

OPEN PEER REVIEW

# Strategic Prioritization of Iran’s Geopolitical and Geoeconomic Capacities under Sanctions: Application of Multi-Criteria Decision-Making (MCDM) Techniques

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| Received: 2026-06-09                                                                                                                                                                        | Revised: 2026-09-15 | Accepted: 2026-09-23 | Initial Publish: 2026-09-27 | Final Publish: 2027-06-01 |
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## 1. Round 1

### 1.1. Reviewer 1

Reviewer:

The description of content validity is currently too general. The manuscript states that “Content validity was established through examination of the extent to which the questionnaire adequately covered the eight predefined conceptual domains.” The authors should explain who conducted this assessment, how many experts participated in the content-validity evaluation, and whether quantitative indices such as the Content Validity Ratio or Content Validity Index were calculated. If validity was assessed qualitatively only, the manuscript should explicitly state this and describe the procedures used to revise, retain, or eliminate items. Considering that the entire analytical framework rests on a researcher-developed 80-item instrument, stronger evidence of instrument validity is essential.

The ranking results in Table 1 warrant more careful treatment of the CH construct. The manuscript ranks Barriers and Challenges third based on a mean of 4.405 alongside positively oriented capacities such as Economic Resistance and Resilience and Geopolitical Capacities. However, a high CH score means that experts perceive obstacles as severe, not that CH represents a desirable strategic priority in the same directional sense as the other domains. The manuscript should explicitly distinguish “importance/severity ranking” from “favorable capacity ranking.” It would be methodologically misleading to compare high CH values directly with high positive-capacity values without noting the reverse substantive interpretation of the scale.

In Table 2, “Weakness of Economic Governance” is ranked first among all 80 items because it has a mean of 4.80. The authors appropriately note that CH items are negatively oriented, but this distinction should be incorporated directly into the

interpretation of the ranking. The table is currently titled “Ten Items with the Highest Mean Scores,” which is statistically accurate but substantively mixes high-value strengths with high-severity weaknesses. Consider adding an explicit column identifying the directional meaning of each item or revising the narrative to separate enabling capacities from constraining factors. Otherwise, readers may mistakenly infer that “weakness of economic governance” is a favorable strategic capacity.

Authors revised the manuscript and uploaded the document.

## 1.2. Reviewer 2

Reviewer:

The reliability paragraph reports an overall Cronbach’s alpha of 0.961 but should address the possibility of item redundancy. An alpha exceeding 0.95 can sometimes indicate that several questionnaire items measure highly similar content. The authors should therefore consider examining corrected item-total correlations, alpha-if-item-deleted statistics, and inter-item correlations. This would help demonstrate that the exceptionally high overall reliability reflects coherent measurement rather than excessive overlap among the 80 items. A short explanation should also be added regarding why Cronbach’s alpha was considered appropriate for these multidimensional expert-rating scales.

The manuscript acknowledges that the Barriers and Challenges dimension produced Cronbach’s alpha = 0.555 and attributes this result to content heterogeneity. This explanation is plausible but presently post hoc and insufficiently tested. The authors should provide item-level reliability diagnostics for CH, examine whether specific items substantially reduce internal consistency, and clarify whether CH is intended to represent a reflective scale or merely a formative collection of distinct obstacles. If governance, bureaucracy, infrastructure, institutional incoordination, and sanctions represent conceptually different barriers, treating them as a single internally consistent latent construct may not be psychometrically appropriate.

In the Data Analysis paragraph, the manuscript states that “the Friedman test was used to determine whether statistically significant differences existed among the relative rankings of the eight major dimensions.” The authors should clarify exactly how each dimension score was generated before entering the Friedman analysis. Because the dimensions contain unequal numbers of items—12, 10, and 8 items—the analysis should be based on dimension means or another standardized composite rather than raw totals. The procedure for handling missing values should also be specified, particularly because the reliability analyses indicate 24 valid cases for some dimensions and 25 for others, whereas the Friedman analysis included only 24 experts.

The interpretation of Kendall’s W requires greater statistical precision. The manuscript states that “Kendall’s W was 0.2009, indicating a low-to-moderate degree of concordance.” Because conventional interpretations of W vary by discipline, the authors should either provide an explicit interpretive convention or use cautious language such as “relatively limited concordance.” More importantly, statistical significance should not be conflated with substantive agreement. The very small p-value indicates that the observed ranking pattern differs from randomness under the test assumptions, whereas  $W = 0.2009$  indicates that consensus itself is modest. This distinction should be emphasized in both the Findings and Discussion sections.

In Table 1, the variable labeled “Mean Median” is conceptually unclear. A median is ordinarily calculated for a distribution, whereas “mean median” appears to indicate that item-level medians were calculated and then averaged within each dimension. If this is the procedure used, it should be explicitly described in the Methods and in the table note. The same concern applies to “Mean IQR” and “Mean Agreement 4+5 (%)” The manuscript should state whether these statistics represent the arithmetic mean of item-level medians, IQRs, and agreement percentages across all items in each dimension. Otherwise, readers may incorrectly interpret them as direct dimension-level statistics.

Authors revised the manuscript and uploaded the document.

## 2. Revised

Editor’s decision: Accepted.

Editor in Chief’s decision: Accepted.