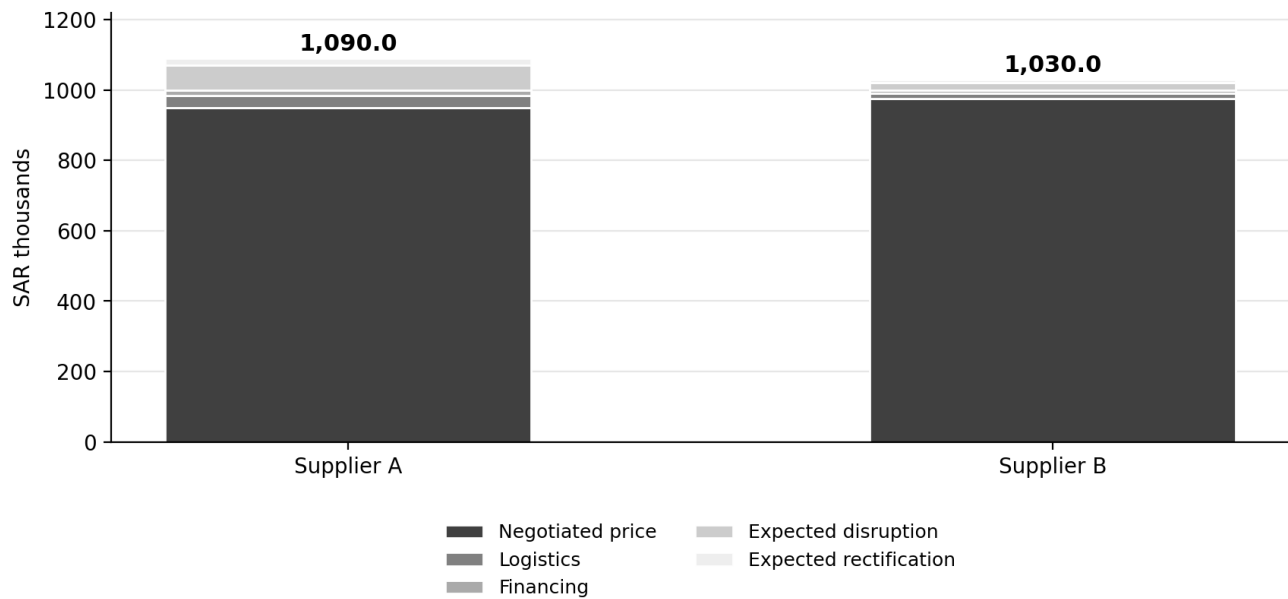
212 *Table 2. Hypothetical evaluation of two offers. All amounts are SAR thousands; expected costs are illustrative.*

Cost component in SAR thousands	Supplier A	Supplier B
Negotiated price	950	975
Buyer logistics	35	15
Buyer financing	15	10
Expected disruption	70	20
Expected rectification	20	10
Evaluated total	1,090	1,030
Discount against initial price of 1,000	50	25

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214 The comparison is sensitive to the disruption estimate. Holding other assumptions constant, A's evaluated
215 cost before disruption is SAR 1,020,000. It equals B's evaluated total when A's expected disruption cost
216 is SAR 10,000. Below that threshold, A becomes the lower evaluated-cost option. The analysis therefore
217 identifies the estimate that deserves scrutiny rather than presenting an uncertain ranking as a fact.

218 Expected disruption could be estimated as probability multiplied by the incremental financial
219 consequence for mutually exclusive scenarios. Correlated events require a joint scenario model to avoid
220 double counting. All figures here are hypothetical and demonstrate a calculation, not predicted outcomes.
221 Neither offer's evaluated total can be compared directly with the SAR 1,000,000 opening price to claim
222 net savings, because the opening price excludes the additional cost components.



223

224 **Figure 2. Hypothetical evaluated package costs. Calculated from Table 2; illustrative, not observed project data.**

225 6 Discussion and Proposed Framework

226 The proposed framework connects five stages: preparation, alternative assessment, negotiation,
 227 agreement and verification. Figure 1 shows the decision relationships and the feedback from post-award
 228 performance. Preparation establishes the scope and cost baseline. Alternative assessment checks
 229 capability and comparable offers. Negotiation explores feasible combinations of terms. Agreement
 230 records the selected obligations. Verification examines whether execution preserves the anticipated
 231 benefit.

232 A central implication is that the negotiating team should include the people responsible for the
 233 consequences of concessions. Procurement staff can assess commercial terms; engineers can verify
 234 technical equivalence; planners can examine delivery implications; and project controls can reconcile
 235 forecasts with expenditure. Their participation should be proportionate to package complexity. Small
 236 standard purchases do not need the same review effort as critical equipment or a major specialist
 237 subcontract.

238 The framework also separates three quantities. Negotiated price reduction is the difference between a
 239 comparable baseline price and the agreed price. Forecast net benefit considers the associated changes in
 240 costs and risks. Realised benefit is assessed after relevant expenditure and performance evidence become
 241 available. The last measure is the most informative but also the hardest to attribute, because design and
 242 market changes may occur simultaneously.

243 For that reason, a closeout record should show the original scope, revised scope, market adjustments,
 244 change orders, actual buyer-borne costs and remaining obligations. The same benefit should not be
 245 counted once as a negotiated reduction and again as a value-engineering saving. The research reviewed
 246 supports attention to multi-criteria decisions and uncertainty; the proposed attribution method is an
 247 extension for practical testing rather than an established causal result.

248 **7 Practical Implications for Saudi Construction Projects**

249 The framework can be applied to Saudi construction portfolios by evaluating vendor offers in a consistent
250 currency and linking deliveries to approved project programmes. Where packages rely on imported
251 equipment, the analysis should explicitly record transport responsibilities, lead-time assumptions, local
252 support and replacement availability. Where domestic alternatives are available, technical qualification
253 should be completed early enough for those alternatives to provide a credible commercial option.

254 Portfolio purchasing offers a possible opportunity to coordinate demand across projects, but aggregation
255 can create exposure if actual call-off quantities diverge from the forecast. The proposed control is to
256 distinguish committed quantities from indicative demand and to evaluate the cost of changing either.
257 Programme teams should retain visibility of the obligations being accepted on their behalf. This
258 application is consistent with a general focus on efficient infrastructure delivery; it does not establish
259 compliance with a particular Saudi procurement rule or guarantee eligibility for any national programme.

260 Managers should review negotiation performance using a small set of linked indicators: comparable price
261 movement, forecast total package cost, on-time delivery, accepted quality, change-order growth and final
262 package expenditure. A high discount accompanied by repeated failures should trigger investigation.
263 Performance incentives should reward documented net benefit and reliable delivery rather than the size
264 of the opening-price reduction alone.

265 **8 Limitations and Future Research**

266 This review is selective, and direct empirical evidence isolating vendor negotiation from other
267 construction management practices is limited within the consulted sources. Some supporting evidence
268 comes from models, professional guidance or other sectors. The paper consequently explains
269 mechanisms and proposes a decision process without estimating an average savings percentage. Its
270 hypothetical example cannot validate the framework or establish how vendors would behave in real
271 negotiations.

272 Future studies could compare technically similar packages across several projects, recording baseline
273 scope, market conditions, negotiated concessions and final outcomes. A longitudinal design would help
274 distinguish initial commercial gains from later cost transfers. Interviews with both buyers and suppliers
275 could explain why particular terms were accepted. Research should also test whether independent
276 technical scoring reduces evaluation bias and whether improved supplier forecasting changes the
277 relationship between payment terms and price.

278 **9 Conclusion**

279 Vendor negotiation can contribute to construction cost reduction when it improves the terms under which
280 a required outcome is delivered. Its value depends on scope clarity, credible alternatives, supplier
281 capability and the consequences of the complete agreement. Price discounts remain relevant, but they are
282 insufficient evidence of project savings. The proposed framework links negotiations to a comparable
283 baseline, total package evaluation and post-award verification. It provides a basis for practical application
284 and empirical testing while preserving the distinction between a commercial promise, a forecast benefit
285 and a saving demonstrated by completed work.

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