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INTERNATIONAL INDICES AS TOOLS OF MANIPULATION: A CRITICAL EXAMINATION

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Abstract: International indices, such as the Human Development Index (HDI), Corruption Perceptions Index (CPI), Doing Business Index, Safety Index, Happiness Index, and others, are pivotal in assessing national performance across economic, social, and political domains, influencing investment, policy, and global perceptions. However, their methodologies are vulnerable to manipulation through subjective criteria, selective data sources, and external political or economic pressures, raising questions about their objectivity and reliability. This article examines the mechanisms enabling such manipulation, including biased weighting, qualitative assessments, and geopolitical influences, using case studies from Georgia's CPI improvements, the World Bank's Doing Business scandal involving China and others, and Turkey's Democracy Index rankings. A regression analysis of the Happiness Index reveals that higher crime rates and antidepressant consumption paradoxically correlate with elevated happiness scores, suggesting methodological inconsistencies. Focusing on Armenia, the study presents original survey research involving 250 respondents (urban and rural, balanced by age and gender) to compare public safety perceptions with Armenia's high Safety Index ranking (8th globally, score 77.9, Numbeo 2024). The survey reveals significant discrepancies with the country's high Safety Index ranking, such as 50% reporting frequent theft and 30% of women feeling unsafe, highlighting methodological flaws in crowd-sourced indices. These findings underscore economic and political implications for small economies like Armenia, where idiocies drive tourism but misalign with realities. Recommendations include enhancing transparency and reforming safety policies. By integrating case studies, survey data, and regression analysis, this study contributes to discourse on index reliability and informs policy for small states.

Key words: *International indices, manipulation, public perception, Safety Index, Doing Business Index, Happiness Index*

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Introduction

International indices, such as the Human Development Index (HDI), Corruption Perceptions Index (CPI), Doing Business Index, Safety Index, Happiness Index, and others, serve as standardized tools to evaluate countries' performance in economic, social, and political domains. Compiled by organizations like Transparency International, the World Bank, the United Nations Organization, and recently popular Numbeo, these indices shape global perceptions, guide investment decisions, and influence policy reforms in countries worldwide. However, their methodologies – often reliant on subjective criteria, selective data sources, and vulnerable to external pressures – raise concerns about objectivity and potential manipulation. Such vulnerabilities necessitate a critical examination of index construction.

The study employs a mixed-methods approach to investigate index manipulation. Three case studies – Georgia's CPI gains post 2003 Rose Revolution, the 2021 Doing Business scandal, and Turkey's Democracy Index rankings – use historical data and secondary sources to uncover manipulation mechanisms, including biased data selection and geopolitical influences. The Happiness Index regression analysis conducted for this study, using World Happiness Report data with Numbeo-sourced variables, reveals that higher crime rates and antidepressant consumption paradoxically correlate with elevated happiness scores, highlighting methodological flaws in well-being metrics. Such contradictions question index validity and necessitate a critical examination of index construction. A survey of 250 Armenian residents (urban and rural, balanced by age and gender) uses Likert-scale questionnaires (e.g., "never" to "very often") to assess perceptions of safety issues like theft, assaults, and nighttime security, compared to Armenia's high Safety Index ranking (8^{th} globally, score 77.9, Numbeo 2024). This article presents survey findings that expose discrepancies, such as 50% reporting frequent theft, underscoring flaws in crowd-sourced indices. The conclusion synthesizes findings and suggests future research directions.

Methodology of Index Formation

The construction of international indices involves standardized methodologies that ensure cross-country comparability. Each index relies on selected indicators, normalization techniques, and data sources that reflect the underlying concept being measured. The reliability and transparency of these indices depend heavily on how data are collected and processed.

Table 1

Classification of Major International Indices

Category	Index Name	Institution / Source	Main Indicators	Type of Data	Potential Manipulation Vulnerability
Economic	Doing Business Index	World Bank	Business regulation indicators (permits, taxes, credit, etc.)	Quantitative + expert survey	Data adjustments and political pressure
Economic	Global Competitiveness Index	World Economic Forum	Infrastructure, innovation, labor market, institutions	Mixed (survey + statistics)	Corporate bias in survey data

Social	Human Development Index	UNDP	Life expectancy, education, GNI per capita	Quantitative statistics	Limited context sensitivity
Political	Corruption Perceptions Index	Transparency International	Perceived public sector corruption	Expert and business surveys	Perception bias, selective sources
Political	Democracy Index	Economist Intelligence Unit	Electoral process, civil liberties, political culture	Expert assessment	Ideological bias, geopolitical influence
Safety / Well-being	Safety Index	Numbeo	Crowd-sourced crime and safety perceptions	Subjective survey data	Non-representative sample
Safety / Well-being	Happiness Index	World Happiness Report (Gallup)	Life satisfaction, GDP, social support, freedom	Survey + statistical inputs	Overreliance on subjective responses

Source: *Authors' compilation based on World Bank, UNDP, Transparency International, Numbeo.*

- **Human Development Index (HDI)** [1]

The HDI is a composite index measuring life expectancy at birth, education, and gross national income (GNI) per capita. Minimum and maximum thresholds are defined for each component to standardize them into indices ranging from 0 to 1. Education is represented by the arithmetic mean of expected and mean years of schooling. Income is transformed using the natural logarithm to reflect diminishing returns. The overall HDI is the geometric mean of the three-dimension indices (Human Development Report 2024).

Data Sources – Life expectancy: UN Department of Economic and Social Affairs; Schooling: UNESCO Institute for Statistics, World Bank, CEDLAS, UNICEF, ICF Macro Surveys, Barro-Lee dataset; GNI per capita: IMF, UN Statistics Division, World Bank.

- **Corruption Perceptions Index (CPI)**[2]

The CPI aggregates assessments from 13 sources measuring expert and business perceptions of public sector corruption, including bribery, misappropriation of public funds, and abuse of office for personal gain. Each source is standardized via Z-scores, then transformed to a 0–100 scale using the formula: $CPI\ score = Z \times 20 + 45$. The final score is the average of available transformed values, requiring at least three sources per country for inclusion. Standard errors and confidence intervals are calculated to account for variability across sources. Prior to 2012, differing methodologies and scaling methods prevented comparability over time. In 2012, Transparency International introduced a new methodology with a fixed mean (45) and standard deviation (20) based on that year's data. This change allows for direct comparison of CPI scores across years from 2012 onward. The final CPI score is the average of all available standardized values for a country. Inclusion requires at least three independent sources. A standard error is

[1] https://hdr.undp.org/data-center/human-development-index#/indicies/HDI
[2] https://www.transparency.org/en/cpi/2024

also reported to reflect variability among sources and to construct a 90% confidence interval, indicating the precision of the score (Transparency International, The ABC of the CPI, 2025).

Data Sources: African Development Bank, Bertelsmann Stiftung, Economist Intelligence Unit, Freedom House, Global Insight, IMD World Competitiveness Center, PERC, PRS Group, World Bank, World Economic Forum, World Justice Project, Varieties of Democracy (V-Dem).

- **World Happiness Report (Happiness Index)**[3]

Based on the Gallup World Poll, the index uses the Cantril Ladder method, asking individuals to rate their life satisfaction on a 0–10 scale. Regression analysis is used to quantify the contribution of six explanatory factors: GDP per capita (log-transformed), social support, healthy life expectancy, freedom to make life choices, generosity, and perceptions of corruption (Helliwell J. et al., 2024).

Data Sources – Survey data: Gallup World Poll; GDP: World Bank, IMF; Life expectancy: World Health Organization; Other variables: Gallup survey questions.

- **Doing Business Index**[4]

This index evaluates business regulations across ten areas: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. Each component is assessed using objective indicators and converted into a "Distance to Frontier" score (0–100). The final index is the average of the ten indicators (World Bank 2020).

Data Sources: legislative analysis, standardized questionnaires, expert surveys (lawyers, accountants, public officials).

- **Safety Index**[5]

The Safety Index is calculated as the inverse of the Crime Index, which is based on users' subjective perceptions of safety and crime. Survey participants rate aspects like fear of being robbed, perceived effectiveness of law enforcement, and safety when walking alone. Scores are scaled to a 0–100 range (Numbeo, 2024).

Data Sources: crowd-sourced user responses collected via Numbeo's online platform.

- **Global Peace Index (GPI)**[6]

The GPI measures internal peace (60%) and external peace (40%), using weighted indicators such as political instability, violent crime, militarization, weapons imports, and international conflicts. Each indicator is scored and aggregated using a weighted average formula: $GPI = 0.6 \times Internal\ Peace + 0.4 \times External\ Peace$ (Institute for Economics & Peace, 2024).

Data Sources: United Nations, World Bank, Stockholm International Peace Research Institute (SIPRI), Economist Intelligence Unit, Governmental and NGO reports.

In the digital era, international indices and statistical indicators are key tools for shaping political and economic strategies. They help states track trends, attract investment, and guide reforms. Strong performance enhances evidence-based

[3] https://www.worldhappiness.report/ed/2024/
[4] https://archive.doingbusiness.org/en/reports/global-reports/doing-business-reports
[5] https://www.numbeo.com/crime/indices_explained.jsp
[6] https://www.economicsandpeace.org/wp-content/uploads/2024/06/GPI-2024-web.pdf

policymaking and bolsters a country's international reputation. Conversely, low scores can undermine credibility and limit opportunities in tourism, investment, and international cooperation.

Mechanisms of Manipulation in International Indices

International indices have become powerful benchmarks for evaluating governance, economic development, democracy, and social well-being. They serve not only as analytical tools for policymakers but also as instruments of influence for international organizations. However, their objectivity is not guaranteed. Many indices are susceptible to manipulation through selective criteria, biased data sourcing, subjective evaluations, and non-transparent methodological adjustments. These mechanisms can be deliberately employed to favor or discredit certain countries, often in line with broader economic, political, or ideological interests.

Subjectivity of Criteria and Methodology

At the core of each international index lies a set of selected indicators – either quantitative or qualitative – used to measure performance in areas such as the economy, society, politics, environment, or technology. While these criteria are designed to offer standardized assessments, their selection and implementation are often subjective and open to manipulation.

Economic Criteria – Economic indicators commonly include GDP per capita, inflation rates, unemployment, debt-to-GDP ratios, and trade balances. These form the basis for rankings such as the Global Competitiveness Index or Economic Freedom Index. Although generally seen as objective, their influence depends heavily on data quality, sources, and the weight assigned to each variable. Investors and entrepreneurs often rely on such indices when evaluating business environments, making these criteria a target for selective emphasis or omission.

Social Criteria – Social indicators include education levels, healthcare access, life expectancy, poverty rates, and human rights protections. These metrics are typically developed by organizations such as the UN, WHO, or ILO. Despite their relevance, social indicators are particularly prone to subjective interpretation – especially when reliant on survey data or expert assessments. Methodological inconsistencies can arise across countries due to different data collection practices or selective inclusion of social issues.

Political Criteria – Political indices – such as the Democracy Index, Rule of Law Index, and Corruption Perceptions Index (CPI) – are frequently used to assess a country's governance and legal environment. These are often shaped by value-laden frameworks and funded or influenced by political actors. Many incorporate qualitative judgments or expert opinions, introducing a degree of bias. Moreover, the weight assigned to specific political dimensions (e.g., electoral process vs. civil liberties) can tilt rankings in a way that supports particular narratives or ideologies.

Environmental and Climate Criteria – These criteria track ecological performance through indicators like air pollution, CO_2 emissions, renewable energy use, and forest conservation. While mostly data-driven, these indices can still be influenced by the availability and reliability of national statistics or by focusing on selected environmental priorities that may disadvantage certain countries.

Technological and Innovation Criteria – Measured through outputs such as patent filings, R&D investment, digital infrastructure, and publication volume, these indicators reflect a country's innovation capacity. However, methodological bias can enter through unequal data reporting, selective timeframes, or differing definitions of what constitutes innovation.

While each index appears to follow a scientific and neutral framework, their construction often involves subjective methodological choices:

- **Indicator Selection**: Emphasizing or excluding certain indicators can favor a particular political or economic profile.
- **Source Bias**: Indices may draw on government reports, international databases, or NGO surveys – each carrying different assumptions and reliability levels.
- **Qualitative Assessments**: Many indices rely heavily on expert surveys, which are vulnerable to perception bias, ideological leanings, or limited geographical understanding.
- **Weighting Systems**: The relative weight assigned to different criteria can significantly alter outcomes. These weights are often chosen without full transparency and may reflect institutional preferences.
- **Inconsistent Data Processing**: Applying different data collection or transformation methods across countries (e.g., using hard statistics for some and perception-based surveys for others) compromises comparability and fairness.

Political interests can further exacerbate these distortions. Indices are sometimes funded, developed, or promoted by actors with strategic agendas. In such cases, index design may serve geopolitical purposes – rewarding allies, penalizing rivals, or legitimizing preferred governance models.

Therefore, while international indices are widely regarded as tools of evidence-based governance and global benchmarking, they often embody subjective choices that can be strategically manipulated. To interpret them responsibly, one must critically assess their methodological transparency, data integrity, and underlying institutional motivations.

Case Studies of Index Manipulation

While international indices are often presented as objective tools for evaluating the progress and condition of states, their methodologies – frequently reliant on subjective expert assessments or limited surveys – open the door to manipulation and bias. Below are selected case studies that illustrate how indices have been used not only to reflect but to shape political and economic realities.

- **Corruption Perceptions Index: Selective Narratives and Political Legitimacy**

Following the 2003 Rose Revolution, Georgia implemented ambitious reforms aimed at combating corruption and modernizing the state. The country's position in Transparency International's Corruption Perceptions Index (CPI) improved dramatically – from 124th place with a score of 1.8 in 2003 to 64th with 4.1 in 2011 – signaling international approval and attracting praise from Western donors like USAID and Freedom House. However, deeper scrutiny revealed that these improvements were largely focused on low-level corruption and public service transparency, while high-level corruption and political favoritism persisted.

By the 2010s, evidence of systemic corruption within the ruling elite surfaced. Business dealings connected to Bidzina Ivanishvili, the billionaire founder of the

Georgian Dream coalition, raised serious concerns. His companies and those linked to his relatives allegedly received preferential treatment, questionable public contracts, and favorable legal outcomes[7]. Yet during this same period, the CPI continued to register improvements. For instance, in 2018 Georgia ranked 41st with 56 points. Experts argue that such perception-based indices are particularly vulnerable to elite lobbying and donor-driven narratives, which can mask deeper governance issues and legitimize power structures rather than challenge them[8]. Georgia's case reveals how the CPI can also become a tool for sustaining favorable international images that obscure state capture and elite corruption.

- **Doing Business Index: Geopolitical Pressures and Data Manipulation**

A striking example of methodological vulnerability and political pressure is the World Bank's Doing Business index, which was discontinued in 2021 after revelations of data manipulation. In the 2018 edition, China's ranking was initially projected to fall from 78th to 85th, a politically inconvenient development as the World Bank sought increased funding from its major shareholders – China included. An independent investigation by WilmerHale revealed that senior officials pressured staff to alter China's data, ultimately maintaining its position at 78th[9].

This manipulation was not isolated. Saudi Arabia, Azerbaijan, and the UAE were also found to have benefited from selective adjustments, with methodological changes aimed at artificially inflating their rankings. The case exposed a broader systemic flaw: the susceptibility of global indices to political influence, especially when compiled by institutions reliant on the financial contributions of powerful states[10].

Critics emphasized that the problem extended beyond individual rankings to the structural design of the index itself. Its reliance on self-reported data, elite surveys, and overly simplified benchmarks made it ripe for exploitation. WB created an external advisory group led by professor Cárdenas, which called for governance reforms within the World Bank to prevent conflicts of interest, especially within the framework of Reimbursable Advisory Services, which allowed countries to pay for technical assistance that conveniently aligned with improved rankings. Analysts warned that the Doing Business index had become a tool for geopolitical image management rather than an objective measure of investment environments.

- **Democracy Index: Strategic Labeling and Diplomatic Double Standards**

The Democracy Index produced by the Economist Intelligence Unit (EIU) also illustrates how indices can reflect political alignments more than democratic realities. Turkey, a NATO member and strategic partner to the West, has undergone significant democratic backsliding, especially since the failed 2016 coup attempt. The government responded with mass arrests, civil service purges, and an unprecedented crackdown on media freedom. In the 2024 *Democracy Index*, Turkey ranks 102nd out of 167 countries, scoring 4.4 out of 10, placing it in the "hybrid regime" category, which indicates a mix of democratic and authoritarian traits. For comparison, in 2006, Turkey was considered

[7] https://transparency.ge/en/post/russian-businesses-bidzina-ivanishvili-and-his-relatives
[8] Corruption and Anti-Corruption Policy in Georgia: 2016-2020. Transparency International. https://transparency.ge/en/post/corruption-and-anti-corruption-policy-georgia-2016-2020
[9] Sandefur J. "The Data Manipulation Scandal That Could Topple the Heads of the World Bank and IMF". https://www.cgdev.org/blog/data-manipulation-scandal-could-topple-heads-world-bank-and-imf-explained
[10] Broome, Andre. 2022. "Doing Business: How Countries Gamed the World Bank's Business Rankings." https://eprints.lse.ac.uk/114220/1/politicsandpolicy_world_bank_business.pdf

a "flawed democracy," holding a higher position[11]. Nevertheless, critics argue that this categorization softens the extent of Turkey's authoritarian drift.

As Human Rights Watch has documented, Turkey's democratic institutions have been systematically eroded. The judiciary lacks independence, civil liberties are restricted, and over 85% of the media is controlled by pro-government conglomerates. Opposition voices are silenced through arrests, internet censorship, and regulatory pressure[12]. Yet Turkey's international image remains buffered by its geopolitical importance. This results in muted criticism and comparatively moderate ratings in global indices, raising concerns about whether the Democracy Index and others are influenced by diplomatic alliances rather than objective analysis.

These cases reveal that international indices, while framed as neutral benchmarks, can serve as instruments of soft power, strategic influence, or even manipulation. Whether through elite lobbying, political pressure, financial interests, or methodological loopholes, indices such as the CPI, Doing Business, and Democracy Index can be shaped to advance particular narratives and obscure inconvenient truths.

- **Happiness Index: Unpacking Empirical Contradictions**

This study conducted an econometric analysis to examine the Happiness Index's methodological vulnerabilities, aligning with concerns about index manipulation. While the Happiness Index may seem less critical than economic or governance metrics, its growing relevance is evident in Bhutan's pioneering adoption of Gross National Happiness (GNH) as its primary development indicator, prioritizing well-being over GDP. Other nations, such as the UAE with its Ministry of Happiness, increasingly focus on subjective well-being to shape policy.

Using the Happiness Index as the dependent variable, the regression model incorporated explanatory variables such as crime rate, antidepressant consumption and internet access. We used cross-sectional data from 46 countries for the year 2021. Surprisingly, the results indicate that higher crime rates and increased antidepressant consumption positively correlate with elevated happiness scores (see Table 2).

Table 2

Regression Analysis of Happiness Index

Dependent Variable: HAPPINESS_INDEX				
Method: Least Squares				
Included observations: 45 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
ANTIDEPRES-SANT	0.012010	0.003864	3.108487	0.0034
CRIME_RATE	0.000257	8.62E-05	2.981271	0.0048
INTERNET_ ACCESS	0.043106	0.012344	3.492015	0.0012
C	1.173383	1.182314	0.992447	0.3268
R-squared	0.619243	Mean dependent var		6.458000
Adjusted R-squared	0.591383	S.D. dependent var		0.900453

[11] https://www.hrw.org/world-report/2016/country-chapters/turkey
[12] https://www.hrw.org/world-report/2023/country-chapters/turkey

S.E. of regression	0.575599	Akaike info criterion	1.817875
Sum squared resid	13.58386	Schwarz criterion	1.978467
Log likelihood	-36.90218	Hannan-Quinn criter.	1.877742
F-statistic	22.22673		
Prob (F-statistic)	0.000000	Durbin-Watson stat	2.150333

These counterintuitive findings suggest flaws in the Happiness Index's construction, such as overreliance on subjective surveys or inconsistent weighting, which may misrepresent societal well-being and align with manipulative practices seen in other indices. These issues, mirrored in the Happiness Index regression, highlight the risk of misaligned policy priorities in small economies like Armenia, where global rankings influence perceptions and investment, underscoring the need for rigorous, context-sensitive methodologies.

Armenia and the Safety Index: Perception vs. Reality

Armenia's geopolitical and economic context makes it highly sensitive to international indices. In 2022, its HDI was **0.786** (76th globally), reflecting gains in life expectancy, education, and per capita GDP (UNDP, 2022). Its 2023 GDP per capita was **$8,053,** placing it mid-tier among regional peers (World Bank, 2023). The CPI improved from 35 in 2018 (105th) to 47 in 2024 (63rd) (Transparency International, 2024).

Despite these improvements, the **Safety Index** ranked Armenia **8th out of 147 countries** in 2024, with a score of 77.9 (Numbeo, 2024), highlighting potential discrepancies between global rankings and local perceptions.

To investigate the alignment between Armenia's Safety Index ranking and public perceptions, a survey was conducted among 250 Armenian residents, comparing internationally published data with subjective experiences on crime, safety, police effectiveness, and external threats. The survey replicated the structure and logic of Numbeo's data collection method, relying on voluntary self-reporting and perception-based questions. This approach was intentionally adopted to reveal the inherent methodological weaknesses of such surveys, particularly their vulnerability to sampling bias and territorial imbalance. Although this design illustrates the problem of subjectivity in safety perception measurement, it also carries the same limitation: it may flatten regional differences, overrepresent urban respondents, and underrepresent rural or border communities.

Questions addressed perceptions of theft, physical assaults, violent incidents, criminal groups, nighttime safety, safety of women and children, public transport safety, police effectiveness, weapon accessibility, and external threats (see Table 3).

Table 3

Sample Survey Questions

Question	Response Options
How often do thefts occur in Armenia (home, car, or parts theft)?	1 – Very Rarely … 5 – Very Often
How often do physical assaults occur (street fights, robbery-related violence, etc.)?	1 – Very Rarely … 5 – Very Often

How visible are criminal groups in Armenia?	1 – Not visible at all … 5 – Very visible
How safe do you feel walking alone at night in your city?	1 – Not safe at all … 5 – Completely safe
How effective is the police in preventing and controlling crime?	Yes / Partly / No
How strong are external threats to Armenia from neighboring countries?	1 – Not strong … 5 – Very strong

Source: *Authors' compilation based on survey (YSU, 2025), replicating Numbeo methodology.*

Responses were collected using structured questionnaires with a Likert scale (e.g., "rarely," "sometimes," "often") to assess perceptions. The data were analyzed descriptively to identify patterns across region, gender, and age. The survey tested the following hypotheses:

- **H1:** Public perceptions of safety in Armenia differ significantly from the Safety Index ranking.
- **H2:** Urban residents perceive higher crime rates than rural residents, reflecting population density and socio-economic factors.
- **H3:** Women and younger respondents report lower safety perceptions due to gender-based vulnerabilities and media exposure.

Survey Findings

The survey revealed significant discrepancies between Armenia's Safety Index ranking and public perceptions. Key findings are presented below (see Table 4):

Table 4

Survey main findings

Category	Indicator	Key Findings	Demographic/Regional Patterns
Perception of Crime	Theft	50% reported theft occurs "often" or "very often"	Yerevan: 60%, Rural: 40%
	Physical Assaults	40% report "sometimes," 25% "often/very often"	Women: 35%, Men: 15%
	Violent Incidents	40% report "often/very often"	Age 18–24: 50%
	Criminal Groups	60% "mostly invisible/sometimes visible"	Yerevan: 30% "visible"
Perception of Safety	Nighttime Safety	40% feel "mostly safe"	Women: 30% "mostly/completely unsafe"
	Women & Children Safety	50% believe "mostly unsafe"	Rural: 60%

	Public Transport Safety	50% feel "yes/partly safe"	Women: 40% feel unsafe
Police Effectiveness	Overall Rating	60% "partly effective," 20% "not effective," 10% "effective"	Young (18–24) more critical
Weapon Accessibility and Use	Ease of Obtaining Weapons	40% report "partly/mostly easy"	Especially in Yerevan
	Weapon-Related Incidents	40% report "sometimes/often"	Negative impact on safety perceptions
External Threats and Immigration	Threats from Neighboring Countries	60% "very strong/quite strong"	Reflects tensions with Azerbaijan/Turkey
	Refugees & Immigrants	40% "neither low nor high," 20% "high"	—

Source: *Survey conducted by the authors among 250 Armenian residents in 2025, replicating Numbeo methodology.*

Overall, regional and demographic differences show that:

- Residents of Yerevan more frequently reported high rates of theft, violent incidents, and use of weapons compared to those in the regions. Meanwhile, regional residents more often emphasized that women and children feel unsafe at night.
- Women more often gave negative assessments of safety, especially at night and on public transport. Men, by contrast, were more likely to report feeling safe.
- Young people (18–24) reported higher exposure to violence and weapons, yet paradoxically felt safer overall. Older adults (45–64) were more critical of external threats.

Analysis

The survey confirms H1, showing a significant gap between Armenia's high Safety Index ranking and public perceptions. Urban-rural differences (H2) are evident, with Yerevan residents perceiving higher crime rates, likely due to density and economic inequality. Gender and age disparities (H3) highlight women's and young people's heightened concerns, driven by vulnerabilities and media exposure. The Safety Index's reliance on crowd-sourced data from Numbeo may overstate Armenia's safety by prioritizing quantitative metrics over subjective experiences, underscoring methodological flaws.

The misalignment between the Safety Index and public perceptions has economic and political implications. Economically, a high Safety Index ranking attracts tourists and investors, but persistent public concerns could deter visitors if not addressed. Politically, low trust in police and high external threat perceptions fuel public discontent, potentially leading to protests or demands for reform. Findings highlight the need for targeted safety policies, despite Armenia's post-2018 transparency reforms.

Discussion

The case studies and Armenia's survey highlight how international indices can be shaped by subjective criteria, selective data, and external pressures. In Georgia, the CPI masked high-level corruption; the Doing Business scandal revealed rankings adjusted to favor powerful states; in Turkey, geopolitical importance softened Democracy Index evaluations; and the Happiness Index shows paradoxical correlations between crime rates, antidepressant use, and happiness scores. Armenia's high Safety Index ranking, while seemingly positive, does not fully reflect public perceptions, revealing methodological limitations.

These discrepancies carry tangible economic and political consequences. High index rankings may attract investment, yet misaligned perceptions can undermine trust and policy effectiveness. The Armenia survey demonstrates the value of local data in challenging global indices and informing more accurate, context-sensitive policies. Small economies are particularly vulnerable, as indices heavily influence investment and governance decisions.

This study does not aim to design a new universal methodology for global indices but rather to expose the weaknesses within existing ones. By identifying how subjective weighting, selective sourcing, and perception-based surveys distort outcomes, it highlights the need for greater transparency and methodological accountability rather than entirely new measurement systems.

Recommendations

To reduce manipulation risks and enhance index reliability:

1. Enhance Methodological Transparency: Index compilers should standardize data sources and reduce reliance on subjective surveys, using independent audits to ensure accuracy.
2. Incorporate Local Perspectives: Indices like the Safety Index should integrate local surveys, as demonstrated by Armenia's case, to reflect subjective experiences.

Conclusion

International indices shape perceptions of national performance but are often biased by subjective methods, selective data, and political influence. Case studies from Georgia, the Doing Business scandal, and Turkey illustrate this, while Armenia's Safety Index contrasts sharply with local perceptions. Our survey highlights the value of local data in questioning global rankings and guiding reforms. Ensuring transparency, inclusivity, and methodological rigor is crucial for indices to reflect reality, especially in small economies. Future research should expand local surveys to validate global indices and better understand their economic and social impacts.

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