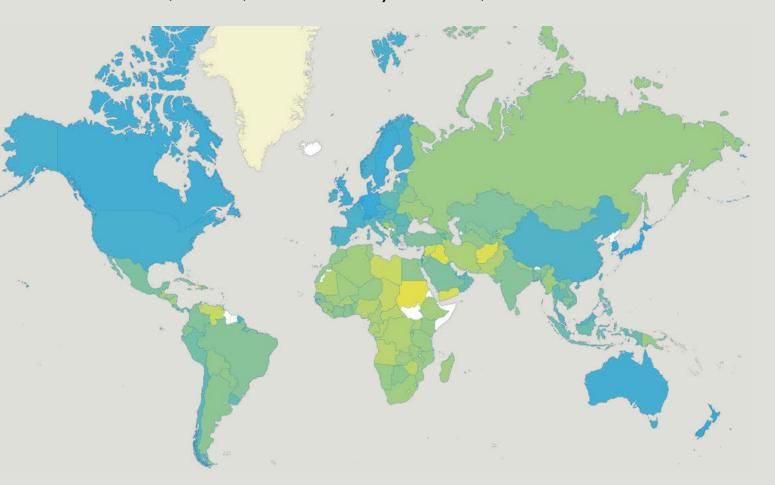


ELITE QUALITY REPORT 2024

The Sustainable Value Creation of Nations

151 COUNTRY SCORES AND GLOBAL RANKINGS

Measuring long-term economic and human development prospects
146 Indicators; 12 Pillars; 4 Political Economy Index Areas; and Power and Value Sub-Indexes



Tomas Casas i Klett, University of St.Gallen (FIM-HSG) Guido Cozzi, University of St.Gallen (FGN-HSG)

FIFTH ANNIVERSARY EDITION

Elite Quality REPORT 2024



COUNTRY SCORES AND GLOBAL RANKINGS

Academic leadership





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The Elite Quality Index® (EQx) and the 'Elite Quality Report 2024: The Sustainable Value Creation of Nations' ('EQx2024' or 'Report') provide a unique interpretation of political economies across the world and their mid- to long-term prospects. The EQx2024 is based on a methodology that starts with the collection and collation of relevant, up-to-date datasets from a variety of organizations and sources (see Section 7.2 for the complete list). The datasets conceptually fit with the EQx and its theoretical basis (Casas-Klett, 2024, in press).

The detailed EQx methodology is described in 'Measuring Elite Quality' (Casas-Klett, Cozzi, Diebold, & Zeller, 2020), a paper whose main tenets have evolved since it was first written to support the EQx2021, with changes summarized in Section 2.4. It was developed and inspired by a team of academics and practitioners with the aim of supporting Value Creation business models in elite systems and incentivizing the institutional arrangements that foster such models. The analysis and interpretations of the results contained in the Elite Quality Report 2024, such as the commentaries on the country scorecards, are the result of individual or collective work and do not necessarily represent the views of the editors, the project team or other project participants.

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The Sustainable Value Creation of Nations

Measuring long-term economic and human development prospects

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The Abbey Library of St.Gallen (Stiftsbibliothek) in Switzerland has roots that can be traced back to medieval times, serving as a repository of knowledge for over a millennium.

Luca Zanier Photography, Corridors of Power Project.

Executive Summary

Elite Quality is 'Macro-level Sustainability'

- Elite business models generate the most income and provide the necessary coordination capacity to realize the full potential of an economy's human, financial, and knowledge capabilities.
- High-quality elites running Value Creation business models that create more value for society than they appropriate are sustainable. Low-quality elites that operate Value Extraction models based on value transfers are not.

What are the Main Findings of the EQx2024?

- 1. Singapore (rank #1, up 1 position from the EQx2023) moves back to the top of the ranking again after losing out to Switzerland (rank #2, down 1 position) last year. These are two very different political economies whose chief similarity, besides their small size, is the significant Sustainable Value Creation of their elite business models.
- 2. Asia's Elite Quality is on the rise. Of the top six leading countries, three are Asian, with Japan (#4, position unchanged) and Korea (#6, up 13 places) exhibiting stellar performance. Moreover, the continent's two emerging superpowers, China (#21, up 1 position) and India (#63, down 4 places), continue to excel given their income levels. The correlation analysis (see page 5) shows that based on Elite Quality, China's GDP per capita (PPP) is predicted to hypothetically equal US\$53,145 (well above its current US\$21,482), while India's would stand at US\$17,322 (rather than the current US\$8,400), and Indonesia's (rank #45) would increase to US\$36,311 (well above the present US\$21,654). This news from Asia provides positive signals for global growth prospects in the coming years.

EQx2024 Top 20 Countries									
Country	Rank	Trend vs EQx2023		Score					
Singapore	1	个	1	65.3					
Switzerland	2	Ψ	-1	64.8					
Netherlands	3	企	3	64.5					
Japan	4	→	0	64.4					
New Zealand	5	Ψ	-2	64.0					
Korea, Rep.	6	个	13	63.7					
Israel	7	Ψ	-2	63.6					
Germany	8	→	0	63.4					
Sweden	9	企	1	62.7					
Denmark	10	个	1	62.5					
United Kingdom	11	Ψ	-2	62.3					
Canada	12	→	0	62.2					
Australia	13	Ψ	-6	62.0					
Finland	14	→	0	61.5					
Austria	15	→	0	61.5					
United States	16	个	5	61.3					
Norway	17	Ψ	-4	61.0					
Qatar	18	个	5	60.4					
France	19	Ψ	-3	60.2					
Estonia	20	Ψ	-2	59.9					

The EQx is the Global Political Economy Index

- The EQx2024 is the fifth comparative international ranking of Elite Quality. It covers 151 countries, uses 146 indicators, and measures conceptual elements including Power, Creative Destruction, and Unearned Income.
- Elite Quality at the macro-level is based on the forthcoming 'Sustainable Value Creation of Firms', a micro-level measurement for leaders, boards, and capital suppliers seeking to transform their business models towards an inclusive future.
- 3. Among Western nations, the improved performance of the **Netherlands** (rank #3, up 3 places) stands out, as does **Germany** (rank #8, unchanged). The **US** is not far behind (rank #16, up 5 places), even though the scale, technologies, and narrative powers of its political economy should see it at the apex of the ranking. The country continues to extract from the young and sits at a lowly #79 in the NextGen Value Creation Barometer, an issue that politics has no capacity to address (Political Value, #75).
- 4. The BRICS Plus countries show mixed performance, ranging from high to rather poor scores (see Table below). Can the success of some emerging nations inspire the elites of laggard countries to curb rent-seeking?
- 5. To hone in on elite business models and their Value Creation/Extraction, the EQx2024 indicators rely on increasingly unique and customized datasets. For instance, the Housing Affordability Index (HAI) and the Construction supply gap (CSG) detail for a given country the extent to which construction and real estate are a source of Value Creation or responsible for extractive shortages, rent inflation, or price bubbles.
- 6. As is the case every year, a minor cause for movements in the EQx is the inclusion of new indicators. This year, a number of new indicators have been added to measure how nations are dealing with ecological issues and managing progress towards the achievement of the Sustainable Development goals (SDGs). Other caveats should also be borne in mind when interpreting ranking changes, especially in times of inflation, war, or even the dramatic reduction in the number of unicorns. Is overall global Elite Quality going up or down? If the latter is the case, many countries are doing better this year as a result of being comparatively less extractive, not because they are producing more value. The intention is to address this issue in the EQx2025 with the introduction of a measurement for the Elite Quality of the world: the 'World-EQ' benchmark.

BRICS plus Countries									
Country	Rank	Trend vs EQx2023	Score						
China	21	企 1	59.6						
United Arab Emirates	32	⊎ -12	56.2						
India	63	⊎ -4	49.5						
Brazil	64	№ 5	49.4						
Egypt, Arab Rep.	84	1 3	47.3						
Russian Federation	103	→ 0	45.1						
South Africa	117	⊸ -34	44.2						
Ethiopia	119	⊎ -18	43.8						
Iran, Islamic Rep.	129	香 11	42.5						

2

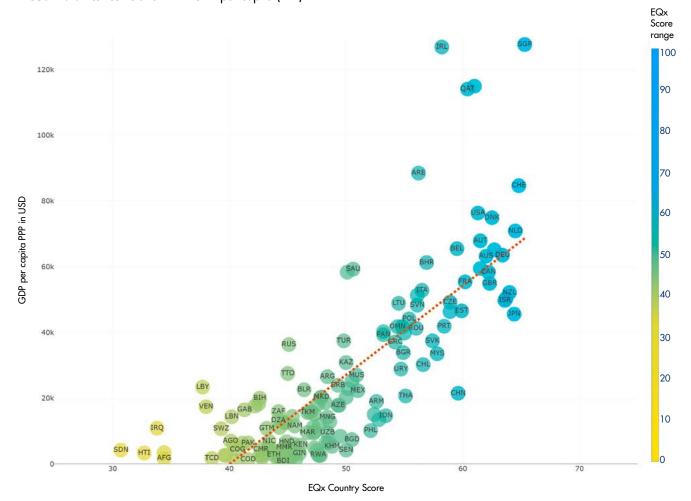
1.1 Measuring Sustainable Value Creation to Safeguard the Future

Without the existence of elite agency and its associated coordination capacity, there is chaos in the political economy and in society as a whole. But this fact does not give elites a free pass. The fundamental assumption of the elite theory of economic development (ETED) is that the Sustainable Value Creation of elite business models holds the key to a better future in terms of economic and human development. The benchmarking and analysis of the variances in Elite Quality across countries and within regions lies at the core of the EQx. The EQx2024 offers, for the fifth consecutive year, Country Scores and Global Rankings for 151 countries based on 146 indicators.

Predictions of Elite Quality can be Surprising

The elite theory of economic development contends that Elite Quality is the leading indicator of future economic growth and human development. Why? Because the Sustainable Value Creation (or Extraction) of elite business models are the key transmission mechanism between the micro-level economic activity of firms and the aggregate macro-level outcomes of the economy. As with previous editions of the EQx, the key findings are not the global rankings themselves but the subsequent steps that are taken to analyze the outcomes. These include the interpretation of the fitted regression line that emerges from the EQx correlation with GDP per capita (PPP) as depicted in Visuals 1.1 and 1.2:

Visual 1.1: EQx correlation with GDP per capita (PPP)



Note: Vertical axis plots GDP per capita, adjusted for PPP, in current intern. US\$. Orange dashed line indicates a fitted regression line. Adjusted R-squared: 0.611 Spearman correlation between EQx scores and GDP: 0.797

Source: The World Bank, 2023.

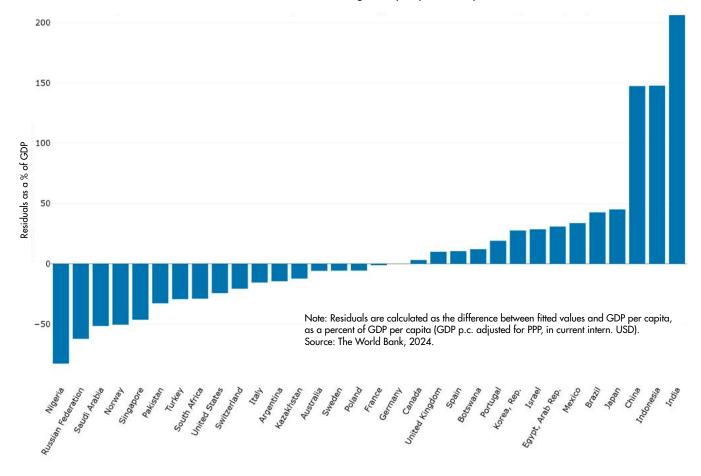
Random selection of country codes are printed in case of country overlaps.

- Asia (and especially China, India, and Indonesia) will drive global growth for years to come.
 China's (rank #21) GDP per capita (PPP) is predicted to hypothetically equal US\$53,145 (well above its current US\$21,482), while India's (rank #63) would stand at US\$17,322 (rather than its current US\$8,400). Indonesia's (rank #45) would increase to US\$36,311 (well above today's US\$21,654). Asia's inclusive elites will drive global prosperity and growth for the next decade and beyond.
- 2. High Elite Quality today may be insufficient for tomorrow. Countries with a high overall EQx ranking like Switzerland, Singapore, the US, or Norway find themselves in negative territory when their EQx scores are regressed against GDP per capita (PPP). The implication is again clear: prosperous countries that wish to maintain their relative success must guard against the emergence of elite business models based on extractive value transfers and engage in continual structural and statutory reform to maintain Value Creation.
- 3. Rich countries that still have scope for growth. Put your money on Japan, Korea, and the UK. Despite their diverse challenges, these three large and prosperous economies all have sophisticated capital markets that are open to global investors and will see comparative growth.

- 4. Must do better in terms of Elite Quality. A number of rich and emerging economies including Italy, Argentina, Kazakhstan, Australia, Sweden, and Poland must make marginal gains in terms of their Elite Quality to escape the middle Elite Quality trap that endangers their future growth prospects.
- 5. In danger of regression. The elite systems of emerging countries like Nigeria, Pakistan, Turkey, and South Africa must have serious conversations about deactivating their extractive business models for the sake of their future economic prosperity and the prospects for their non-elites.

Visual 1.2 also illustrates where future economic growth will likely come from. India, Indonesia, and China are poised to grow on the back of the Sustainable Value Creation of their elite business models. Immense amounts, ranging from 1.4 to 2.4 times their current PPP, could be added to their national incomes. To the extent that the EQx does a good job of capturing 'relative' Elite Quality, and the elite theory of economic development can be validated, East and South Asia are set to be the next engines of global economic growth.

Visual 1.2: Residuals (as a % of GDP) as an indication of future growth prospects, sample of 32 countries



The EQx2024 Contains Rich Analytical Possibilities: The NextGen Value Creation Barometer, the EQx-Indicator Families and Specific Indicator Sets

The EQx2024's munificent dataset can be conceptually sliced and diced to supply insights on specific social, economic, and political phenomena. Two types of EQx data subsets have been formalized: the 'Barometer' and the 'EQx-Indicator Family'. The 'Barometer' approach refers to a subset of data that has been developed with a partner organization and has a weighting scheme applied to indicators that differs from the relative weights used for the EQx. The EQx-Indicator Family approach retains the relative EQx indicator weights. A third diagnostic approach is to select indicator sets to explain a particular elite business model, such as real estate and construction. The EQx2024 includes:

The NextGen Value Creation Barometer (NGVCB)

 Developed in conjunction with the St.Gallen Symposium and the Board Foundation, its aim is to establish the Value Creation/Extraction that occurs from this generation to the next. The NGVCB uses 33 indicators distributed over five categories: Equitable Opportunities; Education and Human Capital; Health and Well-Being; Innovation and Technology; and Ecology and Natural Capital. The 2024 iteration is led by Denmark, followed by Israel and Switzerland (see the analysis and discussion of the methodology on page 10).

Indicator families

- The SDG EQx-Indicator Family is a new addition based on the United Nations' Sustainable Development Goals (SDGs), a framework comprised of 17 goals, 169 targets, and 232 unique indicators providing tangible ways for both countries and corporations to track their progress towards achieving sustainable development (see the analysis and discussion on page 132). This indicator Family tries to answer questions like: How does Elite Quality influence progress towards the SDGs? or, Could there be a trade-off between realizing the SDGs and Value Creation in the economy?
- The Ecology EQx-Indicator Family adds 5 indicators to its original 10 to further underscore the need to integrate environmental considerations at the heart of elite-led economic activities (see the analysis and discussion on page 128). Such an approach would not only help in safeguarding the planet but also ensure that Value Extraction, in whatever domain, is identi-

fied, weighted, and mitigated. The EQx advocates a holistic and balanced view of sustainability and economic development, placing elite agency at the center of inclusive outcomes and growth. The *Ecology EQx-Indicator Family* is therefore a measure of elite commitment to fostering a sustainable future, making ecological concerns essential in comparatively assessing Elite Quality on a global scale.

• The Diversity & Inclusion EQx-Indicator Family rationale is straightforward: any type of discrimination from gender to religion has a business model logic, constitutes a form of rent seeking, and compromises Value Creation. Those discriminated against face barriers that hinder or prevent them from realizing their potential for Value Creation. Moreover, society suffers a serious loss, while the overall Value Creation potential of the economy suffers (see the analysis and discussion on page 126).

Elite quality depends on elite business models. The links between specific industrial sectors and the macro-level through the elite business model transmission mechanism is a key area of inquiry and a benchmark for policymaking. Certain EQx indicators are designed to provide insight into specific sectors, sometimes on a stand-alone basis and sometimes in combination with others.

Indicator sets

• This year, two new indicators put the spotlight on the real estate and construction sectors (see page 102). In partnership with SwissForecast, the Housing Affordability Index (HAI) and the Construction supply gap (CSG), have been developed from industry datasets to establish for a given country the extent to which construction and real estate are either a source of Value Creation or responsible for extraction from non-elites via business model activities such as creating artificial housing shortages. The origins of rent inflation and price bubbles, and the beneficiaries of these value transfers, can thus be assessed.

Indicator interpretation

• The EQx2024 provides a new analytical lens to elucidate any phenomena in the political economy or even in society as a whole. For instance, drug abuse is not a social problem at origin. Drugs are first and foremost an elite business model. This most fatal form of Value Extraction is analyzed on page 106 through the Death rate from substance use disorders (SUB) indicator, and the various policy approaches of different countries, many embedded in intra-elite contests, are brought to light.

Elite Quality at your Fingertips by the University of St.Gallen: Open Access Country Comparison Tools

As one of its flagship research projects, the University of St.Gallen freely provides the EQx country comparison toolset on its website where you can visualize Elite Quality country comparisons based on the PanelEQx (PEQx) data. The aim is to make analyses of Elite Quality accessible to the general public, as well as to students and faculty, in accordance with the university's educational mission: 'From insight to impact'. There is also a second and equally vital

motivation for allowing this access: to foster elite transformational leadership at both the macro-level of policymaking and the micro-level of the firm. The tools essentially allow users to compare elite systems across the world based on their aggregate Sustainable Value Creation. For instance, it is possible to check and compare the Power of a country's elites and how much Value they create relative to those elsewhere.

https://unisg.ch/elitequality



The website is a collaboration between the University of St.Gallen and the Foundation for Value Creation.

Three Elite Quality comparison tools are now available:

• Elite Quality Country Comparison: Compare up to five countries regarding their overall Elite Quality and the Sub-Indices of Power and Value, based on the EQx2024.

Elite Quality Country Comparison Tool (1/3)

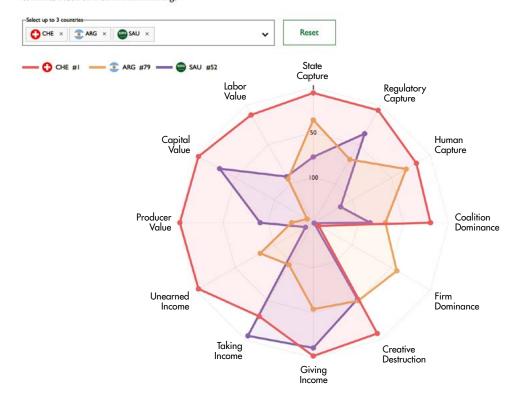
Can we measure if and when elites are 'good' or 'bad' for their nations? To what extent do elite business models focus on value creation rather than extraction? How powerful are elites? Do they use their power and coordination capacity to grow the economic pie for all, or do they rather attempt to increase their slice of the pie at the expense of non-elites? Compare up to five countries on their Elite Quality, the comparative power of their elites (a higher ranking denotes a less powerful elite) and the Value that they deliver.



 Elite Quality Country Comparison at the Pillar Level: Compare up to three countries based on the EQx2024 Pillars.

Pillars of the Political Economy Analysis Tool (2/3)

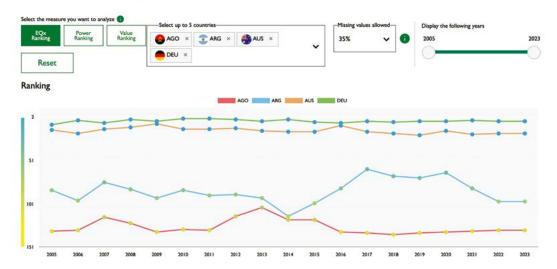
The EQx has 12 Pillars that conceptually classify its component Indicators (134 were used in the EQx2023). Each of the 12 Pillars belongs to one of the four Index Areas: Political Power, Political Value, Economic Power and Economic Value. The Pillars serve the purpose of allowing analysis of specific dimensions of Elite Quality. Compare up to three countries based on their 12 Pillar rankings.



 Elite Quality Historical Country Comparison: Compare up to five countries over time (since 2005) for their overall Elite Quality, Power, or Value, based on the PanelEQx2024.

Elite Quality Historical Comparison Tool (3/3)

The annual EQx reports provide a temporal snapshot of how a country's elites perform in relation to each other in a particular year. But how does Elite Quality evolve over time? The PanelEQx (PEQx), a historical measure of annual Elite Quality starting in 2005, informs this tool. It is essential to specify the percentage of 'missing values allowed' you are comfortable with using (see box below). Compare up to five countries over time for their overall Elite Quality, Power, or Value rankings.



7

Elite Quality Country Comparison Tools: Snapshot

The Elite Quality Country Comparison Tools are meant for all those curious about the state of the world and its future. They are designed for political economy analysts, students, researchers, journalists, policymakers and politicians, investors, business leaders, and others that wish to know how national elites compare to each other and address Value Creation and Extraction. As such, the tools allow you to:

- Compare countries on the quality of their political and economic elites to determine their relative future human and economic growth possibilities.
- Inform your professional decision-making in a variety of ways, ranging from assessing country risk for foreign direct investment projects to how your NGO is likely to fare in a particular jurisdiction.
- Perform individual country analyses of Sustainable Value Creation and establish which parts of the political economy work and which require weighted structural reforms and elite transformational leadership.
- 4. Craft proposals for the transformational leadership of elite business models for boards, the CEO, or top management teams so that the organization's profits are based on Value Creation activities like innovation or inclusive international business rather than on extractive transfers based on market dominance or government subsidies.
- 5. Make policy proposals for structural reforms and institutional change to adjust rules, regulations, and the legal system so that value creators are incentivized, and value extractors are nudged to undertake more inclusive activities.

Basic Notions about Elites and Elite Quality

Definition: Elites are narrow, coordinated groups that run the largest income generating business models in an economy and which successfully accumulate wealth.

Surprise 1: Elites are a mathematical certainty; they are inevitable

Surprise 2: Elites supply essential coordination capacity to societies

Fact 1: Elites can be highquality value creators

Fact 2: Elites can also be low-quality value extractors

Hypothesis: Elite Quality determines economic and human development

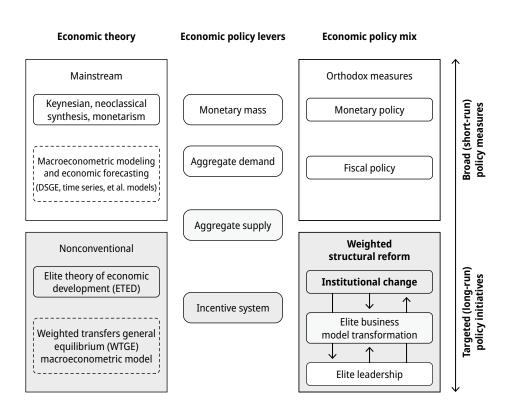
Action: We measure Elite Quality through the Elite Quality Index (EQx)

Takeaway: The EQx is a political economy index that measures the ability of national elite business models – on aggregate – to create value, rather than extract it.

Continuous and Weighted Structural Reforms ensure that there are Incentives for Value Creation (and that Value Transfers are Disincentivized)

Elite Quality is the macro-level conceptual element most relevant for economic and human development. The EQx is at the forefront of various suggested measurements to articulate Sustainable Value Creation and create a toolbox for elite coalitions wishing to design policies and strategic initiatives towards the transformation of their business models. Many of the contributions in the EQx report use the Country Scorecards to suggest such policy changes. The key is to adjust the legal, regulatory, and other incentive systems so that business models engage in Value Creation rather than in Value Extraction. Structural reform trumps the orthodox monetary and fiscal policy mix and its broad, short-run measures. To succeed, structural reforms must be 'weighted' to balance and optimize Value Creation and Value Extraction through trade-offs.

Visual 1.3: The ETED in the economic policy mix: A weighted structural reform approach for the incentive system (Source: Figure 7.1, Casas-Klett, 2024, in press)



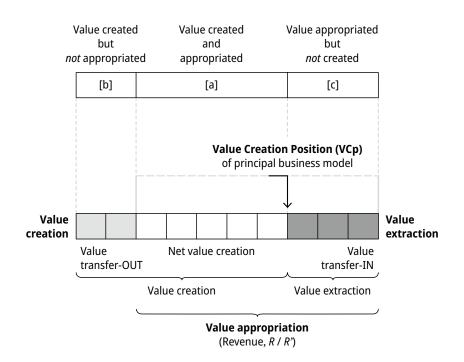
The Sustainable Value Creation of Firms: The Logical Next Step

This report defines Elite Quality as 'The Sustainable Value Creation of Nations'. But how does the weighting and trade-off between Value Creation and Value Extraction occur at the micro-level of the firm or organization? The EQx macro-level project will next be paralleled by an initiative for companies: 'The Sustainable Value Creation of Firms'.

The initiative, based on Casas-Klett & Nerlinger (2023), will first cover assessments of Sustainable Value Creation (SVC) for approximately 100 listed global firms. The theoretical foundation for micro-level SVC measurements will mirror the EQx architecture and conceptual elements. Every firm extracts value from society that it both monetizes (Value transfer-IN) while also injecting value back into society (Value transfer-OUT). Obviously, firms also create value that is monetized (Net Value Creation). The starting point for the SVC measurement is to conceptually establish transfer-IN and transfer-OUT through Metrics (the firm-level equivalents of EQx indicators). These quantities, depicted in the 'value spectrum' of Visual 1.4, are then weighted and every firm will receive a 'rating' reflecting its Value Creation.

Transcending traditional approaches utilized in ESG ratings, firms are assessed on their business models and how much Value these create or extract/transfer from society. It is intended that the 'rating' will adjust the valuation of equity and debt instruments, as well as the overall valuations of firms. The all-important elite business model transformation towards higher Value Creation levels is contextually enabled by both the top-down incentive structures that emerge from the economic policy mix (see Visual 1.3) and the bottom-up transformational leadership of CEOs and boards intent on implementing strategies to improve their Sustainable Value Creation rating.

Visual 1.4: The 'value spectrum' (also referred to as the 'business model value creation spectrum') (Source: Figure 2.11, Casas-Klett, 2024, in press)



1.2 The NextGen Value Creation Barometer 2024: Prioritizing Opportunities for the Young

Now in its third year, the NextGen Value Creation Barometer sheds light on the global state of intergenerational fairness. As a collaboration between the St.Gallen Symposium, the Foundation for Value Creation, and the Board Foundation, the Barometer is the EQx component that focuses on those aspects of national elite models that either deliver a legacy of Value Creation or, conversely, extract value from young and future generations.

In order to achieve these aims, the Barometer assesses five key categories, building on a literature review of intergenerational equity, as well as a global, cross-generational survey that asked respondents to rank the importance of key intergenerational issues (Gaspar, et al. 2022). The first category, Ecology and Natural Capital, focuses on the extent to which dominant elite business models deplete or preserve natural resources and ecosystems for future generations. This category is deemed to be the most important of the five and therefore carries a weight of 30%, compared to 17.5% for the other four, to acknowledge the significance of healthy planetary ecosystems as a foundation for any future Value Creation. The second category, Equitable Opportunities, measures the distribution of economic opportunities across generations, focusing on factors such as social mobility, youth unemployment, and government debt. The third category, Education and Human Capital, stresses the importance of the present generation's Value Creation for the next, in terms of investments in and inclusive access to high-quality learning and education. The fourth category, Health and Well-Being, measures the quality and key outcomes of national health care systems, while the fifth category, Innovation and Technology, explores the capacity provided to the next generation to drive scientific discovery and develop disruptive business models.

Within these categories, indicators have been given specific weights. This was done to account for the relative relevance of a specific indicator (such as CO2 emissions within the Ecology and Natural Capital category and the Youth unemployment rate for Equitable Opportunities). Moreover, the Barometer also weights those indicators that most strongly relate to elite agency, i.e., the extent to which active Value Creation efforts are being made for the next generation (e.g. R&D as % of GDP, Government education expenditure). Such indicators were weighted higher than those that point only to outcomes (e.g. Life expectancy, Internet access), as these tend to depend more strongly on a country's overall income level.

The findings from this year's Barometer once again underscore the importance of focusing on the long-term dimensions of Value Creation and Extraction, the conceptual foundation of the EQx, and provide several noteworthy results:

As in previous years, many smaller, European economies top the list, with Scandinavian countries such as Denmark (#1), Sweden (#4) and Norway (#7) all scoring particularly well.

Denmark, the top-ranked country in the 2024 Barometer, scores particularly well across the categories of Equitable Opportunities and Education, which can be seen as the result of the significant public investments made by the Danish state into public goods. Remarkably, Denmark, which ranks #10 in the overall EQx, combines a large role for the state with a cutting-edge ecosystem for Innovation and Technology, with the success of Novo Nordisk the most prominent recent example. This also in part explains why Denmark ranks relatively highly in the Ecology & Natural Capital category; it is the country with the most green patents per capita, and has one of the world's highest shares of renewable energy in its energy mix.



This year's findings once again highlight that long-term Value Creation is a multifaceted concept, with countries leading in some categories whilst being laggards in others. Across the wealthy OECD economies at the top of this year's rankings, great investments in health, education, and technology are built on an extractive relationship with nature, leading to poor scores in the Ecology and Natural Capital category. To truly create sustainable value for young and future generations, reducing CO2 emissions—the indicator given the highest weight in the Barometer—is of paramount importance.

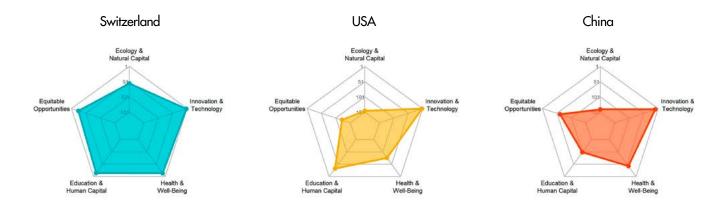
Israel retains its #2 ranking in the 2024 Barometer, but the events that began on October 7th, 2023 will upend everything (EQx data is mostly prior to that tragedy). Peace is the most important of all public goods and with two wars now raging on the European Union's doorstep, the portents should be of concern for all young people worrying about the future.

Compared to 2023, the performance of China has fallen significantly (from #54 to #73). This is mainly due to a strong drop in its ranking in the Equitable Opportunities category, which can be explained by increased social inequality (as measured by the *Gini coefficient*), rising government debt and a stark increase in the Youth unemployment rate. The United States has also fallen in the 2024 Barometer (from #76 to #79) and remains behind China. On top of its highly unequal

wealth distribution, the country suffers from the practices of diverse elite business models that create high levels of *Substance abuse* and *Government debt* levels that are certain to limit the future Value Creation of the young. A general observation that can be made is that for large powerful nations that score well in many areas and sit at the top of the international hierarchy, overall Value Creation is at risk when there is extraction from the next generation.

The relatively poor performance of China and the US contrasts with the gains made in two other important economies. Noteworthy improvements have been in South Korea (rising from #17 to #13), in part due to the advances made in the category of Innovation and Technology and evidenced by increased labor productivity growth and higher investment in research & development. Also, the East Asian nation (which ranks #6 in the overall EQx) has increased Public spending on education, explaining its top performance in the most recent Programme for International Student Assessment (PISA), which saw several European countries fall significantly behind. For now, South Korea is even ahead of Japan (#14), despite the latter's improvement (up from #19 last year). Both countries exemplify the only path forward for aging societies: to leave a strong legacy for the next generation. This has all the more merit in societies where pensioners represent the main voting block and elite business models are still often run by literal golden agers.

Visual 1.5: NextGen Value Creation Barometer 2024 country comparison



Note: The spiderweb axes show a country's Rank.

	NextGen Value Creation Barometer Rank	Difference to NGVCB 2023	Difference to EQx2024	Ecology & Natural Capital	Equitable Opportunities	Education & Human Capital	Health & Well-Being	Innovation & Technology
Denmark	1	0	9	24	2	5	39	2
Israel	2	0	5	88	26	10	3	1
Switzerland Sweden	3 4	0	-1 5	57 54	25 41	16 1	15 26	4 8
Netherlands	5	0	-2	95	5	12	19	10
New Zealand	6	2	-1	118	4	2	7	23
Norway	7	-1	10	70	33	13	14	17
Germany United Kingdom	8 9	1 -2	2	53 32	16 71	23 20	36 28	9 7
Slovenia	10	3	23	17	32	18	40	24
Cyprus	11	1	23	46	80	14	10	28
Finland	12	-2	2	99	74	8	32	6
Korea, Rep. Japan	13 14	4 5	-7 -10	132 78	8 65	21 53	13 2	5 13
Australia	15	-4	-70	138	28	3	9	16
France	16	-1	3	42	100	27	31	12
Estonia	17	-1	3	66	59	7	68	20
Austria	18	0	-3	68	75	33	33	15
Belgium Slovak Republic	19 20	-5 2	3 8	110 29	76 47	6 29	43 46	18 40
Czech Republic	21	0	2	115	7	26	38	34
Spain	22	-2	2	90	124	22	8	26
Croatia	23	3	23	40	83	32	48	38
Italy Cuba	24 25	0 11	7 58	67 69	135 9	30 49	4 55	29 60
Portugal	25 26	-1	-1	103	117	24	23	32
Ireland	27	-4	-1	131	93	28	12	22
Singapore	28	1	-27	105	110	74	1	35
Latvia	29	-2	9	45	49	11	114 11	49
Thailand Lithuania	30 31	-2 2	7 11	76 93	53 13	107 37	104	30 27
Hungary	32	-1	8	86	73	48	70	25
Greece	33	1	11	48	147	19	20	36
Bulgaria	34	1	5	26	48	55	87	48
Poland Senegal	35 36	-5 1	1 23	101 16	84 20	47 85	59 94	33 51
Tunisia	37	-5	70	82	131	17	51	56
Jamaica	38	4	41	23	91	35	45	109
Costa Rica	39	4	17	58	144	15	27	69
Chile	40 41	-2	-10	112	126	25	35	43
Panama Romania	41	7 -3	-7	20 61	102 94	77 64	18 62	88 39
Bolivia	43	6	42	65	90	4	101	95
Dominican Republic	44	11	13	41	51	78	54	74
North Macedonia	45	11	30	38	104	79	49	62
Kyrqyz Republic Morocco	46 47	41 11	53 44	83 106	27 92	44 63	88 47	100 46
Turkev	48	-8	14	124	92 78	106	16	37
Colombia	49	-3	12	113	118	50	37	52
Peru	50	1	0	59	89	62	61	78
Mauritius	51	-6	2	84	85	46	78	79
Qatar Algeria	52 53	31 -3	-34 63	145 119	17 96	97 56	6 21	21 84
Taiikistan	54	24	32	55	19	95	63	99
Namibia	55	13	42	1	148	9	113	76
Philippines	56	4	-5	96	12	98	72	66
Ecuador	57 58	-4	11	89 117	60 125	61 31	67 50	86 68
Uruquay Albania	58 59	-1 10	-17 15	44	111	94	42	80
Canada	60	-13	-48	149	82	40	22	19
Jordan	61	2	27	73	133	84	24	59
Malaysia	62	-18	-35	135	72	87	25	45
Armenia Moldova	63 64	27 -23	-14 26	56 87	108 24	69 38	86 105	58 115
Moldova Georgia	65	-23 23	12	85	113	58	89	44
Timor-Leste	66	23	54	19	57	82	79	113
United Arab	67	-8	-35	141	79	91	29	14
Emirates								
Botswana	68	-4	13	15	140 46	39	130	50
Honduras Tanzania	69 70	12 -8	36 28	37 18	22	57 110	75 102	135 94
Bosnia and								
Herzegovina	71	-10	57	121	52	59	56	91
Venezuela, RB	72	50	72	11	139	65	41	106
China	73 74	-19 -22	-52 20	142 130	62 43	100 86	44 64	11 54
Indonesia Paraguay	74 75	-22 4	-29 14	92	43 45	81	85	96
Uzbekistan	76	16	-5	129	18	114	52	57
Serbia	77	8	-12	136	95	73	69	31
Ukraine	78	-13	30	91	97	52	99	97
United States	79	-3	-63	147	122	34	77	3
Gambia, The	80	15	-2	27	14	76	111	136
Mexico	81	-7 40	-29	107	98	54	80	104
Nepal El Salvador	82	-16	40	50	68	70	90	120
El Salvador	83 84	11 -14	32 20	49 116	66 70	104 72	82 58	111 110
Trinidad and Tobago Niger	85	-14 15	20 11	22	1	111	128	128
								41
Egypt, Arab Rep.	86	19	-2	111	130	105	66	41

	NextGen Value Creation Barometer Rank	Difference to NGVCB 2023	Difference to EQx2024	Ecology & Natural Capital	Equitable Opportunities	Education & Human Capital	Health & Well-Being	Innovation & Technology
Kuwait	89	-22	-31	148	61	60	5	87
Kenya	90	-6	4	62	103	89	115	82
Kazakhstan	91	12	-31	140	6	88	91	83
Ethiopia	92	4	27	39	29	119	118	105
Cambodia	93	-7	-26	14	15	151	92	92
Libya	94	16	51	122	143	41	73	90
Sri Lanka	95	-20	5	8	129	117	53	125
Ghana Liberia	96 97	-19 18	-27 5	71 75	116 11	102 83	103 123	71 133
		3		126	63			
Belarus Nigeria	98 99	24	-5 38	72	35	90 71	95 149	81 98
Turkmenistan	100	36	-8	143	3	128	76	47
Rwanda	101	-2	-21	25	112	125	98	85
India	102	-5	-39	108	123	75	124	55
Brazil	103	3	-39	134	145	42	84	67
Nicaragua	104	0	17	12	64	123	93	137
Vietnam	105	-25	-57	139	42	120	60	63
Saudi Arabia	106	-34	-52	144	101	96	30	64
Malawi	107	2	11	10	109	109	110	123
Zambia	108	16	5	4	132	92	112	124
Togo	109	-16	-33	9	86	121	134	103
Iran, Islamic Rep.	110	-2	19	123	87	131	74	61
Côte d'Ivoire	111	-29	-38	30	44	93	136	138
Burkina Faso	112	-10	15	28	40	101	141	127
Guatemala	113	8	10	79	58	116	119	112
Benin	114	0	-32	5	38	115	142	142
Congo, Dem. Rep.	115	-17	17	97	34	112	133	108
Bangladesh	116	-5	-61	114	55	142	83	89
South Africa	117	3	0	127 6	146 107	51 118	107 143	70 107
Mozambique Syrian Arab	118	1	-17					
Republic	119	-3	27	60	119	108	57	147
Gabon	120	-13	13	13	137	141	106	77
Oman	121	-3	-78	150	88	67	34	73
Guinea	122	3	-27	7	23	149	132	129
Burundi	123	-10	-12	31	21	132	127	141
Iraq	124	-7	25	128	142	36	97	118
Mongolia	125	-13	-53	137	36	66	121	126
Equatorial Guinea	126	20	4	35	106	134	139	93
Mali	127	12	-15	63	30	143	125	117
Bahrain	128	2	-99	151	67	113	17	72
Guinea-Bissau Lesotho	129	16 4	-20	2 74	128 114	126	137 150	121 139
Lesotno Mvanmar	130 131	1	11 -21	125	114 50	45 139	100	139
Sierra Leone	131	-59	-21 -7	33	115	80	140	145
Eswatini	133	-59	9	52	141	68	145	116
Lebanon	134	-3	4	120	150	122	81	42
Madagascar	135	0	-21	80	77	130	120	140
Yemen, Rep.	136	-7	12	36	99	103	131	151
Uganda	137	-10	-13	34	81	137	126	143
Russian Federation	138	-1	-35	146	69	99	116	53
Lao PDR	139	-11	-52	109	56	146	96	134
Papua New Guinea	140	1	-34	98	10	129	129	149
Cameroon	141	-8	-15	81	105	145	135	102
Pakistan	142	-16	-11	100	121	133	109	119
Mauritania	143	-3	-9	102	37	144	117	144
Afghanistan	144	0	3	43	31 138	140	144 138	148 114
Haiti Chad	145 146	3	5 -3	51 64	138 39	135 150	138	114
Cnad Congo, Rep.	146	-3 0	-3 -12	3	149	148	122	132
Zimbabwe	148	-10	-12 -8	47	134	138	147	122
Sudan	149	2	2	94	151	127	108	131
Central African Republic	150	-1	-14	21	120	136	151	150
Angola	151	-1	-12	77	127	147	146	146

Note: A difference of -9 means that a country drops by 9 ranks compared to the respective other indicator; a difference of +9 indicates an improvement of 9 ranks.

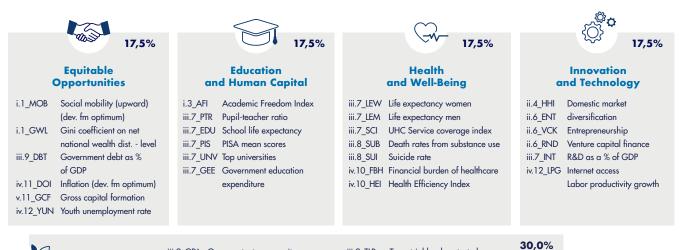
More encouraging news comes from the performance of two large Western economies: Germany (#8) and the United Kingdom (#9). Despite their respective economic woes their elite systems are certainly doing some things right, including in the categories of Innovation & Technology (where they place #9 and #7 respectively) and Education and Human Capital (#23 and #20 respectively).

Some of the emerging countries that perform notably well for intergenerational fairness are Cuba (#25), Senegal (#36), Tunisia (#37), and Costa Rica (#39). To the degree that the Barometer is accurate, their youth will have opportunities to create value in the years to come.

The rankings in the NextGen Value Creation Barometer differ from the overall EQx. The biggest surprise might be that Singapore, the overall EQx2024 winner, places a rather lowly #28. Despite outstanding scores in the Health and Well-being category (#1), the city state's performance in Ecology and Natural Capital (#104) and Equitable Opportunities (#110) leave much room for improvement. This underlines that the intergenerational value relationship, which the Barometer seeks to capture, is a distinct socio-economic phenomenon. As such, it ought to be discretely understood by policymakers, business elites, and society at large, to address disparities and boost the Value Creation prospects of the young.

Felix Rüdiger, St.Gallen Symposium and Tomas Casas-Klett, University of St.Gallen, Switzerland

Visual 1.7: NextGen Value Creation Barometer, 5 categories and 33 component indicators





iii.9_GPA Green patents per capita
iii.9_EPI Environmental Performance Index

iii.9_DER Deforestation rate

iii.9_FUS Fertilizer usage kg per hectar

iii.9_TLP Terrestrial land protected
iii.9_CDO CO2 emissions (metric tons per capita)

iii.9 MWR Municipal waste recycling rate

iii.9_MET Red meat consumption kilograms per capita

NextGen Value Creation BAROMETER

NextGen Value Creation Barometer in partnership with





Methodology of the NextGen Value Creation Barometer

The Barometer uses five categories, comprising a total of 33 component indicators (selected from the 146 indicators included in the full EQx2024). They serve as measurements to highlight intergenerational relationships, both in terms of Value Creation and extractive transfers. The categories selected build on a literature review of intergenerational equity, as well as a global, cross-generational survey that asked respondents to rank the importance of key intergenerational issues (Gaspar, et al. 2022).

The methodology of the Barometer has evolved since its initial pilot in 2022, with three upgrades that are of particular importance.

First, while its five core categories of long-term Sustainable Value Creation have remained unchanged, further indicators have been added to each category to provide a richer, more comprehensive assessment. This applies in particular to the category of 'Ecology and Natural Capital', which now assesses environmental sustainability in multiple dimensions: climate impact and action (e.g., *CO2 emissions*, CDO, iii.9 and *Red meat consumption kilograms per capita*, MET, iii.9), the circular economy (e.g., *Municipal waste recycling rate*, MWR, iii.9) and impact on biodiversity (e.g., *Terrestrial land protected*, TLP, iii.9 and *Fertilizer usage kg per hectar*, FUS, iii.9).

Second, we have introduced different within-category weights for each individual indicator. This was done to account for the relative relevance of a specific indicator (such as CO2 emissions within the 'Ecology and Natural Capital' dimension and the Youth unemployment rate for 'Equitable Opportunities'). Moreover, we aimed to weigh those indicators that most strongly demonstrated elite agency, i.e., the extent to which active Value Creation efforts for the next generation are being made (e.g., R&D as a % of GDP, RND, ii.6 and Government education expenditure, GEE, iii.7). These were weighted higher than mere outcome indicators (e.g. Life expectancy, LEW/LEM, iii.7 or Internet access, INT, iii.7) that tend to depend more strongly on a country's overall income level.

Third, we have allocated a stronger weight to the dimension of 'Ecology and Natural Capital' (30%), relative to the other four dimensions (17.5% each). This was done to acknowledge the significance of planetary boundaries, particularly the world's climate system and biodiversity, for any future Value Creation. It's increasingly clear that environmental crises are humanity's crises, closely interlinked with our future health, well-being, economic prosperity, and capacity to invest in education and innovation. Different aspects of sustainable development and Value Creation interrelate and depend on each other, as in resilience researcher Johan Rockström's (2018) thinking on how a healthy biosphere provides the basis for a society and economy consistent with the aims of the UN Sustainable Development Goals.



1.3 Why Small Nations have Great Elites

We have spent several years researching and trying to understand why a number of small nations lead the world in a number of the metrics considered to be critical to a healthy society including global competitiveness, GDP per capita, prudent levels of debt, PISA scores, confidence in government, and innovation. We have now turned our attention to Elite Quality and concluded that countries that have a smaller distance between their elites and the general population tend to thrive. Why might this be the case?

A successful nation must first and foremost be very good at creating value and then turning it into wealth. High levels of general prosperity will follow. One fruitful path forward is through high levels of exports. That means that a country's products (and services) must have a comparative advantage to prevail over domestic competitors in foreign markets. This is normally achieved through technological superiority.

Private markets are mechanisms to create value and gain stature internationally. Governments should therefore be supportive of private initiatives, fostering conditions that encourage high performance such as providing an outstanding public education system, excellent infrastructure, and a trusted rule of law. Yet there is more. In this context and in many others, it is the elites that play a decisive role.

Here are some general observations:

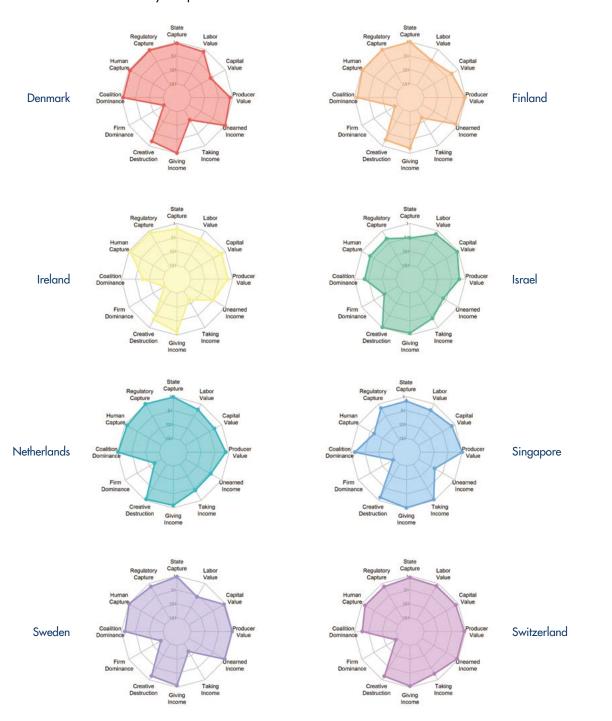
- 1. Cohesion: As elites are conferred a disproportionate amount of power compared to matters that are decided by elections (one person, one vote) it is important that society considers that such power is legitimate. If elites are of high quality and fulfill their role conscientiously then trust and Zusammenhalt will help to bind society together, notwithstanding the superior privileges that elites may have. If the elites abuse this trust or are seen as extracting rather than adding value, widespread mistrust, greater friction, and bad feelings within society will soon emerge and eventually lead to dysfunctionality.
- 2. Trust: The degrees of separation between elites and the general populace are narrower in smaller societies and so the opportunities to validate trust are greater, as are the consequences of destroying it. People have closer relationships and have more data points to call out elites if they are seen to be violating trust or disappointing expectations. This frequency of feedback loops and a higher signal to noise ratio ensures greater social cohesion and higher responsiveness to social concerns by elites.

- 3. Meritocracy: The idea that rewards and positions are based on individual talent and effort rather than family background or social connections is critical to a well-functioning elite. The elite enjoy greater credibility and goodwill from the public if there is a high degree of social mobility and the possibility of entering into the ranks of the elite is possible, regardless of background. This contributes to a sense of fairness and motivates Value Creation and continual striving for upward mobility, the key to social progress. Meritocratic systems place the most qualified and skilled individuals in leadership positions, resulting better decision-making, improved efficiency, and the overall advancement of progress.
- 4. Openness: Due to their size, it is impossible for small nations to source the best global talent locally and yet such human capital is essential to successfully competing at the highest echelons of the global economy. Therefore, it is important for these nations to be open to outsiders and attract the best possible candidates based on merit rather than nationality. The majority of C-Suite members of Swiss multinational corporations come from around the world, as do the professors at leading universities such as the ETH or the University of St.Gallen. We see similar patterns in other small successful nations such as the Netherlands and Singapore.
- 5. Elite circulation: Constant renewal at the top is very important, so that younger, more capable and ambitious potential members of the elite are afforded the opportunity to join the elite and become leaders. Instances where elites cling to their positions of authority irrespective of age and on the basis of favor are a bad sign and counterproductive to a vibrant, forward-looking culture. For example, Prime Minister Lee Hsien Loong of Singapore will step down in November 2024 at the age of 70, notwithstanding his ability, reputation, and legacy, while in Finland, the average age of cabinet members is just 45.

We have identified a 'Group of Eight' nations included in the EQx2024 that reflect the attributes discussed above in their exceptional EQx rankings and scores: Singapore (Rank # 1), Switzerland (Rank # 2), Netherlands (Rank #3), Israel (Rank #7), Sweden (Rank #9), Denmark (Rank #10), Finland (Rank #14) and Ireland (Rank #26).

James Breiding, Founder of S8nations and fellow, Center for International Development, Harvard University

Visual 1.8: S8nations 2024 country comparison



Visual 1.9: Overview of EQx and sub-index ranks for S8nations

	EQx Rank	Power	Value	Political Power	Economic Power	Political Value	Economic Value
Singapore	1	21	1	24	18	1	2
Switzerland	2	17	2	8	26	2	6
Netherlands	3	3	9	3	6	7	15
Israel	7	16	5	36	4	5	5
Sweden	9	11	14	4	16	16	13
Denmark	10	15	10	6	28	6	16
Finland	14	12	19	1	25	24	19
Ireland	26	35	21	15	58	32	17



1.4 EQx2024 Power and Value Sub-Indices at a Glance

Further to the EQx country scores map provided on the inside cover, additional maps for the Power and Value Sub-Indices are presented here. Note the use of different colors to indicate the distance between the Power and Value scores of the featured countries. These provide many interpretative possibilities to explain how a country's political economy relates to its human and economic development outcomes. They reflect elite agency in the use of Power to shape inclusive or extractive institutional arrangements.

Visual 1.10: EQx2024 Power Sub-Index global map (colored according to Power Country Scores)



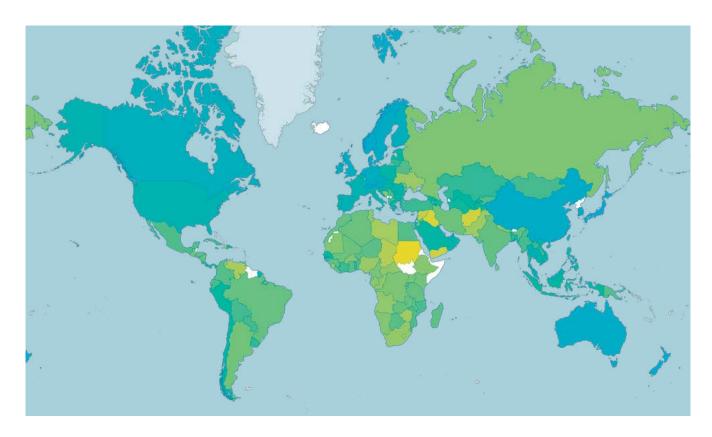
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When examining the maps and related scores two thoughts should be kept in mind:

First, Power is defined as future potential Value Extraction. Assuming a homogenous tendency for Value Extraction by elites across the world, Value scores will, in the mid- to long-term, equalize with Power scores. However, due to discrete elite leadership profiles, cultural issues, historical experiences and other factors, the propensity for elites to extract varies across nations.

The second point to be mindful of is whether and where Power is not used for Value Extraction but rather for Value Creation. Elite systems that have low Power scores have managed to create an effective set of checks and balances for their elites. Elite systems where the Value scores are higher than those for Power, possess elites that that keep their own Power in check and self-restrain their Value appropriation. By doing so, they create the necessary incentives to enlarge the overall size of the pie.

Visual 1.11: EQx2024 Value Sub-Index global map (colored according to Value Country Scores)



1.5 Building and Shaping the EQx Community

The EQx research project was born with a spirit of openness, inclusiveness, and broad international participation. The conceptual framework and accompanying infrastructure are designed to foster the growth of a vibrant community motivated by transforming elites and Sustainable Value Creation. We en-

gage with both institutions and individuals, from users who are stimulated by the EQx rankings to those who wish to become stakeholders in the project and contribute as partners, researchers or patrons.

The EQx for Readers and Followers

The project aims to be meaningful to those who care about taking the long view, building a sustainable society, transforming the political economy, generating ideas for new business models, using power for the greater good, creating value, investing in the future, or for others who are just interested in global rankings and current affairs.

The EQx can be followed on key social media platforms at *LinkedIn*, *Facebook*, *X* and via our website: www.elitequality.org.

Call to Researchers

The EQx2024 Report is a call to all researchers interested in joining the EQx academic community. We will be undertaking projects of both a theoretical and empirical nature, some targeted at publication in leading peer-reviewed journals, while others will focus on the task of providing practical insights for policymakers and firms, essential to making a real impact on business model transformation. Some research partners may wish to take responsibility for work in a particular country. We also encourage the submission of original ideas for new indicators that describe Value Creation and Value Extraction phenomena in the economy. If you are interested in joining this unique research opportunity, or just learning more about our plans, get in touch with us at: research@elitequality.org

Do you wish to Partner with the Foundation for Value Creation (FVC)?

The non-profit Foundation for Value Creation leads the EQx outreach efforts, supports our research and publications program and develops other formats to advance Sustainable Value Creation narratives. We would be delighted to hear from potential benefactors. You may wish to associate your institution with the FVC—or become involved personally—for a variety of reasons. You could be a concerned citizen or running an elite business model; in either case there are many ways to support ideas that 'grow the pie' in the political economy. Together we can help steer our countries' institutions and elite business models towards Sustainable Value Creation. Start a conversation with us now at: partner@valuecreation.org

"Whether one likes it or not, elites play a big role in a nation's success or failure.

They can promote all-round well-being; but they can also be exploitative,

stalling the nation's overall progress.

The newly created Elite Quality Index (EQx), under the academic leadership of the University of St.Gallen, is an exciting experiment in scoring and ranking the quality of elites in different nations. This work can potentially play a role in helping nations reform their leadership, thereby contributing to overall social welfare."

Kaushik Basu, Professor of Economics and Carl Marks Professor of International Studies, Cornell University; Former Chief Economist of the World Bank

"Mainstream economic theory might have reached its limits in terms of practical application.

Fiscal stimuli packages have indebted many countries, while monetary policies have given rise to the bane of inflation. At the same time, Sustainable Value Creation at the micro-level is all too often ignored in macroeconomic policymaking. In China we believe that courageous structural reform is an effective way forward out of crises and in support of inclusive economic development. Reforms must then be based on adjusting the incentive system so that elite business models create rather than transfer value. The elite theory of economic development provides a framework for such structural reform and captures complex trade-offs that require state capacity while at the same time referencing culture and history. Comparing countries based on Elite Quality and their creation of value is both innovative and difficult. The Elite Quality Index (EQx) is a first valuable initiative in this direction and should inspire debate between researchers, policymakers, and the concerned general public across the world."

Zhang Jun, Professor, School of Economics, China Center for Economic Studies, Fudan University, Shanghai, China

"The rise of elites with foresight explains Japan's transformation into a superpower in the 19th century and the post-war miracle. Its inability to let go of past successful experiences led to the bubble economy and subsequent stagnation. Elite quality, as operationalized in the EQx global index, is a distinctly productive framework for comparative evaluation. By describing the micro-level sustainable value creation fundamentals of the political economy, it provides a detailed elucidation of current economic reality and foresight into the growth prospects of nations."

Etsuro Shioji, Professor, Department of Commerce, Chuo University and Specially Appointed Professor, Hitotsubashi Institute for Advanced Study, Hitotsubashi University

"By analyzing elite behavior and rent seeking, the EQx2024 report contains a trove of new insights for political economists. This innovative framework furnishes policymakers with a fresh set of tools to navigate the complexities of the global landscape. The integration of Global Trade Alert data on protectionist measures is particularly welcome, allowing for a nuanced understanding of how government interventions and trade dynamics affect a nation's ability to create sustainable value. The EQx report is an essential resource for anyone seeking to understand and navigate the ever-evolving world of political economy."

Simon Evenett, Professor, University of St.Gallen; Founder, St.Gallen Endowment for Prosperity through Trade

2. Unpacking the Global Elite Quality Index

Chapter 2 presents the conceptual political economy framework of the EQx anchored by the dual notions of Power and Value and discusses how these are operationalized within the EQx architecture. The discussion proceeds to review the index construction methodology that has been applied to the EQx.

2.1 Conceptual Framework and Definitions

The EQx proposes an analytical framework to interpret—and possibly transform—the state of the world's political economies. It is based on a simple idea. The EQx posits that the business models chosen and run by elites determine economic and human development. That is, elites (the 'who') affect human and economic development outcomes (the 'what'), sometimes directly and mostly indirectly via their sway on institutions (the 'how') that set the rules of the game. These rules bestow on elites a 'license to operate'. Both the 'how' and the 'what' have been theoretically discussed at great length and are amply measured. Measuring the 'who' element in the political economy is the research gap that we seek to pursue. We do so at the national level, i.e. by considering the aggregate national elite systems in terms of the Value Creation and Value Extraction impacts of their primary business models.

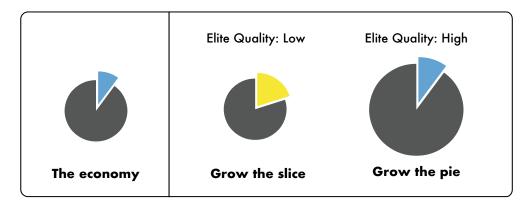
Elites are a mathematical certainty and exist in every society on earth. Their business models generate the most income and are run by leaders possessing the strongest coordination capacity over society's key resources, such as human, financial, and other capital. Moreover, the business models of elites successfully accumulate wealth. Crucially, these business models can be located on a continuum, which ranges from Value Creation to Value Extraction. The latter represent rent seeking, where "a rent is an unearned reward sought through a quest for privilege"

(Hillman & Ursprung, 2015, p. 3). While rent-seeking models are beneficial for the operators, they result in social loss.

The EQx terms elites that run business models creating more value than they extract, 'high quality'. They grow the whole (economic) pie to increase their own wealth and, in doing so, enrich society as a whole. Visual 2.1 describes this metaphor visually. 'Low quality' elites, on the other hand, do the opposite and increase their own slice of the pie at the expense of non-elites. In short, elites can be high-quality value creators, or low-quality value extractors. Obviously, a value creating business model can be transformed into a rent seeking one, or vice versa. This fluidity motivates the annual release of the EQx with the aim of highlighting constructive changes towards transformational leadership made by elites and policymakers.

The EQx proposes that from a sustainability perspective the operation of Value Creation business models is in the longterm best interests of the elites, their families, and associates. By doing this, not only do elites grow their own wealth, but do so by growing non-elite wealth too, without prejudicing the opportunities of non-elites, thereby accruing social legitimacy. Social and political stability are, after all, essential for prosperity. Furthermore, we argue that the prosperity of a nation as a whole depends primarily on the nature of the business models chosen by elites; more specifically, whether elites allocate society's key resources such as savings, talent, or land to value-boosting projects or to projects based on value transfers away from producers. At one extreme, 'rentier capitalism' is when "economic and Political Power allows privileged individuals and businesses to extract a great deal of such rent from everybody else" (Wolf, 2019). In contrast, high-quality elites have a transformative role in the political economyand on society in general—as, by definition, they give more than they take.

Visual 2.1: Macro perspective of Elite Quality: The economic impact of elite business model choices



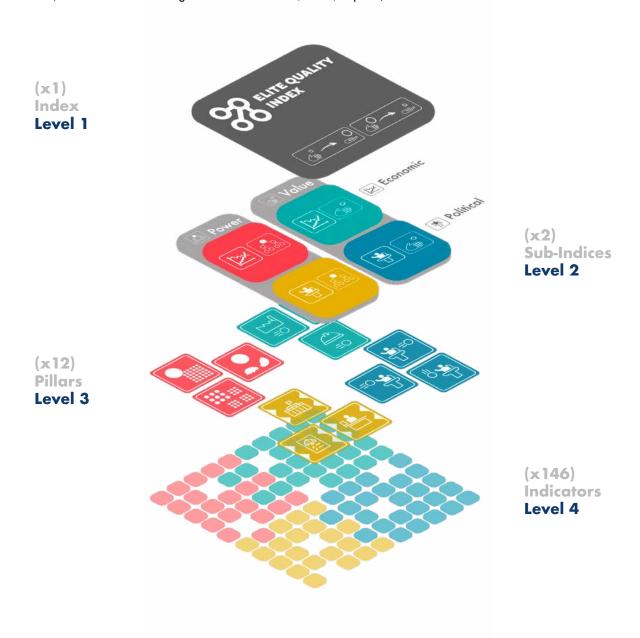
2.2 EQx Architecture

The EQx is a political economy index that measures the overall Elite Quality of nations in terms of the ability of elite business models to create value, rather than rent seek, as evidenced by aggregated datasets.

At the top of the EQx architecture (see Visual 2.2), all of the components of the Index come together to produce the EQx, with its Country Scores and Global Rankings. We de-construct and operationalize Elite Quality through Sub-Indices I and II: Power and Value. The Value Sub-Index I provides

direct evidence of Value Creation and Extraction through elite business models, even though the latter might be easier to measure, since the results of rent seeking are more visible. The Power Sub-Index II conceptualizes the potential for Value Extraction, since there can be no Value Extraction without power. Hence, power is not Value Extraction per se, but rather a necessary, albeit insufficient condition for it to take place. In many countries, elites enjoying high degrees of power invest in and operate inclusive Value Creation business models.

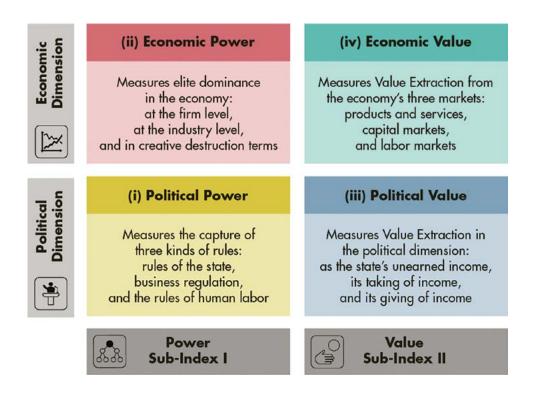
Visual 2.2: EQx Architecture
(Source: Derived from Figure 6.3 in Casas-Klett, 2024, in press)



Each of EQx's two Sub-Indices contain a political and an economic dimension. The former indicates where the rules of business are determined and Value Creation/Extraction is enabled, and the latter denotes where Value Creation/Extraction is actually implemented via suitable business models. This conceptual 2x2 brings to life the EQx's matrix-like 4 Index Areas. Firstly, Political Power measures the capture of three kinds of rules: rules of the state, business regulation, and the rules of human labor. Secondly, Economic Power measures

elite dominance in the economy, at both firm and industry level, as well as in terms of creative destruction. Thirdly, Political Value measures Value Extraction in the political dimension; the state's unearned income, its taking of income, and its giving of income. Fourthly, Economic Value measures Value Extraction from the economy's three markets: products and services, the capital markets, and the labor markets. The 4 Index Areas act as a matrix, the 4 quadrants of which are represented in Visual 2.3.

Visual 2.3: The Four Index Areas: The Power and Value Sub-Indices and their Political and Economic Dimensions



2.3 EQx Pillars

Each EQx Index Area is then complemented by 3 conceptually related Pillars; yielding a total of 12 Pillars in all (see Visual 2.4). The purpose of the Pillars is to define and create conceptual lenses through which we can approach, understand and measure specific phenomena.

The Political Power Pillars (i) were selected to address the capture of 3 kinds of rules: the rules of the state via 'State Capture' (i.1), the rules of business regulation via 'Regulatory Capture' (i.2), and the rules for labor markets and civil service jobs via 'Human Capture' (i.3). 'State Capture' addresses how distributional coalitions capture the state and its government branches, for example, through *Political corruption* (COR, i.1). 'Regulatory Capture' suggests the extent to which rules and regulations, both in terms of process and output, have been captured by interest groups. 'Human Capture' accounts for the power of labor and civil service coalitions, the power of those who can implement discriminatory practices, and the power of elite business models to influence wages and working conditions.

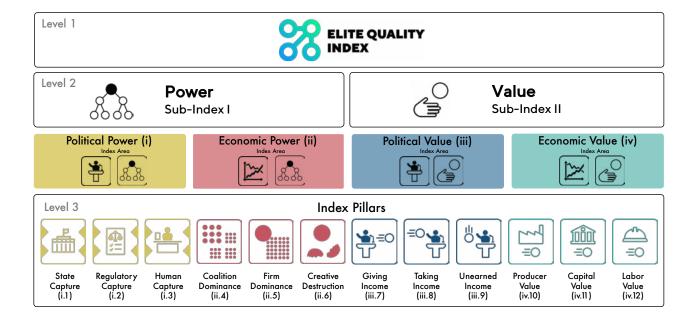
The Economic Power Pillars (ii) measure elite 'Coalition Dominance' (ii.4) and 'Firm Dominance' (ii.5) within the economy, as well as their opposite: the extent of 'Creative Destruction' (ii.6). 'Coalition Dominance' examines the Economic Power of leading industries by measuring the degree of business diversity and the distribution of power in an economy through indicators such as the Economic Complexity Index (ECI, ii.4). 'Firm Dominance' measures the power of single businesses within the economy, using indicators such as Top 3 firms revenues as % of GDP (FRG, ii.5). We borrow Schumpeter's (1942) concept of 'Creative Destruction'—the replacement of outdated business practices with innovative new structures—for the third Economic Power Pillar, which includes measures for Entrepreneurship (ENT, ii.6) and Venture capital finance (VCK, ii.6). The aim is to measure the pressures for renewal and disruption that exist within an economy and fuel Value Creation.

The Political Value Pillars (iii): 'Giving Income' (iii.7), 'Taking Income' (iii.8) and 'Unearned Income' (iii.9), reflect policy decisions in the political sphere that relate to redistribution in its broadest sense: "from one subset of society to benefit a different subset" (Acemoglu & Robinson, 2012, p. 76). An important point here is that we only consider the merits of such redistribution in terms of Value and try to assess whether it has been extracted or created for each surveyed indicator. 'Giving Income' measures how the government manages and uses public finances, in terms of the provision of public goods

such as education or the amount of subsidies distributed in an economy. 'Taking Income' addresses how the state collects such income, as in *Tax revenue as* % of *GDP* (dev. fm optimum) (DTR, iii.8), or whether it allows the existence of business models that take the ultimate value—life—as in Death rates from substance use disorders per 100,000 people (SUB, iii.8). The 'Unearned Income' Pillar focuses on the exploitation of natural resources, such as Natural resources rents as % of GDP (NRR, iii.9), or of the future at the expense of the present, like Government debt as % of GDP (DBT, iii.8). Thus, the Political Value Pillars offer a picture of the degree to which production has been channeled into or shifted away from innovative and wealth-creating sectors of the economy (Porter, 1990).

The Economic Value Pillars (iv) directly measure the extent of Value Creation and Value Extraction from the economy's three markets: the products and services markets, the capital markets and the labor markets. 'Producer Value' (iv.10) estimates the value created or the rents extracted by producers and suppliers in the market for goods and services. 'Capital Value' (iv.11) measures the value created or the rents extracted both directly and indirectly through participation in the financial market. 'Labor Value' (iv.12), which includes indicators such as Unemployment rate (UEM, iv.12) and the Human flight and brain drain (BRN, iv.12), allows us to assess the value created or the rents extracted in the labor markets, for example, from interventions in both supply and demand.

Visual 2.4: The 12 Level 3 Pillars in the EQx Architecture







What is Political?

The dimension where business model rules are determined, and Value Creation/Extraction is enabled.



What is Economic?

The dimension where Value Creation/Extraction is implemented via suitable business models.



What is Power?

The capacity to enforce one's preferences; Power also has the potential to facilitate Value Extraction.



What is Value?

The outcome of productive activities; its creation increases the overall economic pie.

2.4 EQx Methodology

The EQx aims at being an academically grounded and statistically valid measure of national Elite Quality. The multi-dimensionality of the underlying concept is mirrored by the four-level architecture of the index, which allows for an easy interpretation of the state of Elite Quality in a particular country.

Visual 2.5 below illustrates the 9 separate steps in the process for constructing the index. Steps 1 and 2 are detailed in Casas-Klett (2024, in press) and discussed in Sections 2.1 and 2.3 of this Report. Steps 3 to 6 are summarized below. Step 8, the statistical assessment, is addressed in a peer-reviewed paper published in *Social indicator Research* that critically reflects on the EQx2021 rankings (Diebold, 2022).

Throughout the index construction process, judgment calls are inevitable. Hence, our goal is to follow the OECD's *Handbook* on *Constructing Composite indicators* (2008), in that "transparency must be the guiding principle of the entire exercise" (p. 17). As a result, the following Section describes exactly how the EQx is calculated, as well as the underlying assumptions.

Selection of Indicators and Dataset Collection (Step 3)

All 146 EQx indicators provide evidence of Value Creation or Value Extraction in the political economy, either at present, or potentially in the future. As a whole, their aim is to capture and measure all relevant aspects of Elite Quality, according to the Elite Quality theoretical framework, summarized in the Introduction to this Report. For the full list of EQx indicators, see Section 5.2.

The underlying datasets are collected from a variety of renowned international organizations (Section 7.2 provides a comprehensive list of the data sources for each individual indicator). Datasets are then categorized according to whether and how they should be transformed before being utilized to create the EQx indicators. Some indicators are obtained directly from the original data; for example, Control of corruption (COC, i.1) uses one of the Worldwide Governance indicators provided by the World Bank. Other indicators are obtained after some basic transformation of the source dataset, e.g., by setting absolute numbers in relation to a country's total population or GDP. Another set of indicators require more complex transformation, implying data cleaning and more extensive data repurposing, as is the case for Top 3 industries as % of value added (IVA, ii.4).

Generally, the most recently available data is used to compute EQx indicators. That is, wherever possible, the EQx2024 uses data from 2023, and in one case even from 2024.

Visual 2.5: EQx's 9 step construction process

EQx Concept Step 1 Step 2 Discussion of Theoretically the theoretical consistent selectiframework on of Indicators **EQx** Input Step 3 Step 4 Step 5 Step 6 Handling of Weighting and Normalization collection and missing data aggregation preparation **EQx Output** Step 7 Step 8 Step 9 Determination Robustness and Visualization of of Country results and sensitivity publication Scores & Global Rankinas

Handling of Missing Data (Step 4)

Fortunately, the datasets considered for the EQx are, for the most part, characterized by being relatively complete. Generally, the EQx approach to missing values aims to avoid any systematic bias in the index scores as a result of missing datapoints. That is, a lack of data should not penalize or favor any country but should solely influence the accuracy of its score.

High data quality is achieved in three main ways. Firstly, the EQx solely considers indicators (as well as countries) that meet several minimum data requirements. Datasets are only included in the EQx analysis if they cover a minimum of 15% of the countries under consideration. Additionally, they must provide recent information on a countries' Elite Quality, i.e., no later than 2019 (although there are, on occasion, some exceptions to this rule). The selection of countries for the EQx2021 was based on the following criteria: countries were included if their index score was based on at least 40 datapoints, and more specifically, on at least 3 datapoints per Index Area and 1 datapoint per Pillar in at least 11 Pillars. The EQx2024 includes the same countries as the EQx2021.

Secondly, if recent data is not available for only a small number of countries, the missing datapoints are imputed with the latest available data.

Thirdly, the EQx implements an "available-case analysis" (Little & Rubin, 2002, p. 54), where indicators are not omitted if they have missing values but included if they fulfill the above minimum requirements. As a consequence, if the value for an indicator is missing for a particular country, the weight of the missing indicator is distributed among the remaining indicators of the same Pillar, in proportion to their respective weights. The EQx methodology thus builds on the premise that indicators within the same Pillar measure similar aspects of Elite Quality.

For the EQx2024, a country's Index Scores is derived from a minimum of 67 datapoints (in the case of Equatorial Guinea). Of the 146 EQx2024 indicators, almost 80% cover at least half of all 151 countries included in the index, 50% cover at least 89% of countries, and almost 20% cover all 151 countries. On average, a country's index scores is computed using 113 datapoints.

An obvious concern is that missing values are not completely random but based on a systematic pattern (OECD, 2008, p. 24), as data availability might be related to a country's Elite Quality. This could represent an important endogeneity bias for the EQx. However, a positive relationship between Country

Scores and data availability would not necessarily indicate bias. Provided that the existing indicators are unbiased, the EQx scores would not be biased, just less precise. By using less, but correct information, the state of Elite Quality would still be depicted. We are confident that this argument applies to the EQx, since it uses data from renowned and trustworthy international organizations.

Still, data constraints might hamper the cross-country comparability of EQx Country Scores. Some indicators stem from different years, while others cover a heterogenous set of countries. The latter implies that each Country Score relies on a different set of indicators (Little & Rubin, 2002, p. 54), which might limit the meaningfulness of the international ranking. However, while these important limitations should be kept in mind, we are confident that the EQx offers valuable insights on aggregate Elite Quality in the considered countries. An uncertainty and sensitivity analysis performed on the EQx2021 suggests that the ranking positions of the top 50 countries are largely robust to modifications in key modelling assumptions. Ranking positions of middle and lower performing countries appear to be more sensitive towards methodological choices, and especially the availability of data. Any interpretation or conclusion on the Elite Quality of these countries based on the exact rank should therefore be treated with caution, and ranking positions should not be taken at face value but rather be seen as indicative (Diebold, 2022).

Normalization of indicator Values (Step 5)

Because indicators initially have different scales and measurement units, normalization is necessary prior to aggregating the data to "avoid adding up apples and oranges" (OECD, 2008, p. 27). Initially, a logarithmic transformation is applied to indicator datasets: firstly, if Pearson's second coefficient of skewedness exceeds unity, indicating strong skewedness (Belfiore & Favero, 2019, p. 63); and secondly, if the indicator is not already based on an existing index. This is to improve the distribution of the data and thus yield more meaningful indicator scores. In total, 17 of the 146 EQx indicators are based on a log transformation.

Subsequently, data is standardized, i.e., converted to a common scale (with mean zero and standard deviation one) by calculating z-scores:

$$I_{q,c}^{z} = \frac{x_{q,c} - mean(x_{q})}{sd(x_{q})}$$

where $x_{q,c}$ indicates the value of indicator q of country c, and $I_{q,c}^z$ denotes the standardized value. This improves the comparability of datasets with large differences in scales and units, as is the case with the EQx indicators. Next, and only if necessary, outliers are winsorized to fall within a [-2,+2] interval. The resulting values are then rescaled so that the indicator scores all range between 0 and 100, using:

$$I_{q,c} = (\frac{I_{q,c}^z}{4} + 0.5) * 100$$

Lastly, and again, if necessary, indicators are adjusted for polarity. That is, they are transformed so that—consistently across all datasets—a value close to 100 indicates a high level of Elite Quality, and a value close to 0 represents a low level of Elite Quality. For reflections on the index normalization scheme, see (Section 2.6).

Weighting Scheme (Step 6a)

The weighting scheme of any index is decisive since it represents an important determinant of the resulting scores and rankings. By weighting index elements, different levels of relevance can be attributed to them. Best practice in index construction suggests that weights must be explicitly consistent with the concept of the index and fully transparent. In other words, first, a weighting scheme must reflect what the index aims to measure and second, each of the datasets that constitute the index must have their weight assigned in a documented and traceable manner.

The weight of each indicator in the EQx depends on its weight within its Pillar, the weight of that Pillar within its Index Area, the weight of that Index Area within its Sub-Index, and the weight of that Sub-Index within the overall EQx.

What does the EQx aim to measure? Again, the aim is to portray the overall Elite Quality of nations in terms of the aggregate Value Creation of a country's elite business models as evidenced by aggregated datasets.

Sub-Index weights

The EQx sees Power as a necessary condition for Value Extraction and rent seeking. The Power Sub-Index I is thus a predictor of potential future Value Extraction. Therefore, the relative weighting for the two Sub-Indices, Power and Value, is conceptual and has been determined by the authors after thorough deliberation: the Power Sub-Index I has a weight of 1/3 whereas the Value Sub-Index II is weighted at 2/3.

Index Area weights

The EQx could also have been called 'the political economy index' because it measures Power and Value in the political economy. Accordingly, each of the EQx's two Sub-Indices contain a political and economic dimension. The weights of the resulting two Index Areas within Power Sub-Index I and Value Sub-Index II are also the result of the conceptual design of the EQx and the authors' judgments: the weights for both are established at roughly 1/3: 2/3 (conceptual deliberations 2 and 3). This determines the weights of all four Index Areas: Political Power (PP), Economic Power (EP), Political Value (PV) and Economic Value (EV). For Power Sub-Index I, the rationale is that Economic Power is supreme, while Political Power reflects potentially extractive processes if these successfully transition into the economic arena. For Value Sub-Index II, the rationale is the higher significance—in terms of direct impact on citizens and economic agents—of the economic over the political in the overall Value Creation processes of the political economy.

Aggregation Scheme (Step 6b)

Anticipating the linear aggregation scheme discussed below, the three conceptual deliberations in weighting imply the following index area weights within the overall EQx: $11.\overline{1}\%$ (PP), $22.\overline{2}\%$ (EP), $22.\overline{2}\%$ (PV), and $44.\overline{4}\%$ (EV).

Pillar and indicator weights

While the weights of the Sub-Indices and Index Areas are determined by conceptual deliberations, a panel of experts is used to determine the weights of the Pillars and indicators. A Budget Allocation Process (BAP) is employed to establish the weighting of the Pillars within each of the 4 Index Areas, as well as weighting the indicators within each of the 12 Pillars. Visual 2.6 summarizes the structure and weighting scheme used in the EQx. Section 5.1 lists all indicators with their respective weights, both within their Pillar, as well as within the overall EQx.

Finally, the EQx applies a linear aggregation scheme. This implies constant and full compensability between each aggregated element at the respective aggregation level (OECD, 2008, p. 33). Within Pillars, indicators are assumed to measure similar aspects of Elite Quality, and as a consequence, full compensability is intended. A similar reasoning applies to the aggregation of Pillars within Index Areas. Moreover, a linear aggregation scheme transmits the relative importance—as determined by the underlying weighting scheme—of the elements that are aggregated at the respective level to the index (Santeramo, 2017, p. 131). Therefore, Index Areas and Sub-Indices are also linearly aggregated, to ensure a full transmission of the relative weights as implied by the theoretical framework.

Visual 2.6: EQx weighting overview



2.5 The PanelEQx (PEQx2024) Dataset: Measuring Elite Quality over Time for Academic and Policy Purposes

What is the role of elite agency in a country's economic and human development? Can we measure when elites are 'good' or 'bad' for their nations? Since 2020, the annual EQx reports have presented a data-driven answer to these questions. The reports reveal a temporary snapshot of how a countries elites perform comparatively to each another over one particular year.

Two key questions then arise: how does Elite Quality evolve over time? Is it possible to measure the evolving impact of elite business models since 2005? To answer these questions, the annual EQx reports represent a natural starting point. However, there are some technical limitations. For instance, due to the unavailability of some historical data, it isn't possible to compute the EQx back in time for all the 146 indicators used in the 2024 report. Furthermore, the annual EQx reports are only partially comparable to each another. This is because each annual iteration attempts to improve the index by adapting the list of indicators to incorporate current events or newly discussed aspects of Elite Quality. Nevertheless, to analyse how Elite Quality is related to other aspects of human and economic development, an empirical and stable measure of Elite Quality over time would likely provide interesting new insights.

Thus, in 2023 we proposed the PanelEQx (PEQx), a historical measure of annual Elite Quality, starting in 2005. The PEQx conceptually corresponds to the EQx. In particular, the PEQx maintains the conceptual framework and resulting multi-level architecture of the EQx. However, taking into account the unavailability of some historical data, the PEQx is computed using only a subset of EQx indicators. Moreover, it is only available for a subset of EQx countries. The size of this subset depends on the amount of missing values a given researcher is willing to accept in the context of his or her research aims. The PEQx provides a high quality, comparative empirical measure of Value Creation and Extraction by a countries' elite over time. Additionally, it represents a flexible and promising tool for researchers interested in empirically analyzing the topic of Elite Quality.

Methodology

How can Elite Quality be measured over time? The PEQx always follows the EQx methodology for a particular year, i.e., the PanelEQx2024 is based on the EQx2024.

Taking into account the availability of historical data, the PEQx uses the 73 EQx indicators that generally all have annual data going back to 2005. By ensuring that the PEQx is based on a common set of indicators each year, the comparability and meaningfulness of the data over time is ensured. However, other considerations are also required. For example, reducing the number of indicators per Pillar also implicitly affects the underlying weighting scheme of the EQx. Following the EQx methodology, the weight of a missing indicator (or Pillar) is distributed among the remaining indicators of the same Pillar (or remaining Pillars of the same Index Area) in proportion to their respective weights.

The resulting dataset provides the data for the PEQx at all index levels between 2005 and 2024. That is, the dataset covers all available historical indicator values in a normalised format as indicator scores as well as the weighted and aggregated index values of countries at the Pillar, Index Area, Sub-Index and overall EQx level, for each year between 2005 and 2024.

The PEQx only uses publicly available data retrieved from renowned international organizations. However, limitations on the availability of data, especially for the earliest years, poses issues in assuring the meaningfulness and comparability of index values over time. This is because index country scores that are computed based on differing sets of indicators are less comparable to one another, thus restricting the informative value of the implied country ranking over time. For instance, for the 73 generally available EQx indicators used for each PEQx year, up to 54% of values per year are not available for the countries Afghanistan and Timor-Leste.

On the other hand, the aim is to comparatively measure Elite Quality for as many countries as possible. In this context it is important to note that the selection of countries affects the computation of all index values via the normalization process. We address this trade-off as transparently as possible. Data will be made freely available for use at www.elitequality.org/peqx. Researchers interested in investigating Elite Quality can specify the maximum proportion of missing values that they are comfortable with and then use the PEQx for the implied set of countries. The table below indicates the number of countries included in the PEQx depending on the maximum proportion of missing values in the underlying dataset.

Visual 2.7: Table with sets of PanelEQx countries subject to data availability (percentage of missing values)

Percentage of missing values allowed for any country and year	Implied nr. of countries	Countries (additionally) included
10	35	Australia, Austria, Belgium, Bulgaria, Canada, Switzerland, Czech Republic, Germany, Denmark, Spain, Estonia, Finland, France, United Kingdom, Greece, Croatia, Hungary, India, Ireland, Israel, Italy, Lithuania, Latvia, Mexico, Netherlands, Norway, Poland, Portugal, Russian Federation, Slovak Republic, Slovenia, Sweden, Thailand, United States, South Africa
20	66	Argentina, Armenia, Azerbaijan, Bangladesh, Brazil, Chile, China, Colombia, Costa Rica, Cyprus, Dominican Republic, Ecuador, Georgia, Honduras, Indonesia, Jamaica, Japan, Kazakhstan, Korea, Rep., Sri Lanka, Morocco, Malaysia, New Zealand, Pakistan, Peru, Philippines, Paraguay, Romania, Tunisia, Turkey, Ukraine
30	110	Angola, Albania, Benin, Burkina Faso, Bosnia and Herzegovina, Belarus, Bolivia, Botswana, Cameroon, Congo, Rep., Egypt, Arab Rep., Ethiopia, Ghana, Guatemala, Iran, Islamic Rep., Jordan, Kenya, Kyrgyz Republic, Cambodia, Lebanon, Moldova, Madagascar, North Macedonia, Mongolia, Mozambique, Mauritius, Namibia, Niger, Nigeria, Nicaragua, Panama, Saudi Arabia, Senegal, Singapore, El Salvador, Tajikistan, Trinidad and Tobago, Tanzania, Uganda, Uruguay, Uzbekistan, Venezuela, RB, Vietnam, Zambia
55	151	Afghanistan, United Arab Emirates, Burundi, Bahrain, Central African Republic, Côte d'Ivoire, Congo, Dem. Rep., Cuba, Algeria, Gabon, Guinea, Gambia, The, Guinea-Bissau, Equatorial Guinea, Haiti, Iraq, Kuwait, Lao PDR, Liberia, Libya, Lesotho, Mali, Myanmar, Mauritania, Malawi, Nepal, Oman, Papua New Guinea, Qatar, Rwanda, Sudan, Sierra Leone, Serbia, Eswatini, Syrian Arab Republic, Chad, Togo, Turkmenistan, Timor-Leste, Yemen, Rep., Zimbabwe

Note: The table indicates the number and set of countries covered by the PanelEQx, depending on the maximum proportion of missing values allowed for.



Descriptive Results of the PanelEQx, allowing up to 10% of Missing Values per Country and Year

A fairly restrictive requirement of only up to 10% of missing values for the 73 considered indicators for any country and year results in a PanelEQx covering 35 countries. Table 2 summarizes the PEQx ranking between 2005 and 2024 regarding overall Elite Quality, as well as the Sub-Indices for Power and Value. The ranking reveals interesting differences in the state of Elite Quality across the considered countries over time.

As discussed, as a result of the methodological adjustments, the PEQx2024 rankings will differ from the EQx2024 rankings. This allows for a unique analysis over time and could suggest policy recommendations. Switzerland leads the PEQx ranking steadily, in 2005 as well as in 2024. The largest improvement in Elite Quality is displayed by Israel. The Middle Eastern country gains an astonishing 17 ranking positions in

Visual 2.8: PEQx ranking at EQx and Sub-Index levels for 2024 and the differences to 2005

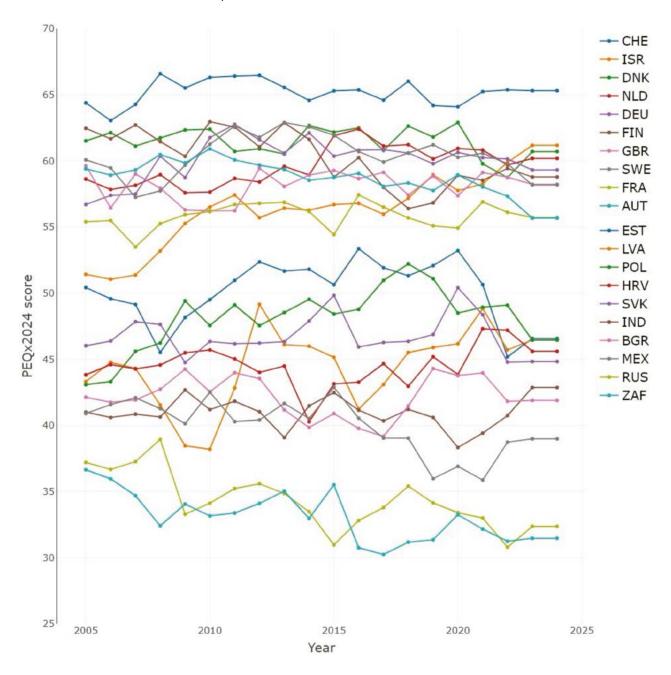
Country	EQx level ranking in 2024	Difference to ranking in 2005	Power sub-index ranking in 2024	Difference to ranking in 2005	Value sub-index ranking in 2024	Difference to ranking in 2005
Switzerland	1	0	2	2	1	0
Israel	2	17	10	3	2	24
Denmark	3	0	12	-9	3	3
Netherlands	4	4	3	7	5	2
Germany	5	4	4	3	7	12
Finland	6	-4	1	0	12	-1
United Kingdom	7	-2	7	2	10	-5
Sweden	8	-4	5	1	11	-2
France	9	4	6	2	17	3
Austria	10	-4	11	-6	14	-4
Belgium	11	6	8	4	18	3
Spain	12	6	13	3	13	1
Norway	13	-3	16	2	9	-7
Australia	14	2	23	-9	6	6
Canada	15	-1	17	-6	15	3
Czech Republic	16	-1	20	-3	8	0
United States	17	-10	9	-7	23	-7
Slovenia	18	-6	15	4	19	-16
Thailand	19	3	31	-1	4	11
Italy	20	3	14	9	22	5
Ireland	21	-10	27	-12	16	-12
Greece	22	9	26	3	20	12
Portugal	23	-2	24	-2	21	-4
Hungary	24	0	21	5	25	-3
Lithuania	25	1	18	9	32	-8
Estonia	26	-6	19	1	30	-17
Latvia	27	1	22	10	29	-1
Poland	28	1	25	-1	27	4
Croatia	29	-2	28	3	24	1
Slovak Republic	30	-5	29	-4	26	-3
India	31	1	30	-2	31	2
Bulgaria	32	-2	32	3	28	1
Mexico	33	0	34	0	33	-3
Russian Federation	34	0	33	0	35	-1
South Africa	35	0	35	-14	34	1

Note: Countries are sorted according to their PEQx ranking at the EQx level in 2024. A positive difference indicates a relative improvement in Elite Quality between 2005 and 2024, and a negative difference indicates a decline in the ranking position.

overall Elite Quality between 2005 and 2024 (readers should keep data availability constrains in mind, with highly topical developments not (yet) mirrored in index scores, see also Section 2.7). Denmark performs steadily in overall Elite Quality (rank #3 in both 2005 and 2024), but with some interesting dynamics playing out at the Sub-Index level: Danish elites appear to have become more powerful (dropping by 9 ranking positions in the Sub-Index for Power) but have used

this power to deepen their commitment to Value Creation rather than Extraction over time (moving up by 3 ranking positions in the Sub-Index for Value). The United States, on rank #17 in 2024 in the PEQx2024, display a decline in Elite Quality over time, dropping by 7 ranking positions both in the Power and the Value Sub-Index, and 10 ranking positions overall. Visual 2.9 illustrates the individual trajectories of countries assessed using the PEQx over time.

Visual 2.9: The PanelEQx2024: The Top 10 and the Bottom 10 Countries in 2024



Tomas Casas-Klett, Guido Cozzi, Céline Diebold and Alexander Tonn, University of St.Gallen



2.6 Critically Reflecting on Normalization

Initiated in 2020, the EQx project is the first systematic attempt to empirically measure Elite Quality: the relative Sustainable Value Creation of elites in proportion to their rent seeking. This is done by means of an index, because composite indicators can account for the multi-dimensionality of such an investigated phenomenon without losing the underlying information base. Indicators thus facilitate the communication of key insights to decision-makers as well as the interested public. However, there is no 'objective' way to construct an index, and any changes to the EQx' underlying assumptions and computational methods can have considerable effects on the resulting country rankings (Diebold, 2022). Hence, the overarching objective of the EQx is to make all index assumptions, as well as the underlying decision-making process, as transparent and justifiable as possible.

Each annual iteration provides a new opportunity to evaluate the index and make judgments on how it might be improved. The most expeditious way to achieve this is by refining the selection of indicators, meaning that new ones may be added, while others that are deemed to be less effective at reflecting a Value Creation/Extraction phenomenon may be discarded. Another approach to improving the index is to adjust the weights allocated to individual indicators. The detailed EQx methodology is described in 'Measuring Elite Quality' (Casas-Klett, Cozzi, Diebold, & Zeller, 2020), a paper whose main tenets have evolved since it was first written to support the publication of EQx2021, with the major changes summarized in Section 2.4.

An important parameter with wide ranging implications for any index concerns the way that raw indicator values are normalized. Because indicators initially have different scales and measurement units, normalization is necessary prior to aggregating the data to "avoid adding up apples and oranges" (OECD, 2008, p. 27). The comprehensive Uncertainty and Sensitivity Analysis presented in Diebold (2022) highlights the normalization process as one of the most important methodological choices in the construction of the EQx. This is also due to how the normalization scheme interacts with the issue of missing data (Diebold 2022, p. 152). Hence, this article briefly compares and contrasts the present EQx normalization method, based on z-scores, with an alternative Min-Max method. Both methods are common approaches applied in the composite indicator literature.

Normalization Scheme based on z-Scores (the Baseline EQx Scheme)

The EQx normalization process that is applied to raw indicator data relies on the computation of z-scores. That is, data is standardized, by calculating z-scores:

$$I_{q,c}^z = \frac{x_{q,c} - mean(x_q)}{sd(x_q)}$$

where $x_{q,c}$ indicates the value of indicator q of country c, and $I_{q,c}^Z$ denotes the standardized value, with a mean of zero and a standard deviation of one. Importantly, any outliers then undergo the process of "Winsorization" that limits extreme values to reduce the effects of outliers. In this case they are winsorized to fall within a [-2;+2] interval, before the resulting values are rescaled so that indicator scores all range between 0 and 100, using:

$$I_{q,c} = \left(\frac{I_{q,c}^z}{4} + 0.5\right) * 100$$

Normalization Scheme based on Min-Max (the Alternative Method)

The alternative option standardizes values according to the Min-Max procedure, applying:

$$I_{q,c}^{m} = \frac{x_{q,c} - min(x_q)}{max(x_q) - min(x_q)}$$

This data scaling technique yields values with a range [0,1]. Next, values are rescaled to fall within a [0,100] interval, applying:

$$I_{q,c} = I_{q,c}^m * 100$$

Implications of using the EQx-based Normalization Scheme vs the Min-Max Alternative

The baseline EQx normalization scheme, based on z-scores, and the alternative, based on Min-Max, can yield substantially different index scores and rankings. The two methods both have their strengths and weaknesses. This is now illustrated by several examples.

Visual 2.10 highlights a particular shortcoming of the EQx baseline normalization scheme. It shows the eight worst performing countries according to the *Death rate from substance use disorders* (iii.8_SUB) indicator. Seven countries have outliers that, after the computation of z-scores, are winsorized to fall within the [-2;+2] interval. This step in the EQx normalization process results in those countries all sharing the lowest possible rank (column (3)). An alternative normalization scheme based on Min-Max would maintain the more nuanced information contained in the raw values, and be mirrored in distinct rankings (column (5)).

Visual 2.10: Example 1: Low-performing countries for the Death rate from substance use disorders (iii.8_SUB) indicator

			aseline normalization neme		ative normalization eme
Country	Raw values (1)	Scores (2)	Ranks (3)	Scores (4)	Ranks (5)
Lithuania	14.26	0.012	#144	10.96	#144
El Salvador	14.95	0	#145	9.9	#145
Ukraine	16.15	0	#145	8.16	#146
Mongolia	16.4	0	#145	7.81	#147
Russia	18.16	0	#145	5.5	#148
United States	22.03	0	#145	1.14	#149
Estonia	22.12	0	#145	1.05	#150
Belarus	23.17	0	#145	0	#151

Note: Raw values and scores are rounded to two decimals, but scores and rankings are computed on unrounded values.

On the other hand, Visual 2.11 highlights a specific strength of the EQx normalization scheme. Outliers in the raw values of hypothetical country "E" (columns (1) and (4)) result in scores that reflect the extraordinary performance of the country (columns (2) and (5)). The alternative normalization scheme would, however, yield extremely high scores (columns (3) and especially (6)) that would exceed the scores of the remaining countries in a non-proportionate way.

Visual 2.11: Hypothetical examples

		Example 2		Example 3					
Country	Raw values (1)	Scores, baseline norm. (2)	Scores, altern. norm. (3)	Raw values (4)	Scores, baseline norm. (5)	Scores, altern. norm. (6)			
A	1	21.41	0	1	28.79	0			
В	2	34.40	20	2	35.86	11.11			
С	3	47.40	40	3	42.93	22.22			
D	4	60.40	60	4	50	33.33			
Е	6	86.39	100	10	92.43	100			

Note: Scores are rounded to two decimals.

The different computational methods even have the potential to rearrange the overall EQx country rankings in substantial ways. This is because, in comparison to the EQx baseline normalization method, the alternative scheme would award both exceptional and particularly bad performance with more ex-

treme scores. It should be noted that this would also worsen the implications of missing data. Visual 2.12 lists how the Top 10 performing countries would differ as a result of utilizing one or the other of the normalization schemes.

Visual 2.12: EQx2024 Top 10 countries when applying different normalization methods

Ranki	ng resulting from the EQx normalization scheme (based on z-scores)	Ranking :	resulting from an alternative normalization scheme (based on Min-Max)
#1	Singapore	#1	Singapore
#2	Switzerland	#2	Switzerland
#3	Netherlands	#3	Korea, Rep.
#4	Japan	#4	Israel
#5	New Zealand	#5	Netherlands
#6	Korea, Rep.	#6	United Kingdom
#7	Israel	#7	Japan
#8	Germany	#8	New Zealand
#9	Sweden	#9	United States
#10	Denmark	#10	Germany

In summary, no normalization scheme is 'objectively' perfect. While the shortcomings of the current baseline scheme should be addressed in the future, entirely replacing it with an alternative would also not yield a satisfactory result. Finding a compromise that benefits from the strengths of the two meth-

ods while minimizing the implications of their respective weaknesses, would be an innovation that could benefit the production of the EQx, as well as other global indices and related research. This is a goal for next year's 2025 iteration of the EQx.

Céline Diebold, University of St.Gallen, Switzerland The EQx attempts to quantify the quality of national elites and elite business models on aggregate. Through annual iterations, the index aims to provide relevant and timely insights. Still, the very nature of this empirical approach has its limits, and this is the topic of this article. Our foremost aim is to elicit a maximum level of transparency.

To comprehensively measure the Value Creation and Extraction of elites, the EQx2024 utilizes 146 indicators that use the *most recently available data* across twelve conceptual Pillars. Like all composite indicators, ensuring the quality and timeliness of the utilized data represents a significant challenge. In particular, several factors can contribute to a considerable time lag between unfolding current events and their reflection in a country's index scores and rankings.

Firstly, data published closely before the report's publication may, while being available, not be used. Indicators are updated as closely to the date of publication of the report as possible—in general this is roughly 3 months prior to publication. Subsequent data source updates, if published after this date, are incorporated into the EQx the following year.

Secondly, the EQx attempts to measure the multidimensional concept of Elite Quality as comprehensively as possible. Hence, every annual iteration of the index provides an opportunity to update the list of indicators measuring Value Creation and Extraction. New indicators are introduced either because of newly available data or because they account for entirely new Value Creation or extraction phenomena. For instance, the

EQx2021 introduced indicators for *Covid-19 fatality rate,* age-adjusted (COF, iii.7), among others, in the context of the pandemic that had started the previous year. The EQx2023, however, purged these indicators due to their declining relevance and concerns related to whether they were still being accurately updated. Another example relates to the indicators for *Government AI Readiness Index* (GAR, iii.7) and the *Global AI Index* (GAI, iv.10) that have been introduced into the EQx2024 to take account of the rapid recent developments in Artificial Intelligence.

A third aspect concerns the temporal availability of data. The underlying datasets for the EQx are collected from various international organizations, such as the World Bank, the International Labour Organisation, the International Monetary Fund, and several United Nations' databases. These organizations usually publish data with a time lag of one or more years, and updates, at least initially, are only provided for a subset of countries. The data thus also enters the EQx with a time lag. This has significant implications for the index. In particular, the characteristics and consequences of black swan events such as major economic crises, pandemics, or wars, are only reflected in EQx scores after the fact. Country rankings may thus appear counterintuitive, with highly topical events or developments not (yet) mirrored in index scores.

The case of Israel underscores such empirical challenges. Despite the tragic events that began in October 2023 and continue to impact the region, Israel maintains a high ranking in the EQx2024. This result is primarily due to data availability, as most of its indicators reflect information gathered from 2022 or earlier. Visual 2.13 illustrates data availability for Israel. Similar considerations apply to the cases of Ukraine and Russia, also presented in the Visual 2.13 below.

Visual 2.13: Descriptive statistics regarding data availability, by country

	Year Indicators	are from					
Country	Min	1st Qu.	Median	Mean	3 rd Qu.	Max	°Avail. Indicators
Israel	2012	2021	2022	2021	2022	2024	134
Ukraine	2012	2020	2021	2021	2022	2023	119
Russia	2012	2020	2021	2021	2023	2024	134

Given the limitations of an empirical approach and the aim for transparency in representing the overarching goal, the EQx project provides an empirical measure of elite Value Creation that may not always be easy to interpret and accurately reflect current events and debates. As the EQx aims to measure

"long-term economic and human development prospects", short-term disruptions, as dramatic as they might be, are not always visible in the data. Readers should therefore keep data availability constraints in mind when putting index scores and country rankings in context.

> Céline Diebold, Alexander Tonn, Guido Cozzi and Tomas Casas-Klett, University of St.Gallen, Switzerland

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2.8 The Elite Quality Index as a Resource for International Business Education

"The raison d'être of international business education lies in helping students become respectable global leaders and citizens through transformative learning." (Paik, 2020)

In studying the role and behavior of firms in the global economy, the field of international business (IB), needs to prepare future leaders "(...) to interpret and evaluate global issues" (Paik, 2020). As a field, IB is unique due to its focus on the context, connection, and complexity inherent to being "global", as Dau et al. (2022) emphasize in AIB Insights, the practice-oriented publication outlet of the Academy of International Business. Context refers to the fact that firms do not operate in a vacuum and that they are always embedded in a multi-layered institutional environment shaped by various actors (see, for example, Peng et al., 2008; Peng et al., 2009, among others). Connection refers to IB's unique and often challenging task of bridging different levels, units, and disciplines of analysis. Complexity refers to IB's systemic nature via the linkages to context and connection, thereby enabling a comparative analysis of real-world implications for international firms (Dau et al., 2022).

International business courses and executive programs need to educate students in many knowledge areas, while providing them with the skills to navigate context, connection, and complexity (the three C's) to prepare them for an increasingly demanding global business environment. To the best of our knowledge, there are no integrated textbook solutions for many of the current key challenges in IB such as the changing geopolitical environment, the reconfiguration of value chains, re-globalization, the increasing relevance of sustainability and corporate social responsibility, equality, diversity, and inclusion, or the disruptive effects of AI. Moreover, soft skills such as creative and interdisciplinary thinking and cross-cultural communication are becoming essential. As today's world is more intertwined and complex than ever before, business schools need to provide students and executives with the tools and skills to understand the realities of the world and the causes and effects of global trends so that they are able to rigorously, thoughtfully, and strategically incorporate cutting-edge insights into their decision-making processes.

The Elite Quality Index (EQx) is a comparative country-level ranking and data repository that measures the level of Sustainable Value Creation in a society. As such, it naturally relates to the three C's. It is a unique, differentiated, and powerful framework that provides a transformative resource for the leaders of tomorrow in addressing the challenges for IB. The index is contextual, as it analyzes and ranks countries, one of the unique settings in which firms operate (1st C: Context).

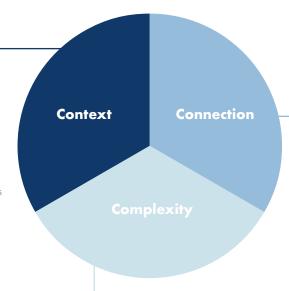
It is interdisciplinary, combining insights from economics, politics, and management, as well as functioning cross-level via its multidimensional index architecture (2nd C: Connection). Finally, the EQx is comparative in nature and tracks real-world changes (3rd C: Complexity). Visual 2.14 highlights the potential pedagogical usefulness of the EQx in addressing the three C's of IB. Below we illustrate the EQx's usefulness as a resource for IB education with three examples.

First, the EQx is designed as a holistic political economy index with 12 discrete Pillars that provide perspective. Its focus is on elites, whose agency shapes institutions and, as such, a country's long-term development trajectory. The Value Creation of elite business models thus affects the investment climate, and, ceteris paribus, the projected returns on foreign investment in each country. We believe that the EQx, in providing a comprehensive aggregate statistic for Sustainable Value Creation, is a unique independent variable for analyzing foreign investment opportunities through its implied considerations of risk and opportunity. It may very well serve as a complement in cross-country regressions, standing in line with the conceptual ideas of the institution-based view, the third leg of the strategy tripod in IB.

Visual 2.14: The EQx and the three C's (Context, Connection, and Complexity) of International Business. Derived from Dau et al. (2022).

- Context Matters (firms do not operate in a vacuum)
- Relevant, Generalizable and Timely
- Established Field

The EQx is a country ranking combining various index-dimensions and indicators to provide context for the firm



- Cross-Disciplinary
- Cross-National
- Cross-Level

The EQx combines insights and theory from economics, political sciences, management (and more) across a multitude of levels of analysis for various countries

- Systemic in Nature
- Comparative
- Real World Implications

The EQx is systemic in nature as it provides comparative insights, incorporates real world developments and enables the derivation of practical insights

Second, the EQx can add value to IB education by actively connecting the dots and encouraging integrative thinking to master the diverse challenges of today's international business landscape. As ChatGPT and Perplexity AI have become mainstream, information is readily and easily available. However, the interpretation of data is not standard, and differentiated analyses have become ever more difficult. While AI tools are great resources for providing information, they lack the ability to connect the dots in original and novel ways and provide reasoning on the advanced level necessary for strategic and competitive decisions. Today's leaders need to manage nustakeholder relationships—from customers host-country politicians and bureaucrats—all embedded in specific contextual settings in order to take into account the full complexity of the world. Awareness of the major contextual drivers and constraints—the outcomes of elite agency—is essential. Analyzing Elite Quality offers a unique understanding of a wide array of phenomena; from Political Power (i), Youth unemployment rate (YUN, iv.12), Suicide rate (SUI, iii.8), and Substance abuse (SUB, iii.8) to the level of Property rights (PRI, i.2) protection. These ex-ante insights can help multinational enterprises leverage their own firm-specific advantages to transform the perceived liabilities of foreignness into assets (Lu et al., 2022).

Finally, in order to leverage a resource like the EQx, leaders need to be fluent in data literacy and possess the relevant analytical skills. Integrating the EQx into modern business school education enables exactly that: in-class, hands-on training to acquire these skills and then practice them through data-centric business cases to develop strategic foresight. Using data insights from the EQx2024's 146 indicators, or its sister panel data version (PEQx) that provides a comparative time series from 2005-2024, will enable both students and executives to identify a country's strengths and weaknesses over the long run for strategy formulation. For example, how could a multinational entering a foreign country leverage domestic strengths, such as highly skilled labor, while proactively helping the host government in addressing weaknesses, such as high levels of substance abuse or suicide? Companies that provide mutually beneficial and creative ideas that align their business interests with the demands for social justice and environmental sustainability in host countries will succeed in the global economy.

As part of the broader EQx community, we have already worked on international projects and strategies with students, executives, and leaders at top business schools from Switzerland to China using the EQx's data-centric approach as an educational resource. Whether at the undergraduate, graduate, or executive program level, the Value Creation vs Value Extraction framework leads to unique reflections, insights, and decision-making. We encourage fellow educators to leverage the immense resources that the EQx provides and utilize it in IB courses.

To our delight, the EQx has also been used as a resource beyond IB in recent years. For instance, in comparative economics courses at Cornell University taught by leading academics such as Kaushik Basu, former Chief Economist of the World Bank. As early as the 2022 edition of the EQx, he noted that: "This work can potentially play a role in helping nations reform their leadership, thereby contributing to overall social welfare".

We agree, and believe that only the troika of nations, firms, and individuals can foster a virtuous cycle of inclusive and sustainable long-run prosperity for all.

Weilei (Stone) Shi, Cheung Kong Graduate School of Business, Shanghai, China and Alexander Tonn, University of St.Gallen, Switzerland

3. EQx2024 Results

3.1 Elite Quality Country Scores and Global Rankings

Visual 3.1 (1/4): EQx2024 table of Country Scores and Global Rankings with Power and Value Sub-Indices

		E	Qx		Sub-Indices Sub-Indices								
						Po	wer (I)		-	Val	ue (II)		
Country	Rank		end vs x2023	Score	Rank		end vs x2023	Score	Rank		end vs ex2023	Score	#datapoints /146
				Very	High Qual	lity El	ites						
Singapore	1	4	1	65.3	21	4	2	63.7	1	⇒	0	66.0	122
Switzerland	2	Ψ	-1	64.8	17	Ψ	-6	65.9	2	⇒	0	64.2	136
Netherlands	3	4	3	64.5	3	4	6	71.9	9	⇒	0	60.7	135
Japan	4	→	0	64.4	13	4	1	67.4	4	Ψ	-1	62.9	137
New Zealand	5	Ψ	-2	64.0	10	Ψ	-3	68.2	6	Ψ	-1	61.9	125
Korea, Rep.	6	4	13	63.7	5	4	15	71.0	13	4	6	60.0	135
Israel	7	Ψ	-2	63.6	16	Ψ	-1	66.0	5	Ψ	-1	62.5	134
Germany	8	→	0	63.4	4	Ψ	-3	71.9	17	小	3	59.1	139
Sweden	9	4	1	62.7	11	Ψ	-3	68.2	14	⇒	0	59.9	137
Denmark	10	4	1	62.5	15	4	1	66.3	10	⇒	0	60.6	139
				Н	igh Quality	Elite	•						
United Kingdom	11	Ψ	-2	62.3	9	Ψ	-4	68.6	16	Ψ	-4	59.2	140
Canada	12	→	0	62.2	6	Ψ	-3	69.8	20	小	1	58.3	136
Australia	13	Ψ	-6	62.0	18	Ψ	-5	65.5	12	Ψ	-5	60.3	137
Finland	14	→	0	61.5	12	Ψ	-6	67.7	19	4	6	58.4	138
Austria	15	→	0	61.5	19	Ψ	-2	65.1	15	→	0	59.7	137
United States	16	4	5	61.3	2	⇒	0	72.0	27	4	10	56.0	140
Norway	17	Ψ	-4	61.0	24	Ψ	-3	61.6	8	Ψ	-2	60.7	137
Qatar	18	4	5	60.4	43	Ψ	-3	54.7	3	小	5	63.3	104
France	19	Ψ	-3	60.2	8	4	2	69.0	28	Ψ	-1	55.9	142
Estonia	20	Ψ	-2	59.9	1	4	3	72.7	43	Ψ	-14	53.5	131
China	21	4	1	59.6	36	Ψ	-11	58.0	11	4	6	60.4	131
Belgium	22	Ψ	-5	59.5	7	4	5	69.6	33	Ψ	-7	54.5	140
Czech Republic	23	4	3	58.9	31	ተ	6	59.5	18	Ψ	-2	58.6	131
Spain	24	4	1	58.9	20	Ψ	-2	63.9	25	4	5	56.4	140
Portugal	25	4	5	58.4	14	4	12	66.5	34	Ψ	-1	54.4	135

		EQx		Sub-Indices							
					Power (I))		Value (II)		_	
Country	Rank	Trend vs EQx2023	Score	Rank	Trend vs EQx2023	Score	Rank	Trend vs EQx2023	Score	#datapoints /146	
				Quality El	lites						
Ireland	26	⊸ -2	58.2	35	4	58.2	21	₩ -8	58.3	138	
Malaysia	27	→ 0	57.8	32	4	59.2	23	→ 0	57.1	128	
Slovak Republic	28	14	57.4	22	25	62.6	31	14	54.8	131	
Bahrain	29	6	56.9	67	2	48.3	7	4	61.1	98	
Chile	30	♠ 1	56.6	26	₩ -4	61.1	35	↑ 7	54.4	134	
Italy	31	小 1	56.5	29	₩ -1	59.8	30	№ 6	54.8	138	
United Arab Emirates	32	J -12	56.2	40	J -21	55.5	24	⊸ -2	56.5	118	
Slovenia	33	3	56.1	30	8	59.7	36	₩ -4	54.3	123	
Cyprus	34	J -5	56.1	48	J -14	54.1	22	6	57.1	124	
Romania	35	8	56.0	33	8	58.8	32	27	54.6	130	
Poland	36	∳ -3	55.4	34	₩ -3	58.3	39	₩ -5	54.0	138	
Thailand	37	. -9	55.1	50	₩ -5	52.6	26	₩ -8	56.4	132	
Latvia	38	↑ 7	55.0	28	№ 5	60.0	50	26	52.5	122	
Bulgaria	39	2	54.9	27	→ 0	60.6	54	26	52.1	132	
Hungary	40	⊸ -3	54.8	37	₩ -7	56.7	41	→ 0	53.8	135	
Uruguay	41	₩ -3	54.7	23	♠ 6	62.3	63	J -14	50.9	116	
Lithuania	42	№ 4	54.5	25	∳ -1	61.3	61	26	51.0	130	
Oman	43	小 1	54.4	51	13	52.6	29	№ 6	55.3	101	
Greece	44	☆ 7	54.2	39	♠ 11	56.0	44	24	53.3	135	
Indonesia	45	₩ -6	53.4	41	₩ -6	55.0	48	⊸ -2	52.6	136	
Croatia	46	9	53.2	45	♠ 11	54.4	47	23	52.6	124	
Panama	47	↑ 3	53.2	53	35	51.7	40	₩ -9	53.9	112	
Vietnam	48	J -14	52.8	57	₩ -9	50.2	38	J -14	54.1	122	
Armenia	49	53	52.6	38	35	56.7	64	53	50.5	113	
Peru	50	☆ 7	52.4	52	16	52.0	49	3	52.6	129	
Philippines	51	₩ -3	52.1	54	⊸ -2	51.3	51	→ 0	52.5	130	
Mexico	52	₩ -5	51.0	42	→ 0	55.0	82	J -16	49.0	137	
Mauritius	53	3	50.9	65	19	48.8	57	⊸ -17	51.9	103	
Saudi Arabia	54	⊸ -2	50.6	86	J -14	44.3	42	2	53.7	116	
Bangladesh	55	25	50.5	63	27	48.8	60	12	51.4	120	
Costa Rica	56	22	50.5	56	♠ 6	50.6	65	42	50.4	118	
Dominican Republic	57	13	50.2	78	3	45.7	52	13	52.4	110	
Kuwait	58	→ 0	50.1	83	4 -13	44.7	45	2	52.9	106	
Senegal	59	3	50.0	76	→ 0	45.8	56	小 1	52.0	108	
Kazakhstan	60	J -20	50.0	68	4 -14	48.0	62	4 -23	51.0	123	
Colombia	61	₩ -7	50.0	49	₩ -5	52.8	86	2	48.5	136	
Turkey	62	₩ -2	49.8	66	₩ -17	48.7	66	1 26	50.4	136	
India	63	₩ -4	49.5	46	⊸ -14	54.3	96	20	47.2	133	
Brazil	64	№ 5	49.4	44	₩ -1	54.5	100	1 27	46.8	137	
Serbia	65	17	49.3	59	8	49.5	79	24	49.2	118	
Azerbaijan	66	→ 0	49.3	87	⊸ -12	44.2	59	2	51.9	109	
Cambodia	67	↑ 1	48.8	127	♠ 1	38.1	37	小 1	54.2	110	
Ecuador	68	4	48.6	70	15	47.3	80	-13	49.2	116	
Ghana	69	₩ -6	48.5	61	-3	49.3	88	3	48.1	113	
Argentina	70	№ 9	48.4	47	₩ -1	54.1	113	17	45.6	128	
Uzbekistan	71	18	48.4	114	13	39.8	46	4	52.7	104	
Mongolia	72	₩ -5	48.4	79	8	45.6	73	-18	49.8	107	
Côte d'Ivoire	73	8- 4	48.3	85	4	44.6	67	-19	50.1	96	
Albania	74	19	48.2	77	2	45.8	76	21	49.5	113	
North Macedonia	75	16	47.9	80	⊸ -2	45.4	81	14	49.1	109	

Visual 3.1 (3/4): EQx2024 table of Country Scores and Global Rankings with Power and Value Sub-Indices

		EQx		<u> </u>	Sub-Indices						
					Power (I)			Value (II)			
Country	Rank	Trend vs EQx2023	Score	Rank	Trend vs EQx2023	Score	Rank	Trend vs EQx2023	Score	#datapoints /146	
			Mi	ddle Qualit	ty Elites						
Togo	76	5	47.8	92	2	43.2	68	小 1	50.1	100	
Georgia	77	-13	47.8	123	4 -40	38.7	53	↑ 3	52.3	116	
Gambia, The	78	20	47.7	90	1 6	43.9	75	↑ 4	49.6	87	
Jamaica	79	9	47.7	95	₩ -9	43.1	69	15	50.0	101	
Rwanda	80	⊸ -27	47.6	58	₩ -3	49.6	103	₩ -39	46.6	105	
Botswana	81	₩ -7	47.6	74	→ 0	46.6	90	₩ -9	48.0	109	
Benin	82	₩ -5	47.5	89	↑ 6	44.0	78	4 -15	49.3	97	
Cuba	83	J -22	47.5	84	№ 9	44.6	83	₩ -40	48.9	74	
Egypt, Arab Rep.	84	8	47.3	82	4 -19	44.7	85	34	48.5	122	
Bolivia	85	↑ 2	47.3	98	₩ -6	42.0	71	♠ 6	49.9	105	
Tajikistan	86	1 21	47.3	129	₩ -4	37.7	55	27	52.1	101	
Lao PDR	87	⊸ -12	47.2	100	↑ 2	41.8	70	₩ -16	50.0	96	
Jordan	88	8	47.2	72	4 -13	47.1	95	34	47.2	111	
Paraguay	89	♠ 6	47.0	105	₩ -4	41.2	72	♠ 6	49.9	109	
Moldova	90	⊸ -41	46.9	60	₩ -9	49.3	112	J -50	45.7	102	
Morocco	91	₩ -5	46.7	73	4 -13	46.6	102	19	46.8	122	
Turkmenistan	92	31	46.7	136	12	36.2	58	17	51.9	71	
Belarus	93	⊸ -17	46.4	102	小 1	41.7	84	₩ -31	48.7	107	
Kenya	94	-23	46.1	71	4 -10	47.2	115	⊸ -17	45.5	115	
Guinea	95	32	46.0	91	№ 5	43.6	93	35	47.3	92	
Niger	96	17	45.7	103	18	41.5	91	↑ 2	47.8	98	
Namibia	97	2	45.6	62	4	49.1	123	→ 0	43.9	102	
Tanzania	98	₩ -4	45.6	93	⊸ -2	43.2	101	4 -18	46.8	109	
Kyrgyz Republic	99	19	45.5	120	⊕ -1	39.5	87	14	48.5	108	
Sri Lanka	100	→ 0	45.4	81	₩ -4	45.2	114	₩ -6	45.5	114	
Mozambique	101	J -17	45.2	135	4 -19	36.8	77	J -19	49.3	105	
Liberia	102	J -17	45.1	108	4	40.8	94	-34	47.2	88	
Russian Federation	103	→ 0	45.1	75	23	46.4	120	J -31	44.4	134	
Trinidad and Tobago	104	⊸ -14	45.0	107	₩ -8	41.0	99	₩ -25	46.9	96	
Honduras	105	小 1	44.9	111	₩ -3	40.3	97	∳ -1	47.2	109	
Papua New Guinea	106	⊸ -1	44.9	125	№ 9	38.5	89	⊸ -16	48.1	82	
Tunisia	107	5	44.8	64	小 1	48.8	130	№ 4	42.8	120	
Ukraine	108	J -35	44.7	55	⊸ -2	51.2	138	J -23	41.5	119	
Guinea-Bissau	109	20	44.7	104	27	41.3	107	4	46.4	79	
Myanmar	110	₩ -6	44.7	144	-39	34.6	74	12	49.7	106	
Burundi	111	₩ -3	44.6	119	小 1	39.6	98	4 -13	47.1	94	
Mali	112	14	44.4	106	5	41.1	110	1 0	46.0	99	
Zambia	113	№ 4	44.4	113	J -13	39.9	104	10	46.6	106	
Madagascar	114	5	44.3	131	⊸ -2	37.6	92	⊸ -2	47.7	109	
El Salvador	115	₩ -6	44.3	109	⊸ -2	40.5	108	₩ -9	46.2	109	
Algeria	116	12	44.2	116	⊕ -1	39.8	106	18	46.5	111	
South Africa	117	₩ -34	44.2	69	⊸ -12	47.8	134	⊸ -12	42.4	132	
Malawi	118	₩ -4	44.1	112	小 1	40.1	109	⊸ -7	46.1	100	
Ethiopia	119	J -18	43.8	88	∳ -6	44.2	126	₩ -20	43.6	108	
Timor-Leste	120	J -23	43.5	97	1 20	42.7	122	J -51	43.9	73	
Nicaragua	121	→ 0	43.4	134	₩ -4	37.0	105	∳ -11	46.6	101	
Nepal	122	∳ -12	43.3	101	№ 8	41.8	121	∳ -21	44.0	110	
Guatemala	123	№ 2	43.2	124	∳ -1	38.6	116	∳ -3	45.5	113	
Uganda	124	₩ -9	42.9	121	∳ -11	38.8	117	J -13	45.0	109	
Sierra Leone	125	∳ -9	42.8	94	⊸ -23	43.2	132	∳ -1	42.6	95	

Visual 3.1 (4/4): EQx2024 table of Country Scores and Global Rankings with Power and Value Sub-Indices

		EQx		Sub-Indices							
					Power (I)			Value (II)		_	
Country	Rank	Trend vs EQx2023	Score	Rank	Trend vs EQx2023	Score	Rank	Trend vs EQx2023	Score	#datapoints /146	
				Lagging E	lites						
Cameroon	126	₩ -6	42.7	122	₩ -4	38.8	118	₩ -9	44.7	107	
Burkina Faso	127	₩ -5	42.6	110	№ 4	40.3	124	J -12	43.8	109	
Bosnia and Herzegovina	128	₩ -4	42.6	99	⊸ -2	41.8	128	₩ -2	43.0	106	
Iran, Islamic Rep.	129	♠ 11 ···	42.5	139	⊸ -2	35.6	111	28	46.0	110	
Equatorial Guinea	130	№ 5	42.2	118	8	39.6	127	№ 9	43.4	67	
Pakistan	131	⊸ -20	41.6	96	J -16	42.8	139	⊸ -14	41.0	118	
Congo, Dem. Rep.	132	⊸ -2	41.6	140	♠ 5	35.4	119	₩ -9	44.7	94	
Gabon	133	6	41.3	126	⊸ -2	38.3	129	♠ 11	42.8	94	
Mauritania	134	₩ -3	41.1	137	∳ -1	36.1	125	₩ -7	43.7	94	
Congo, Rep.	135	↑ 7	40.7	133	☆ 7	37.5	135	↑ 8	42.3	89	
Central African Republic	136	₩ -3	40.5	138	♠ 11	35.9	131	J -26	42.7	79	
Nigeria	137	₩ -5	40.4	132	J -28	37.5	136	₩ -3	41.8	117	
Lebanon	138	№ 6	40.2	117	24	39.7	142	2	40.4	111	
Angola	139	2	40.1	141	₩ -8	35.3	133	8	42.5	108	
Zimbabwe	140	⊸ -2	39.7	130	№ 9	37.6	140	⊸ -5	40.7	104	
Lesotho	141	₩ -7	39.6	115	☆ 7	39.8	144	₩ -6	39.5	97	
Eswatini	142	₩ -6	39.3	142	₩ -4	34.8	137	₩ -5	41.6	93	
Chad	143	₩ -6	38.5	128	№ 4	37.7	145	₩ -8	38.8	88	
Venezuela, RB	144	小 1	38.0	146	₩ -4	33.9	143	2	40.0	101	
Libya	145	₩ -2	37.7	149	₩ -5	32.0	141	⊕ 1	40.6	78	
Syrian Arab Republic	146	2	35.8	147	⊸ -12	33.5	146	↑ 3	36.9	81	
Afghanistan	147	↑ 3	34.4	148	↑ 3	32.2	148	2	35.5	86	
Yemen, Rep.	148	∳ -1	34.4	151	₩ -1	31.5	147	₩ -1	35.8	92	
Iraq	149	₩ -3	33.8	150	⊸ -7	31.6	149	⊸ -2	34.8	90	
Haiti	150	⊸ -1	32.7	143	↑ 3	34.7	150	⊸ -2	31.7	86	
Sudan	151	→ 0	30.7	145	№ 2	34.3	151	→ 0	28.9	96	

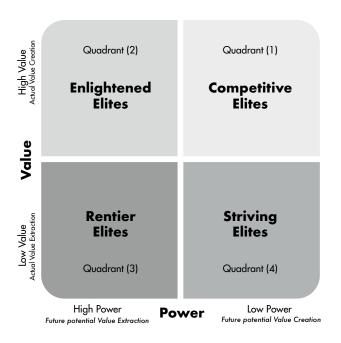
3.2 State of Elites Framework: Country Mapping

The State of Elites framework revolves around the EQx's 2 Sub-Indices, Power and Value. Both represent the degree of Value Creation along a spectrum ranging from high to low.

It is important to emphasize that the State of Elites framework sees the interaction of the present with the future, as it reflects the fact that Power can be converted into Value Extraction. Value Extraction business models require Power to operate and thus Power is described as having future Value Extraction potential in Visual 3.2. In the framework, the 2 axes represent the 2 temporal perspectives and so every country finds itself in a position that captures information about the present (via Value) and the future (via Power).

The State of Elites framework is best comprehended through 4 possible conditions that describe a country's elites in terms of their business models on aggregate: 'competitive', 'enlightened', 'rentier' and 'striving'. The Power Sub-Index I and Value Sub-Index II Country Scores serve as the x- and y-axis of the 2x2 matrix which provide the coordinates that not just locate each political economy in the framework, but most importantly serve as a starting point for interpretive work. A country's position is a unique and important source of insights to analyze its present situation as well as to understand its prospects, especially given our aim to support the development of prescriptive views.

Visual 3.2: The State of Elites Framework for Policy (Source: Derived from Casas-Klett, 2024, in press)



Description of the 4 States of Elites

Quadrant 1 sees 'competitive elites' in a situation which most resembles a free market. This state is characterized by short-lived cycles of highly innovative and profitable elites that rise to the top in quick succession. If contests between elites are civil, that competition will produce a plethora of public goods, leading to human and economic development. Technological possibilities are seized, and long-term economic growth is maximized and limited only by the human capacity to innovate.

Quadrant 2 sees powerful elites that dominate the political economy. These dominant coalitions, however, refrain from Value Extraction despite having the ability to obtain rents, and instead choose to run value creating business models. The **'enlightened elites'** state is one where elites are very powerful but nonetheless create substantial value.

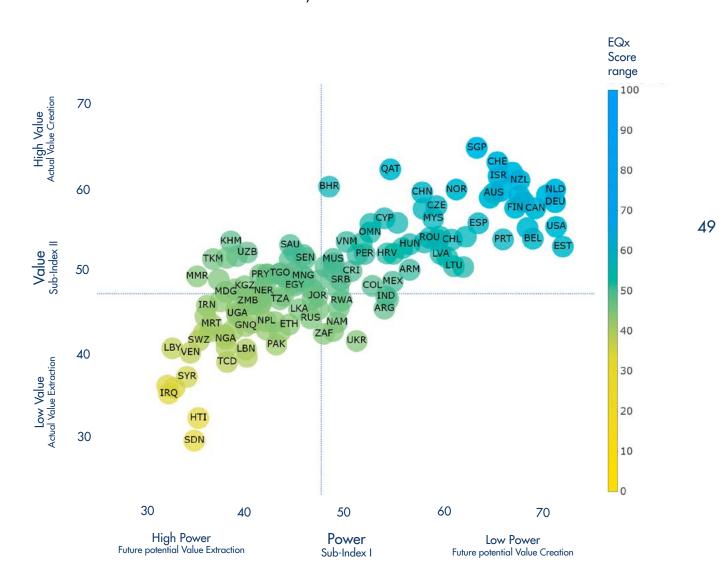
Quadrant 3 exhibits **'rentier elites'**. Countries with economies in this state are characterized by highly dominant and powerful elites that have consolidated value extracting business models. Having captured the levers of power and overcome the resistance of productive forces, the elites have designed institutions that favor their business models at the expense of increasingly demoralized non-elites who have little incentive to invest in Value Creation activities.

Quadrant 4 sees free-for-all Value Extraction by a multitude of diverse agents. Low power elites compete for rents and Value Creation business models are absent, challenged by all sides. The 'striving elites' state is an "Absent Leviathan" situation (Acemoglu & Robinson, 2019) and a rather unstable one, with aspirational elites whose extractive rent seeking is real but has not (yet) scaled. Emerging interest groups engage in struggles of all kinds for dominant positions that will enable them to shape institutions and in turn protect and consolidate their business models.

EQx2024 State of Elites, Results

Employing the Power Sub-Index I and Value Sub-Index II Country Scores, we position each of the 151 countries covered in the EQx2024 in the State of Elites framework.

Visual 3.3: EQx2024 State of Elites Framework: Country Positions based on EQx Sub-Indices Power and Value



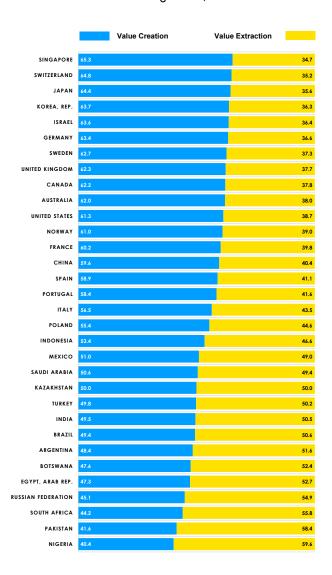
Note: Random selection of country codes are printed in case of country overlaps.

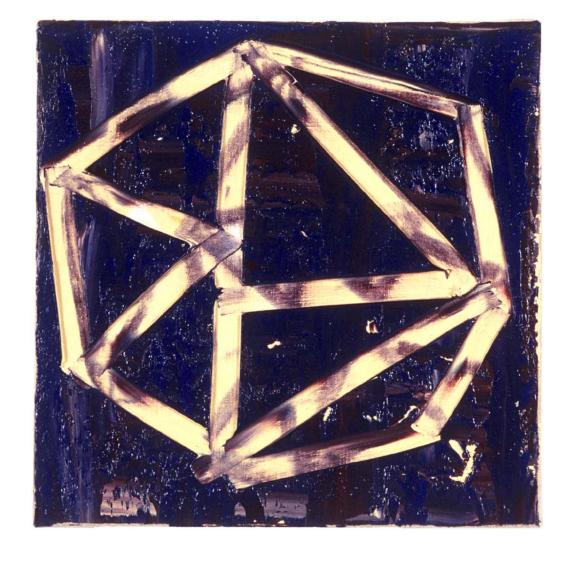
3.3 Value Configuration Framework: Value Creation and Extraction and Shares of Overall Economic Activity

The EQx ranks countries on their Elite Quality. That is, each country receives a score that represents a point on an imaginary Value Creation to Value Extraction spectrum of the political economy. These country scores are normalized within a range of 1 to 100, with 100 being the highest score, i.e., the best, in terms of Value Creation. To concretize the abstract Elite Quality aggregate, to support policy and social debates, and to facilitate the connection between the macro (country-level) EQx to the micro (firm-level), we introduce here the 'Value Configuration Framework' to offer a visualization of the relative proportion of Value Creation vs Value Extraction business models within a given economy on a relative and

comparative basis. Converting the EQx scores into Value Creation percentages allows us to see the distance from a theoretically perfect 100%, assumed to be caused by the complete absence of value transfers derived from extractive business models. While figuratively speaking, country scores represent a point on a continuum, the Value Configuration Framework is a heuristic where the range up to the country score position is determined to be Value Creation and the remainder is assumed to be Value Extraction. If the total economic pie is measured by GDP, Value Creation and Value Extraction jointly add up to 100% of national income. The 32 countries selected for inclusion are those from the pilot EQx2020.

Visual 3.4: EQx Value Creation vs Value Extraction Configuration, for selected 32 EQx countries





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The Pillars are the specific and integer constructs that host the EQx indicators and their datasets. Categorized and color-coded along the 4 Index Areas, they are presented next. Conceptually, the Pillar Country Scores and Global Rankings measure where exactly in the political economy Value is being created and if the pie (rather than the slice) is being enlarged.

Political Power Pillars, Index Area (i)

The Political Power Pillars measure the capture of 3 kinds of rules: The rules of the state, the political economy's regulations, and the rules that concern human agency. The terminology is borrowed from Stigler's 'capture theory' (1971).

Pillar i.1, State Capture focuses on the direct capture by distributional coalitions of the state and its government branches. This Pillar measures diverse manifestations of elite Power ranging from political centralization to gender parity at the top echelons of the state. Specific indicators measure Social mobility (upward) (MOB, i.1) and attempt to find evidence of state capture through, for instance, Political corruption (COR, i.1) or Press freedom (PFD, i.1).



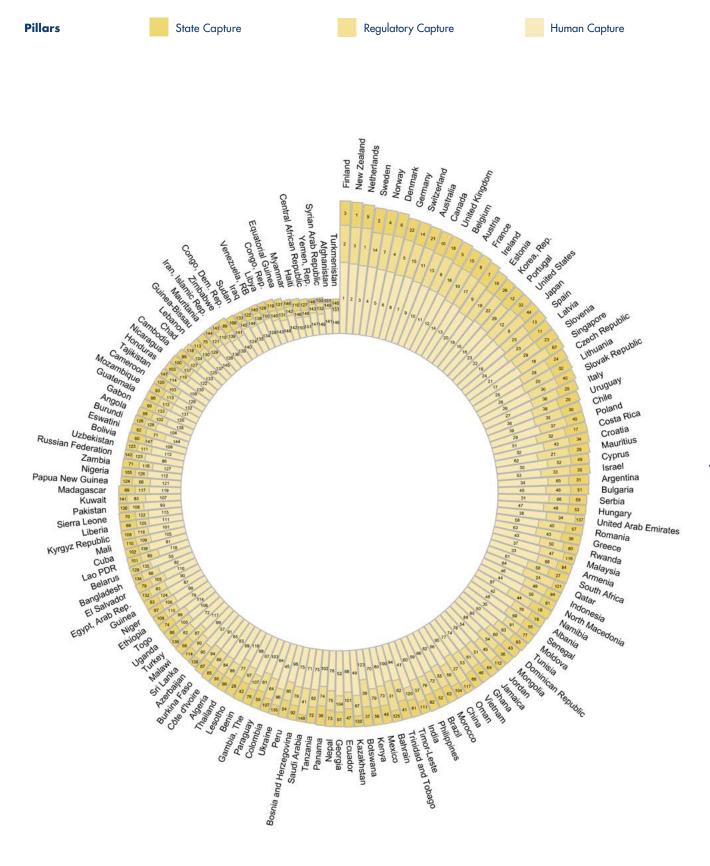
Pillar i.2, Regulatory Capture measures the extent to which rules and regulation, or the making thereof, have been captured by special interests. This Pillar includes Property rights (PRI, i.2) and Crony capitalism (CRO, i.2), an indicator proposed by The Economist ('Comparing crony capitalism', 2016) that measures wealth derived by billionaires from rent-heavy industries and signals the successful capture of regulators and legislators by elites.



Pillar i.3, Human Capture attempts to measure the extent of restrictions placed on the freedom of individuals and discrimination in all its forms, which boost Value Extraction and impede Value Creation. This is reflected by the inclusion of diverse indicators such as the Human Rights Index (HRI, i.3), Forcibly displaced people as % of population (FDP, i.3) or LGBT+ inclusiveness (LIN, i.3). Other facets of human capture are operationalized by the Women, Business and the Law (WBL, i.3) indicator and, to measure the extreme phenomenon of modern slavery, the Global Slavery Index (GSI, i.3).



Visual 3.5: Index Area (i) - Political Power Pillars with Global Rankings



Economic Power Pillars, Index Area (ii)

The Economic Power Pillars measure elite **dominance** in the economy. Firstly, they focus on the dominance of coalitions within an economy, then on individual businesses, and finally, on the terminator of dominance, i.e. creative destruction.

Pillar ii.4, Coalition Dominance measures the power of diverse coalitions within the political economy. These include labor and civil service coalitions often enjoying privileges in the political system to the cost of outsiders, reflected by the inclusion of indicators such as Unionization rates (UNI, ii.4) and *Public employees as a % of total employment* (PUE, ii.4). Indicators such as *Criminal actors* (CRA, ii.4) and *Military expenses as % of GDP* (MIL, ii.4) address the dominance of other coalitions in the economy. The *Economic Complexity Index* (ECI, ii.4), which measures the "amount of productive knowledge" (Hausmann, et al., 2011, p.63) implied in a country's export structures points to distributed coalition power.

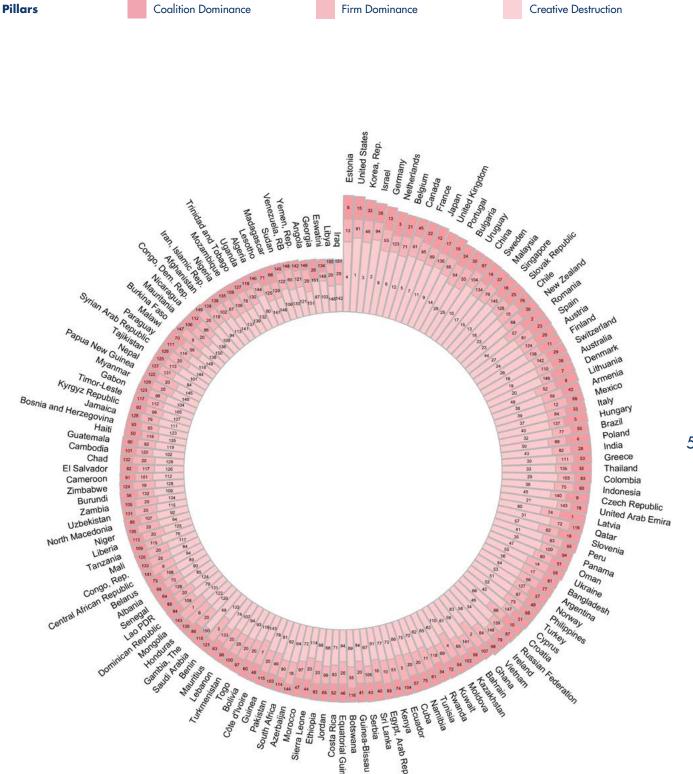


Pillar ii.5, Firm Dominance measures the degree of power concentrated in the hands of a nation's leading firms. To that effect, the Pillar examines, for instance, the *Top 10 firms market cap* as % of GDP (FKG, ii.5), *Top 30 firms revenues as* % of GDP (FRR, ii.5), as well as the number of Small and medium-sized enterprises per 1,000 people (SME, ii.5). The power in the hands of a nation's billionaires is measured by *Billionaires' wealth as* % of GDP (BIW, ii.5).



Pillar ii.6, Creative Destruction estimates the pressures for renewal and disruption within an economy. Borrowing from Schumpeter's concept, one key focus is on entrepreneurs, whose role is to challenge incumbents and drive economic growth. The Pillar first considers the 'destruction' part of the process by measuring the *Firm exit ratio* (EXR, ii.6) and *Billionaire's creative destruction* (BCD, ii.6). It then evaluates the forces fostering 'creation' in the economy, such as the all-important level of *Entrepreneurship* (ENT, ii.6) or access to *Venture capital finance* (VCK, ii.6).





The Political Value Pillars measure Value Creation/Extraction in the political dimension through the perspective of **income**. The state can either create or extract Value as it performs its Taking Income (through taxation, etc.) and Giving Income (through providing services, etc.) functions. The state's unearned income is deemed to be extractive.

Pillar iii.7, Giving Income focuses on how the government uses and manages public finances. Redistribution of state income in the form of *Subsidies and transfers as % of expenses* (SNT, iii.7) is an important indicator of this Pillar; many of these processes often divert resources away from relatively efficient uses and create hidden costs (Clements & Parry, 2018). The Pillar also evaluates indicators conducive to Value Creation, such as health, and *School life expectancy* (EDU, iii.7) since the provision of public education acts to curb rent seeking behavior.



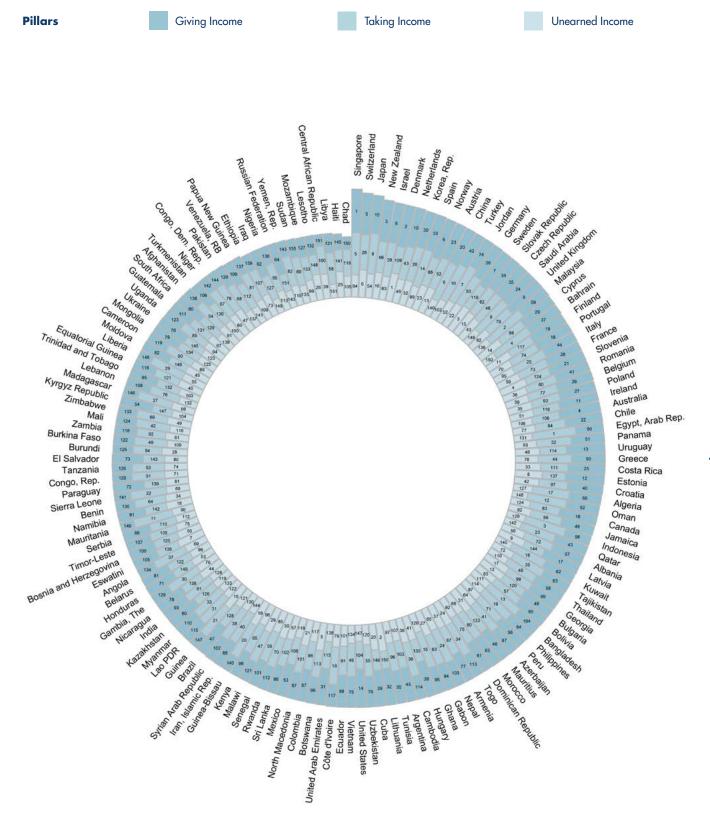
Pillar iii.8, Taking Income measures rent extraction that occurs as the state collects income from productive citizens and other value generators, fails to protect these, or endorses value transfers carried out by powerful coalitions. The Pillar includes the key characteristics of the tax system such as the *Corporate tax rate* (dev. from optimum) (DCT, iii.8) and Fiscal decentralization (FDE, iii.8). Another important component of this Pillar are measures related to the challenging tasks of providing security. Indicators such as the Global Cybersecurity Index (GCI, iii.8) and Homicide rate (HOM, iii.8) point to an absence of security that encourages the proliferation of extractive (criminal) business models.



Pillar iii.9, Unearned Income mainly focuses on the exploitation of or Value Extraction from natural and other resources, as well as the future itself. For instance, environmental footprints are conceptualized as wealth provided by nature, i.e., value that is not earned by those who appropriate it. Accordingly, a low score in the *Environmental Performance Index* (EPI, iii.9) represents the existence of intergenerational value transfers, as does *Government debt as* % of *GDP* (DBT, iii.9). The reliance on natural resource exports also contributes to this part of the Pillar as *Natural resources rents as* % of *GDP* (NRR, iii.9). Further additions to the EQx2023, such as the *Air Quality Index* (AIR, iii.9) and *Fertilizer usage per hectar* (FUS, iii.9) account for the increasing role played by intergenerational value transfers in the ecological dimension.



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The Economic Value Pillars measure Value Creation/Extraction in the **economy's 3 markets:**The products and services market, the capital market and the labor market.

Pillar iv.10, Producer Value identifies rents extracted by producers and suppliers in the market for goods and services. Rents are extracted, for example, through barriers, as implied in *Trade freedom* (TRF, iv.10), *Barriers to FDI* (FDI, iv.10) or *Share of imports targeted by protectionist measures* (IPM, iv.10). Protectionist measures against market entry enable Value Extraction elite business models to consolidate their positions, usually to the benefit of domestic producers and investors, inducing welfare losses that are well documented in the economics literature.



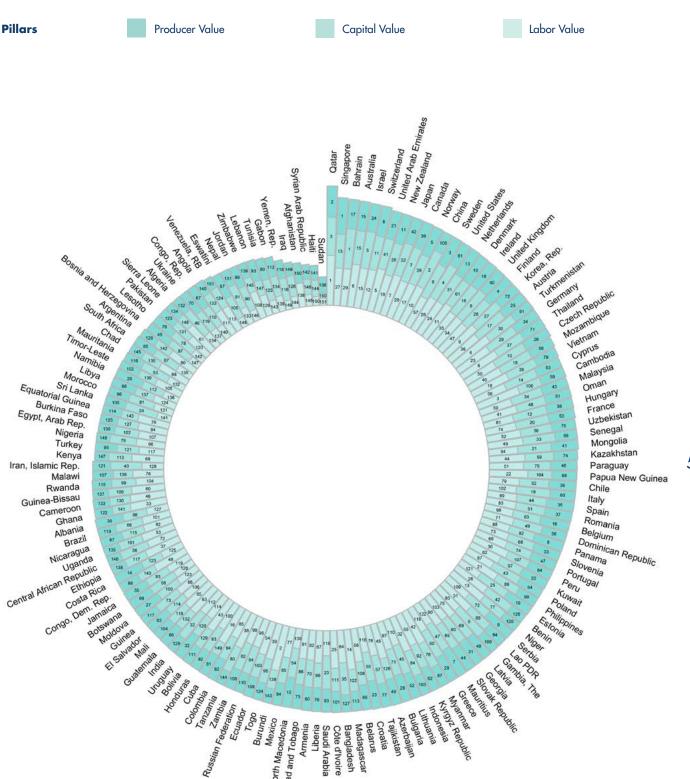
Pillar iv.11, Capital Value focuses on the value created or the rents that are extracted though direct or indirect participation in the financial markets. Value created is reflected in *Unicorns as a % of GDP* (UNC, iv.11) or the *Financial Markets Index* (FMI, iv.11). Data from various markets is used to assess Value Extraction with indicators including *Neutral interest rate* (DNI, iv.11), *M&A as % of GDP* (DMA, iv.11), *Gold demand as % of GDP* (GOL, iv.11) or *Inflation* (DOI, iv.11). At times, controversial positions that will require further research are taken.



Pillar iv.12, Labor Value seeks to determine the extractive consequences and rents arising from interventions in or related to labor markets by participants on both the supply and demand sides. To advance this purpose, the Pillar includes the *Unemployment rate* (UEM, iv.12) and other measures that are often the result of intra-labor Value Extraction. Rent seeking can also occur at the employer's end, as measured by the *Delta real wage vs labor productivity* (WLP, iv.12) indicator. Other, more clear-cut Value Extraction models considered in this Pillar include, for example, *Human flight and brain drain* (BRN, iv.12).



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EQx2024: By Pillar, Global Rankings

Visual 3.9 (1/4): Table of complete EQx Pillars by Global Rankings, color-coded

	i.1 State Capture	i.2 Regulatory Capture	i.3 Human Capture	ii.4 Coalition Dom.	ii.5 Firm Dom.	ii.6 Creative Destruction	iii.7 Giving Income	iii.8 Taking Income	iii.9 Unearned Income	iv.10 Producer Value	iv.11 Capital Value	iv.12 Labor Value
							* ±0		(1	<u>(</u> =0
Singapore	17	18	67	16	145	13	1	5	84	1	13	27
Switzerland	7	15	14	29	142	16	5	26	6	6	11	12
Netherlands	3	1	9	3	123	6	10	43	46	13	31	24
Japan	22	6	44	12	89	11	15	8	54	42	22	7
New Zealand	2	3	1	36	68	23	3	66	16	11	26	19
Korea, Rep.	15	22	26	32	48	3	30	28	32	72	27	9
Israel	53	33	35	38	94	2	8	39	63	24	5	15
Germany	8	5	22	13	53	8	36	50	22	34	29	23
Sweden	4	14	2	14	134	17	7	119	3	3	6	57
Denmark	6	4	6	7	146	20	2	109	1	10	61	11
United Kingdom	11	8	18	17	136	9	9	79	62	40	8	34
Canada	10	13	10	45	61	5	16	83	124	39	7	20
Australia	9	11	21	39	110	19	4	106	106	15	15	6
Finland	1	2	3	11	138	26	19	117	11	4	28	47
Austria	14	10	15	20	124	24	23	52	13	25	17	36
United States	23	12	33	15	81	1	14	104	147	61	4	28
Norway	5	7	4	27	127	53	6	86	23	5	39	17
Qatar	64	24	121	119	72	31	43	23	142	2	3	1
France	13	17	8	22	95	7	28	73	58	50	20	74
Estonia	18	19	16	6	13	4	12	137	8	19	25	121
China	56	56	104	67	104	10	20	6	140	100	2	10
Belgium	12	16	5	21	71	12	26	77	59	16	63	98
Czech Republic	25	28	24	9	140	45	35	46	43	26	10	50
Spain	19	25	13	23	91	27	33	14	89	35	44	89
Portugal	16	26	12	18	85	14	18	74	70	47	74	66
Ireland	20	9	7	79	148	34	11	116	51	18	16	35
Malaysia	37	47	116	37	76	15	59	2	136	43	34	59
Slovak Republic	26	30	40	25	126	18	34	62	15	44	65	90
Bahrain	100	31	125	58	141	59	37	4	150	17	1	29
Chile	39	35	30	76	15	22	22	84	77	36	52	79
Italy	27	36	25	33	84	37	44	25	95	60	19	102
United Arab Emirates	38	34	137	78	143	21	31	115	138	21	41	5
Slovenia	21	29	23	19	62	57	21	124	4	33	68	73
Cyprus	30	52	49	31	147	42	29	88	14	53	14	58
Romania	58	40	57	2	57	44	41	60	38	37	51	83
Poland	29	37	45	4	88	50	27	93	35	54	43	87
Thailand	69	98	98	35	135	33	58	48	110	71	37	8
Latvia	24	23	11	1	74	60	17	144	9	48	69	75

Visual 3.9 (2/4): Table of complete EQx Pillars by Global Rankings, color-coded

	i. 1 State Capture	i.2 Regulatory Capture	i.3 Human Capture	ii.4 Coalition Dom.	ii.5 Firm Dom.	ii.6 Creative Destruction	iii.7 Giving Income	iii.8 Taking Income	iii.9 Unearned Income	iv.10 Producer Value	iv.11 Capital Value	iv. 12 Labor Value
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Bulgaria	40	46	51	24	54	28	48	120	12	28	71	97
Hungary	47	48	53	5	137	40	38	135	41	38	12	81
Uruguay	36	38	20	30	50	25	13	114	48	32	120	114
Lithuania	28	20	32	8	52	48	32	150	2	52	45	110
Oman	95	27	117	51	80	47	52	12	148	51	48	41
Greece	63	43	39	53	111	30	50	44	78	29	50	115
Indonesia	46	49	94	80	75	36	98	3	129	103	84	32
Croatia	32	42	34	10	66	66	40	97	42	23	55	116
Panama	102	74	38	94	100	35	51	32	93	8	82	88
Vietnam	77	53	66	98	64	58	75	45	134	79	38	18
Armenia	33	68	84	42	58	38	77	87	37	80	70	82
Peru	96	80	54	95	63	41	56	71	87	64	107	30
Philippines	59	76	62	49	87	51	84	19	114	99	89	21
Mexico	80	73	48	69	12	39	53	108	118	84	85	77
Mauritius	62	21	29	63	133	74	46	123	31	7	47	122
Saudi Arabia	71	41	148	110	150	49	24	9	146	83	23	118
Bangladesh	92	88	134	81	17	56	104	13	111	127	35	64
Costa Rica	51	32	17	52	83	71	25	111	33	14	123	125
Dominican Republic	65	60	43	84	108	79	61	75	92	58	49	71
Kuwait	107	83	141	72	69	63	62	16	145	22	97	62
Senegal	48	69	55	64	128	85	101	59	85	88	33	49
Kazakhstan	49	67	130	102	65	61	60	126	119	74	59	44
Colombia	84	64	107	83	103	29	67	98	117	82	94	85
Turkey	72	82	139	68	73	52	42	10	102	95	121	117
India	60	57	111	28	82	43	93	61	128	129	32	112
Brazil	66	72	52	55	77	32	47	128	121	119	66	101
Serbia	31	66	59	43	105	67	89	110	112	9	72	109
Azerbaijan	57	95	138	144	16	64	87	41	64	49	126	45
Cambodia	133	127	99	101	120	102	114	36	36	59	106	3
Ecuador	68	101	47	104	5	86	68	91	101	109	103	54
Ghana	74	61	46	107	2	83	95	15	126	122	141	33
Argentina	34	65	31	77	56	54	45	103	107	126	142	80
Uzbekistan	113	111	123	131	20	115	76	55	120	75	36	52
Mongolia	88	54	36	143	1	131	79	134	125	41	21	94
Cote d'Ivoire	85	89	85	48	7	143	117	18	79	101	111	25
Albania	42	70	78	99	70	90	57	72	56	30	98	127
North Macedonia	44	59	81	85	107	92	97	101	21	12	54	130
Togo	114	99	74	97	20	93	113	34	24	124	95	39

EQx2024: By Pillar, Global Rankings

Visual 3.9 (3/4): Table of complete EQx Pillars by Global Rankings, color-coded

	i.1 State Capture	i.2 Regulatory Capture	i.3 Human Capture	ii.4 Coalition Dom.	ii.5 Firm Dom.	ii.6 Creative Destruction	iii.7 Giving Income	iii.8 Taking Income	iii.9 Unearned Income	iv.10 Producer Value	iv.11 Capital Value	iv.12 Labor Value
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Georgia	52	104	91	26	151	87	69	99	17	31	60	103
Gambia, The	67	107	76	86	20	120	129	30	76	106	9	93
Jamaica	78	51	64	128	79	111	49	56	82	55	93	119
Rwanda	43	50	80	34	118	65	112	70	30	115	99	104
Botswana	123	39	37	116	55	69	99	113	5	69	58	126
Benin	98	97	42	121	3	133	130	64	34	128	42	26
Cuba	81	136	102	57	20	75	39	146	20	81	149	16
Egypt, Arab Rep.	90	93	132	89	10	77	90	1	131	130	102	107
Bolivia	108	147	60	60	20	116	65	57	83	111	129	43
Tajikistan	109	114	147	125	113	101	83	35	72	77	57	78
Lao PDR	118	85	101	88	20	124	115	31	122	94	88	31
Jordan	54	45	112	65	99	68	74	7	52	89	90	146
Paraguay	103	81	50	111	114	118	72	139	81	46	75	51
Moldova	35	91	77	54	4	110	82	149	45	27	100	123
Morocco	82	55	63	47	97	72	63	80	86	96	81	131
Turkmenistan	146	151	145	100	20	94	106	130	100	91	30	4
Belarus	55	135	129	73	106	89	81	122	98	65	108	56
Kenya	70	79	56	74	51	73	96	65	96	147	113	69
Guinea	87	124	83	115	20	78	147	21	10	117	73	86
Niger	99	106	97	136	20	94	142	67	60	120	77	13
Namibia	97	44	19	75	20	70	91	142	18	20	112	136
Tanzania	73	92	72	109	115	76	126	53	74	144	80	38
Kyrgyz Republic	101	116	108	92	96	127	54	147	104	62	92	55
Sri Lanka	89	90	114	40	18	91	86	102	57	105	24	141
Mozambique	132	113	93	108	109	137	127	133	99	56	18	40
Liberia	111	125	68	113	20	125	148	29	55	76	96	67
Russian Federation	86	123	142	87	139	46	64	151	143	110	64	95
Trinidad and Tobago	94	62	41	127	78	139	85	132	103	73	86	91
Honduras	130	119	103	130	6	122	71	140	53	92	83	100
Papua New Guinea	121	86	124	122	20	145	137	81	108	68	104	22
Tunisia	50	63	65	61	11	82	55	96	97	90	125	143
Ukraine	45	96	135	59	14	55	70	145	123	70	119	137
Guinea-Bissau	145	129	75	41	20	94	140	20	19	137	109	60
Myanmar	142	142	146	129	20	140	110	33	133	97	76	42
Burundi	104	128	126	56	132	109	125	94	28	143	138	2
Mali	105	109	110	120	20	117	124	42	116	104	118	65
Zambia	127	118	71	105	20	134	118	92	61	108	62	99
Madagascar	119	117	69	66	129	148	146	27	66	113	122	14

Visual 3.9 (4/4): Table of complete EQx Pillars by Global Rankings, color-coded

	i.1 State Capture	i.2 Regulatory Capture	i.3 Human Capture	ii.4 Coalition Dom.	ii.5 Firm Dom.	ii.6 Creative Destruction	iii.7 Giving Income	iii.8 Taking Income	iii.9 Unearned Income	iv.10 Producer Value	iv.11 Capital Value	iv.12 Labor Value
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El Salvador	110	105	79	62	117	126	73	143	80	63	114	106
Algeria	83	84	95	140	144	80	66	17	127	132	46	134
South Africa	61	58	27	114	90	62	80	129	139	85	67	135
Malawi	117	87	58	70	59	149	121	47	29	107	136	76
Ethiopia	79	115	109	82	20	88	139	107	73	138	117	37
Timor-Leste	41	120	61	117	112	105	107	105	75	102	139	105
Nicaragua	122	137	100	112	86	136	78	138	44	87	115	92
Nepal	76	75	73	137	131	84	103	24	65	131	91	133
Guatemala	131	112	96	90	92	119	111	131	67	86	132	63
Uganda	106	100	86	118	130	132	123	85	94	135	101	53
Sierra Leone	115	122	70	44	20	114	141	22	68	134	148	61
Cameroon	129	103	120	91	101	112	119	90	88	133	130	46
Burkina Faso	91	94	87	147	8	138	122	49	109	125	127	84
Bosnia and Herzegovina	75	78	92	93	93	123	100	125	50	45	87	147
Iran, Islamic Rep.	136	110	143	138	102	113	88	40	144	121	40	128
Equatorial Guinea	148	131	131	46	20	94	116	121	40	114	143	70
Pakistan	93	108	136	103	49	81	120	68	137	123	131	120
Congo, Dem. Rep.	140	141	106	149	20	108	144	78	47	98	140	48
Gabon	120	133	90	123	98	104	94	63	27	112	134	139
Mauritania	126	121	144	106	20	150	149	11	90	116	53	132
Congo, Rep.	143	140	119	133	20	94	128	51	71	67	110	140
Central African Republic	151	148	127	141	9	94	151	100	39	146	56	72
Nigeria	112	126	105	135	67	141	136	95	113	148	79	96
Lebanon	137	130	113	96	20	107	108	76	132	93	147	129
Angola	138	102	88	146	20	151	134	37	69	140	133	111
Zimbabwe	139	139	89	124	19	128	133	69	49	139	145	108
Lesotho	116	77	28	71	125	147	132	148	26	78	78	142
Eswatini	144	71	82	134	149	103	105	136	7	57	105	148
Chad	125	134	118	132	20	129	150	118	105	145	135	68
Venezuela, RB	134	138	140	148	60	130	109	112	141	151	124	113
Libya	128	150	128	150	20	146	131	58	151	66	137	124
Syrian Arab Republic	149	132	150	126	20	144	102	38	130	142	146	145
Afghanistan	141	149	151	139	119	94	138	54	91	150		138
Yemen, Rep.	147	143	149	142	121	121	143	82	115	118	116	149
Iraq	135	144	122	151	20	142	92	127	149	149	128	144
Haiti	150	146	115	50	116	135	145	141	25	141	144	150
Sudan	124	145	133	145	122	106	135	89	135	136	150	151

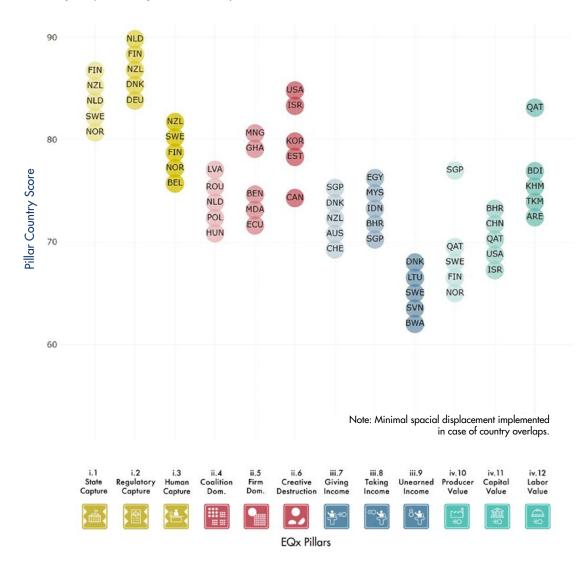
3.5 Outstanding Country Performances by Pillar

The Leaders

Visual 3.10 displays the top performers for each Pillar in the EQx2024, drawing our attention to the countries that might provide inspiration for others in terms of their specific Value Creation business models. The variation in the scores between the top 5 performing countries in each Pillar is consistently small. Therefore, in the Visual, a minimal spatial displacement has been implemented in case of country overlaps. It is generally a closely fought race for which country takes rank #1.

However, there are some exceptions. In the Firm Dominance Pillar (ii.5) for instance, Mongolia outperforms by a considerable distance. The same applies for the USA in the Creative Destruction Pillar (ii.6) due to very different reasons that become clear when analyzing the component indicators. In the Producer Value Pillar (iv.10), Singapore exhibits exceptional performance, as is the case for Qatar in the Labor Value Pillar (iv.12), an outcome that will certainly invite debate.

Visual 3.10: Highest performing countries (5) by Pillar

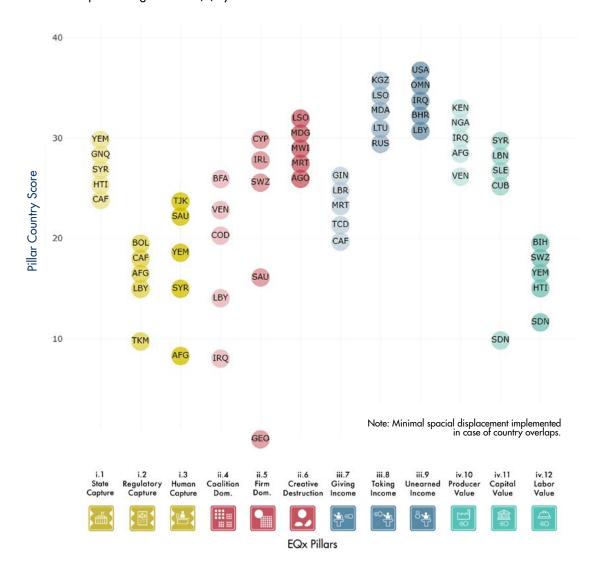


Greatest Potential for Improvement

The raison d'être of the EQx is to identify areas where the business models of country elites could be transformed to create more value. In Visual 3.11, the countries with the greatest potential for improvement are shown by Pillar. The purpose of this specific graph is to trigger the leadership of national elite

systems to consider the transformation of their existing business models towards increased Value Creation. Both the elites themselves and the nations they lead will benefit and emerge stronger by engaging in structural reform and institutional change.

Visual 3.11: Lowest performing countries (5) by Pillar



4. EQx2024 Analysis and Interpretation

The EQx project has developed a variety of interpretive formats. The 'Country Scorecard' format captures on one convenient page the full set of a country's EQx Scores, from the headline Level 1 EQx Index score to the 146 more granular Level 4 indicators.* The Country Scorecards can be conveniently utilized for interpretative purposes by offering a 360-degree view of a country's political economy.

Section 4.1 is a highlight of the report offering deep-dive analyses of Country Scorecards by leading economists, political scientists, and management scholars from around the globe. Each analysis constitutes an original interpretation of how a given country has and will fare viewed through the prism of Elite Quality. Section 4.2 provides the indicator Scorecard perspective, exploring individual phenomena of Value Creation/ Extraction, which are discussed in comparative terms across countries. Section 4.3 reviews the four EQx-Indicator Families: Diversity & Inclusion, Ecology, SDGs and Billionaires.

*Note: EQx Country Scores are rounded. The rankings are derived from the full EQx Country Scores and thus can deviate from the rankings implied by the rounded Country Scores.

66



4.1 Country Scorecards: Deep-dive Analyses

Argentina

The Paradox of Undeveloped Potential

Argentina shows an overall improvement in the EQx2024 results (rank #70) compared to those obtained in the EQx2023 (rank #79). Despite this, it remains a matter of concern that a country that has the potential to be one of the world's most prosperous continues to be mired in poverty and extreme poverty. Argentina possesses vast natural resources (e.g., in agriculture, minerals, hydrocarbons, fisheries, tourism, etc.), human resources (including five Nobel Prizes awarded to graduates from its public universities, an important milestone for the region), and has a large and habitable territory with low population density. Using the analytical tools and scores of the EQx2024, this article aims to identify and explain the reasons for this paradox.

The extractive nature of Argentina's elites is evidenced in the EQx2024 by the Regulatory Capture (rank #65) Pillar and Regulatory Quality (rank #103) indicator as well as the indicator on *Property rights* (PRI, i.2, rank #110). The analysis must also stress the poor ranking for *Control of corruption* (COC, i.1, rank #81) that highlights the low level of trust placed by Argentinian citizens in their political system. Bottom up Value Creation is thus institutionally and culturally stymied as is reflected in the scores for *Entrepreneurship* (ENT, ii.6, rank #64), *Venture capital availability* (VCA, ii.6, rank #111) and *SMEs per 1,000 people* (SME, ii.5, rank #69).

Despite this, there are some bright spots on the human capital front. In the Giving Income Pillar (iii.7, rank #45) the high level of education is evidenced by high School life expectancy (EDU, iii.7, rank #7) and Top universities (UNV, iii.7, rank #26). Surely, these educational resources could result in a higher level of productivity, seemingly lacking in PISA mean scores (PIS, iii.7, rank #59)?

So, why would a country with so many advantages fail to develop?

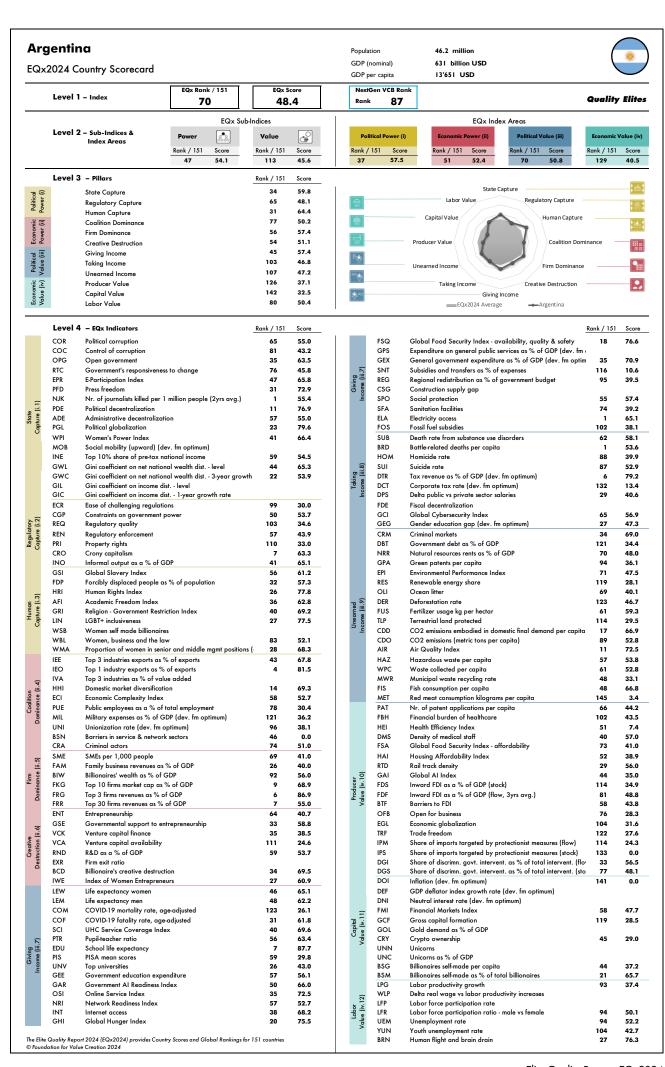
One of the explanations for economic and social fragility in Argentina is the existence of a deep-seated 'hegemonic tie', a century-old, never-resolved impasse between opposing elite coalitions backed by two antagonistic social groups that understand the country's development in completely different ways. The elite business models of one of these coalitions assume that development will be achieved by strengthening the domestic market by increasing the added value of traded goods. The business model of the other coalition wants Argentina to specialize in the production of primary goods based on

extractive industries and basic agricultural products. These evenly matched hegemonic coalitions alternate at the helm of the state, but neither is able to properly deploy their strategic plans because they lack the necessary institutional time for their policies to consolidate and bear fruit. Thus, Argentina has been doomed to a cycle of brusque change on the back of popular discontent that removes one or the other elite coalition from power. The recent election of the new President of the Republic, Javier Milei, marks a change. Milei does not come from any of the traditional political parties or alliances, nor does he have a history of holding public office; instead his popularity has been built via mass media and social networks, which is in itself a reflection of the high degree of popular discontent with the elite status quo after numerous rounds of frustrated expectations. Many questions arise: will his presidency see the emergence of a third force? Or could his platform be absorbed into one of the two traditional camps? Will Argentinian elites become less or more extractive?

One point worth noting and where there is unanimity on the part of the two antagonistic elite coalitions is that they prefer to mostly tax consumption rather than income. This is massively extractive, and generates a regressive tax system (Taking Income Pillar, iii.8, rank #103) that explains the unassailable position of elite business models, lack of elite circulation, and extreme poverty in the general population that cannot access public services that the government cannot afford to finance. Moreover, a catastrophically high level of Inflation (DOI, iv.11, rank #141), which has been above 100% per year for several years, also has a very negative impact on the poorest segments of the population, increasing the gap to wealthier classes that are able to protect themselves from the erosion of the purchasing power of the currency through privileged access to financial instruments that are not offered to the general public (Capital Value Pillar, iv.11, rank #142).

The laws of demography may end up unsettling both groups in the future since the living standards for non-elite citizens can hardly increase without structural reform and a profound fiscal revamp that strengthens the progressivity of the tax system. But this would require elite circulation and inclusive new ideas. As things stand, it is far from clear that the new government represents such a radical change.

Pablo San Martin, Chair, SMS Latinoamérica/North America



Chile

From Zero to Hero to Average? The Stagnation of a Latin American Miracle

Chile, the first South American nation to be classified as a "high-income" country, has an overall ranking of #30 in the EQx2024. From 1990 until 2014, Chile was seen as the shining economic light of the South American continent, swiftly converging with developed country income levels. In a term popularized by Milton Friedman, a (Chilean) "miracle" happened. For instance, from 1990-2014, average annual GDP growth was above 4%, the yearly investment rate was above 9%, and the average annual creation of new jobs was above 180,000 (quite significant for a country of just 20 million inhabitants). The small and open economy was also catching up with developed countries such as Portugal; in 1990, Chile had GDP per capita of around 40% of Portugal's, reaching 80% by 2014. For that reason, Chile was referred to as a "jaguar", echoing the "tiger" epithet used for countries such as Singapore and South Korea in East Asia. However, over recent years, Chile's fortunes have shifted. Between 2014 and 2019 (pre-COVID), average annual GDP growth fell to 0.6%, the yearly investment rate to 0.2%, and the average yearly creation of new jobs to around 90,000. Convergence is also in retreat, and by 2019 Chile's GDP per capita had fallen to 71% of Portugal's. How can the EQx2024 shed light on this zero to hero to average tale of stagnation?

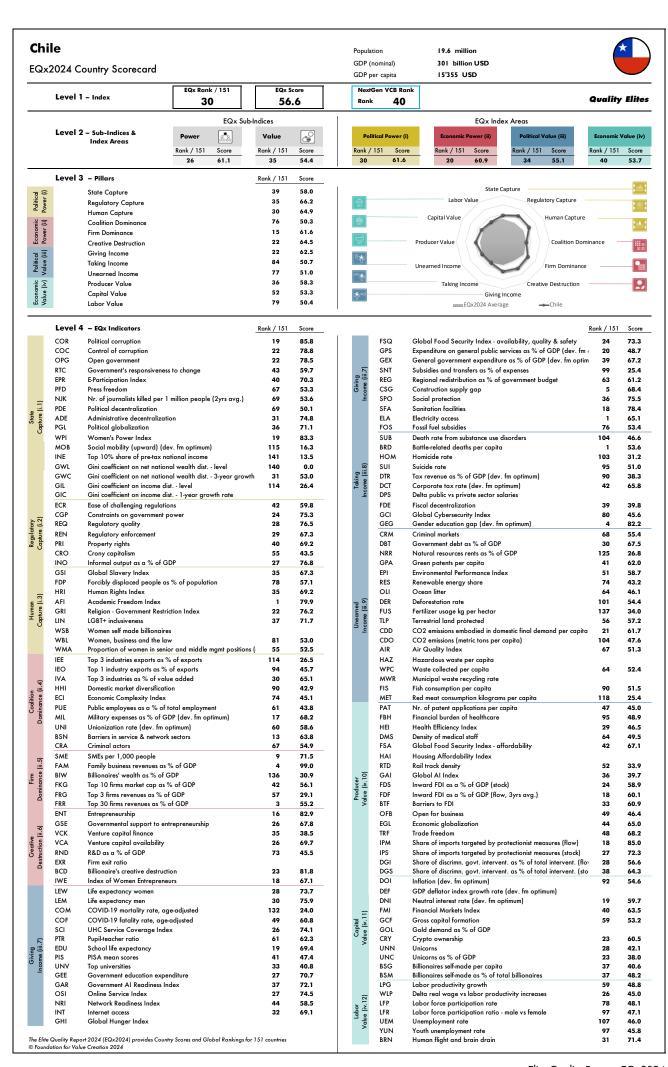
If we begin with the first Index Area of Political Power, Chile has a ranking of #30. It is notable that the country has very low levels of Political corruption (COR, i.1, rank #19), scores exceptionally well in the Academic Freedom Index (AFI, i.3, rank #1), and has a relatively Open government (OPG, i.1, rank #22). However, it also ranks incredibly poorly for Social mobility (upward) (MOB, i.1, rank #115), Top 10% share of pre-tax national income (INE, i.1, rank #141) and Gini coefficient on net national wealth dist.-level (GWL, i.1, rank #140). Taken together, these indicators provide an initial glimpse on the possible tensions between broad non-elite social groups and elites within Chilean society. The Achilles' heel of the 'Chilean system' is, most likely, the severe dependency on sustained economic growth in order to legitimize current elite structures. As long as jobs were being created in a stable economy with rising wages, the social fabric did not shatter. However, the moment that economic growth weakened (or, in this case, became absent), the (lack of) social security mechanisms were insufficient to keep social tensions under control. One recent example was the 'social unrest' protests that drew worldwide attention during 2019. Since then, Chile has failed to approve not one, but two new constitutional drafts, and has left the 'social contract' as a pending issue

for the future. This economic stagnation and consistently poor policy interventions are currently reflected in the terrible *Unemployment rate* (UEM, iv.12, rank #107), high *Inflation* (DOI, iv.11, rank #92) and poor *Gross capital formation* (GCF, iv.11, rank #59).

If we analyze the Index Areas of Economic Power and Economic Value, one gets further insights into the above-mentioned dynamics: the best ranked area is Economic Power (rank #20), while the worst ranked is Economic Value (rank #40). This is a fair synopsis of international independent analyses of the Chilean economy over recent years. One of the main problems of the last two decades has been the sustained and persistent decline in productivity. At the beginning of the 21st century, Chile's trend (or long-run) GDP growth was 5.5%, while today it is only 2%. If we adjust the second figure in line with population growth, productivity falls to almost 0%. The EQx2024 captures part of this phenomenon in Labor productivity growth (LPG, iv.12, rank #59). This overall productivity problem is partly, but not exclusively, related to a low ranking in the Economic Complexity Index (ECI, ii.4, rank #74) and a dependency on the current exports structure reflected in Natural resources rents as % of GDP (NRR, iii.9, rank #125).

Ultimately, the big social debate between the Chilean elites and society must be settled. This long-standing unresolved social contract has generated stagnation and frustration. If the elites are unable to come up with a legitimizing social and economic bargain soon, social unrest might spark again. By using the EQx2024 as general framework, authorities could channel their political efforts into an effective analysis of the current situation and plan appropriate structural reforms. More inclusive elite business models are the first step towards a long-term solution.

Emiliano Heresi Toni, University of St.Gallen, Switzerland



Balancing Control, Culture, and Institutions

The overall EQx2024 rank of China is #21 (up one position from 2023), reflecting its continued upward trajectory while also explaining to an important extent the economic development record of the country over the last few decades. Sustainable Value Creation was the main factor for progress during its heyday when the economy was expanding by as much as 10% a year, and continues to be a key driver of today's gentler growth. It is critical for a developing nation to rein in rent-seeking business models, as China testifies and is revealed by the EQx dataset.

The Sustainable Value Creation of the national elite system is verifiably better than countries with a similar GDP per capita (PPP), and even comparable to many advanced countries that enjoy a PPP that is double or triple that of China. In fact, while China's PPP now stands at US\$21,482, its Elite Quality suggests that this could reach US\$53,145 (see Visual 1.2). Such a doubling of China's PPP has been targeted by economic policymakers as an aim over the next two decades. The key factor in achieving this aspiration will be to continue with structural reform and maintain relatively low levels of value transfers and extraction by the country's elite business models. State capacity then becomes an indispensable element of the challenge.

China has a long history of state formation. While it might appear that opportunities for development were missed—including the building of a capitalist system based on the precepts of the free market economy—at diverse critical junctures during China's modern history, what is often overlooked is that the country has a long grassroots market economy tradition with deep cultural anchors. This bottom-up energy must be productively harnessed and realized through the right institutions, otherwise an unguided free-for-all will cause chaos to such a huge country. To this one must add the greater willingness of political elites to reform and learn from the capitalist and industrialized countries of the West. This formula was the basis for unlocking the country's potential in the post-1978 era, as China opened its doors and started to integrate into the world trade system.

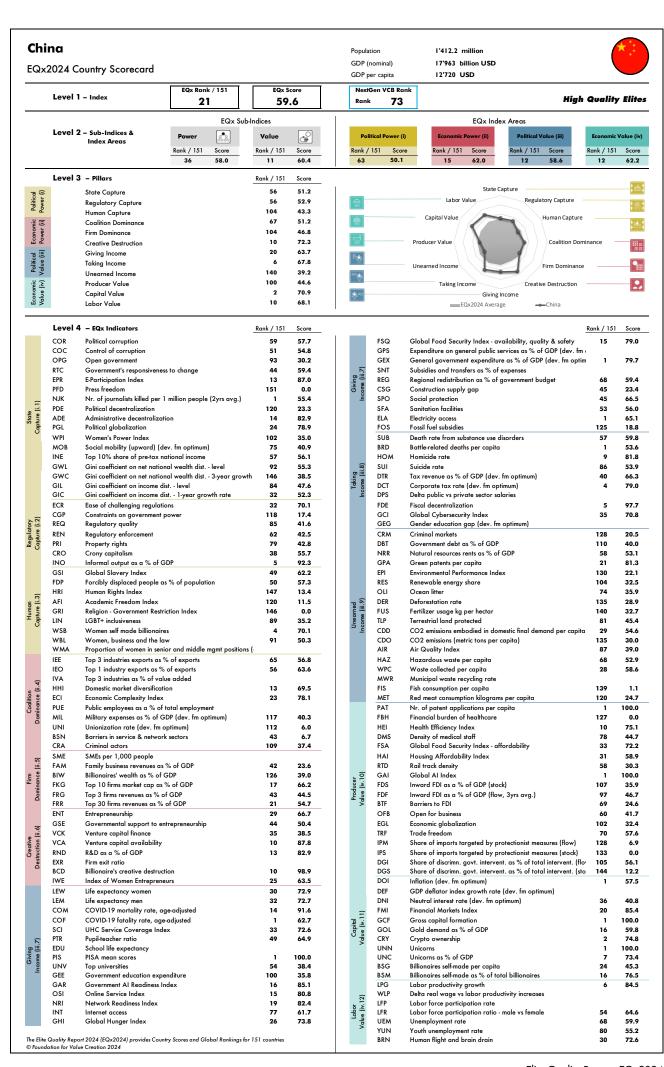
The country's political economy is therefore best characterized by the dual balancing acts of control and autonomy, and of culture and institutions. Resolving this dilemma is a source of grit, not of rigidity. Maintaining an effective balance requires flexibility, not dogma. This might not always appear obvious to outside observers. For instance, China has a rich and complex elite system; many elite coalitions compete in a market where the dominance of any single player is curtailed and power is widely distributed (Economic Power, rank #15), creating exceptional market dynamism. On the other hand, the low Political Power rank (#63) would seem to suggest a powerful and uniform state that has limited competition in the political arena. Yet the EQx might not fully capture the role of local governments, which not only balance the center but are the true drivers of competition across a wide range of business models. Institutionalized rivalry addresses slack and sub-optimal X-efficiency, and explains China's business ecosystems (such as EVs or the supply chain for renewables), and at the same time produces the conditions to increase social welfare levels.

The power of the state materialized in inclusive institutions is essential for coordination and a vital element in the operation of markets. The coordination afforded by state capacity enables economic development for all, including the advanced economies that are now increasingly adopting national industrial policies to support the green transition or their high-tech sectors. Rent seeking is inevitable when the state intervenes, promotes reforms and directly or indirectly provides subsidies, but in China this risk is outweighed by the Value Creation of its elite business models.

In any elite system, the leading business models must work for shareholders as well as for all other stakeholders. How does this translate into specific reforms at this juncture? Investment, including in infrastructure, must be deemphasized in favor of household incomes and wage growth. The general direction has to be increased market liberalization. That aligns the incentives for residual income generation with the goal of making the country richer and stronger. Value can only be created through a long-term vision and intelligent and responsive strategies by those at the top are key to achieving this. The country must continue to experiment with reform. It has made mistakes and will likely do so again, but as long as it can quickly figure these out and fix them, China will continue to progress.

Zhang Jun, Professor of Economics, Fudan University

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Ethiopia

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Shaping the Future Despite Adversity

Ethiopia's economic landscape has undergone a significant transformation over the past decade, driven by the government's reform program aimed at shifting to a more private-sector-led growth model. Ethiopia is described as a country with a robust growth trajectory, tripling its 2011 GDP per capita of US\$350 to over US\$925 a decade later, and aspiring to achieve middle-income status by 2025 (the lower level of which is a GDP of US\$1,086 per capita). In recent years, however, Ethiopia has faced new challenges, such as civil war, COVID-19, and various international conflicts, which have slowed the country's growth. According to the EQx2024, Ethiopia is doing less well than in previous years. Overall, Ethiopia's position in the EQx has fallen this year (rank #119 in 2024, down from rank #101 in 2023). This deterioration is the result of a drop in its rankings in each of the four Index Areas. In terms of Political Power, it still does reasonably well (i, rank #99), but saw its Political Value drop precipitously (iii, rank #140 in 2024, down from rank #133 in 2023), meaning that the political elite has recently become more extractive and lost its willingness or ability to engage in inclusive reforms. Economic Power is stable (ii, rank #79), while Economic Value has suffered a drastic fall (iv, rank #103 in 2024, down from rank #92 in 2023).

Fiscal discipline has been one of the defining characteristics of Ethiopia's recent economic achievements. The IMF has recognized Ethiopia's efforts to reduce its *Government debt as a % of GDP* from 54% in 2021 to 31.2% in the EQx2024 (DBT, iii.9, rank #47). This fiscal prudence, combined with an emphasis on debt management, has placed Ethiopia in a favorable position relative to its regional counterparts. Additionally, Ethiopia has been dealing harshly with *Political corruption* through the legislative implementation of strict anti-corruption policies (COR, i.1, rank #74).

However, key challenges remain. Government revenues have declined and *Inflation* (DOI, iv.11, rank #134), while somewhat contained, remains a concern. In addition, economic forecasts indicate that external pressures, such as the consequences of the war between Russia and Ukraine, could dampen growth prospects in sub-Saharan Africa, including Ethiopia.

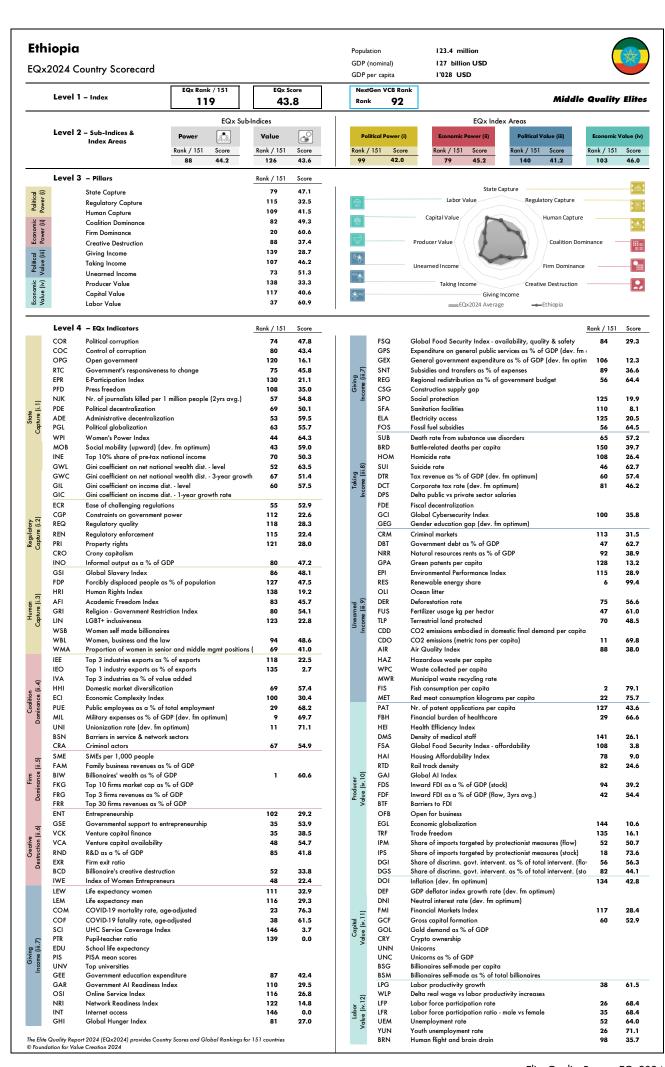
The quality of Ethiopia's elite has evolved significantly in line with these developments. The government's "Vision 2025" aims to develop Ethiopia's economy through strategic FDI (FDS, iv.10, rank #94, and FDD, iv.10, rank #42), increasing export earnings through *Economic globalization* (EGL, iv.10, rank #144), and improving the quality of life, for example, through better food security (FSQ, ii.7, rank #84) for its citizens. To this end, the focus is on political stability, economic

reforms, and the creation of a business environment that is conducive to innovation in agriculture, manufacturing and services. Despite its impressive recent growth spurt, Ethiopia still faces challenges related to the centralization of Political Power (OPG i.1, rank #120), which in a multi-ethnic state (with over 80 languages spoken) could impact on its ambition to foster a diversified and resilient economy. Nevertheless, the country has already demonstrated significant progress in areas such as the Global Slavery Index (GSI, i.3, rank #86), Government support for entrepreneurship (GSE, ii.6, rank #35) and Government education expenditure (GEE, iii.7, rank #87).

In order to be able to maintain its growth trajectory, Ethiopia needs to strike a balance between state initiatives and the dynamism of a market economy. The government's national economic reform program and ten-year development plan focus on privatizing key sectors like telecoms, power, logistics and transport, improving financial services and access to capital, and encouraging FDI.

In conclusion, Ethiopia's economic future looks promising, provided that reforms continue, public finances are strategically managed, and an enabling environment is fostered for the private sector. If it succeeds in doing so, Ethiopia could become a major player on the African continent, with an elite whose quality matches its economic aspirations.

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Georgia

A Difficult Legacy Waiting for Complete Political and Economic Modernization

At the end of 2023, Georgia received some long-awaited and promising news: it officially became a candidate for EU membership. At the same time, however, its overall ranking of #77 in the EQx2024 was significantly down in comparison to 2023 when it stood at #64. The hope is that EU candidate status will allow Georgia to more effectively modernize its economy with the active support and critical oversight of the European community.

Rapprochement with such an influential political and economic actor as the EU will likely improve Georgia's Elite Quality, for instance, through the level of political globalization in the country. In 2022, Georgia's ranking for Political globalization was #120, a position that has hardly moved over the last two years (PGL, i.1, rank #117). For this former Soviet republic, EU candidacy now requires elite transformation. To achieve this, a lot of internal political energy will have to be developed to get rid of the heavy post-communist legacy. Among the most salient issues that need to be addressed is the continued presence of monopolies in main sectors of the economy such as the energy and utility markets. The artificial restriction on competition leads to oligopolistic market prices for basic products and services in Georgia. It is hence not a surprise that among the 151 countries assessed in the EQx2024, Georgia ranks #151 in the Firm Dominance Pillar (ii.5). EU candidate status will gradually push the country towards the elimination of such monopolist tendencies by the economic elite. Such improvements will also likely improve the country's poor ranking in the Regulatory Capture Pillar where Georgia ranks a lowly #104 (i.2).

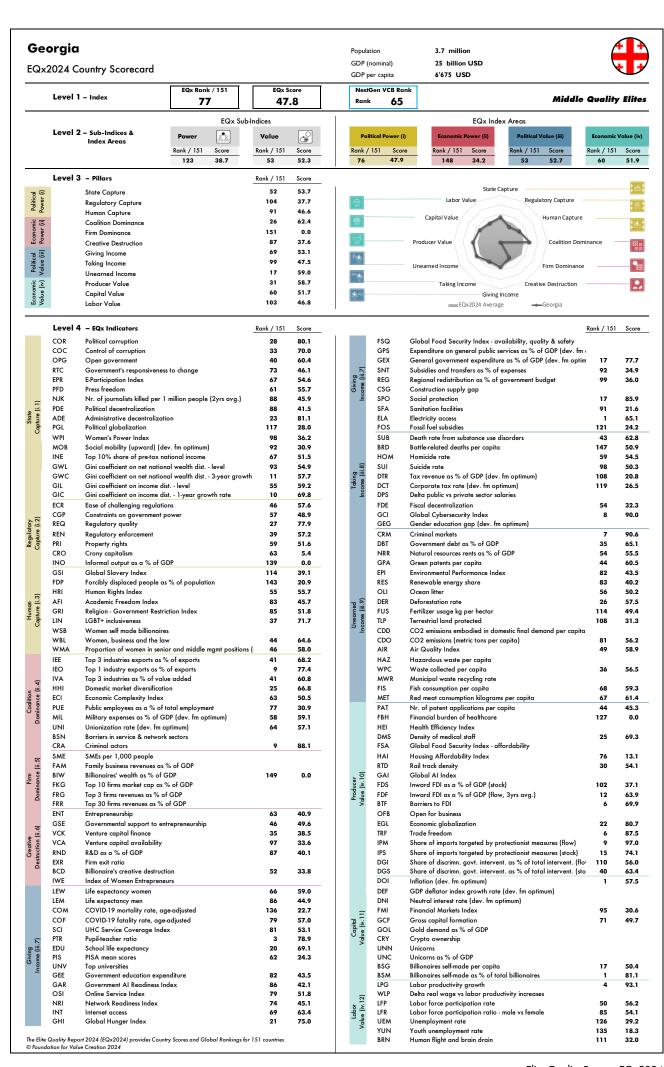
Another important issue is unemployment. According to official statistics in Georgia, the Unemployment rate in the fourth quarter of 2023 stood at 15.3%, a slight improvement but still the cause of an EQx rank of #126 (UEM, iv.12). The Youth unemplayment rate deteriorated from #124 in the EQx2023 to #135 this year (YUN, iv.12). In contrast to this poor performance, the state has tried to use its meager resources to provide some social assistance to its poorest citizens, as is reflected by the comparatively positive score for Social protection (SPO, iii.7, rank #17). Still, at the labor force level, there is another problem that social security cannot compensate for: low wage levels. In recent years, and especially after the pandemic, more and more people are emigrating to other countries in search of high-paying jobs (BRN, iv.12, rank #111). In Georgia, everyone complains that human labor is not valued in the country and that employers do not adequately pay for the value that labor provides. Monopoly power has a lot to do with this. As a result, many employees compare their work with slavery, which

is reflected by Georgia's depressing rank of #114 in the *Global Slavery Index* (GSI, i.3). By the end of 2023, the number of employed people who received a monthly salary of up to to 600 GEL (US\$225) was 23.3%. Georgia unsurprisingly records one of its worst EQx2024 results in the Labor Value Pillar at #103. However, the government expects that in 2024, the remuneration of state employees will increase by 10%. In contrast, anecdotal evidence tells us that private businesses are less enthusiastic and in no hurry to raise wages.

Finally, Georgia's Battle-related deaths per capita ranking has deteriorated dramatically. In 2022, the country was among those with the least deaths, but in 2023 Georgia is very near to the bottom (BRD, iii.8, rank #147). This can be explained due to the very nature of a comparative ranking in which every single death is one too many. For example, several dozen Georgian volunteers fighting on the side of Ukraine in the conflict with Russia have tragically been killed, even though Georgia is officially not actively involved in the war.

Problems clearly remain, but there are now realistic hopes that the rapid modernization of the country can be facilitated by the transformative power of the EU.

> Dr. Beka Chedia, Associate Professor in Political Science, Tbilisi, Georgia



Ghana

Walking the Tightrope of Economic Development

Ghana has now received US\$600 million, the second tranche of the International Monetary Fund's Extended Credit Facility (ECF) of US\$3 billion. The ECF builds on the country's Post COVID-19 Programme for Economic Growth (PC-PEG). Substantial economic shocks as well as preexisting vulnerabilities saw Ghana locked out of international markets resulting in heightened pressure on the domestic financial system and Ghana's Central Bank. The country's overall EQx2024 score of 48.5 (rank #69) is therefore indicative of a deep quagmire, combining macroeconomic instability with an election year between the two main political parties in the country, the ruling New Patriotic Party (NPP) and the opposition National Democratic Congress (NDC).

In terms of recent macroeconomic trends, according to the African Development Bank Group, the country's fiscal deficit slightly widened to 9.3 percent of GDP in 2022 from 9.2 percent in 2021. Ghana's public debt also rose to 93.5 percent of GDP in 2022, up from 82.0 percent in 2021. This accounts for the country's abysmal rank of #124 for Government Debt as % of GDP (DBT, iii.9). In the midst of these negative trends, Political corruption (COR, i.1) involving top government officials has made the headlines. Ghana's rank of #90 reflects its ongoing difficulties in fighting corruption, with 33% of citizens believing that corruption had increased in the country over the last 12 months according to Transparency International's Anti-Corruption Perception Index (CPI). Ghana's CPI score was 43/100.

Despite these problems, the country does comparatively better in the *E-Participation Index* (EPR, i.1, rank #78), having now rolled out a national biometric identification card that proponents argue will progressively become the default method for conducting any transaction in the country, from acquiring passports to financial services, creating significant Economic Value in the process. This positive development notwithstanding, a familiar challenge has returned to the country: erratic power supply. The country's poor *Electricity access* (ELA, iii.7, rank #107) has reminded businesses and citizens of the lengthy periods of poor electricity access and rationing—locally known as *Dumsor*—that were prevalent just a few years ago.

Civil society organizations (CSOs) have recently raised huge concerns on the country's newfound lithium resources, while the country is now in the process of awarding its first lithium mining licenses to Australia-incorporated and to London AIM-listed, Atlantic Lithium. Already, there has been the Gold for Oil (G4O) Program initiated by the country's central bank

and Precious Minerals Marketing Company (PMMC) where gold was purchased in cedis under a petroleum purchasing agreement. Part of this gold was then used to secure oil with gold and oil leveraged as international reserves, all in an effort to cushion the country's ailing economy. This over reliance on the country's extractive sector for economic development is demonstrated by its poor ranking for *Natural resources rents* as % of GDP (NRR, iii.9, rank #119).

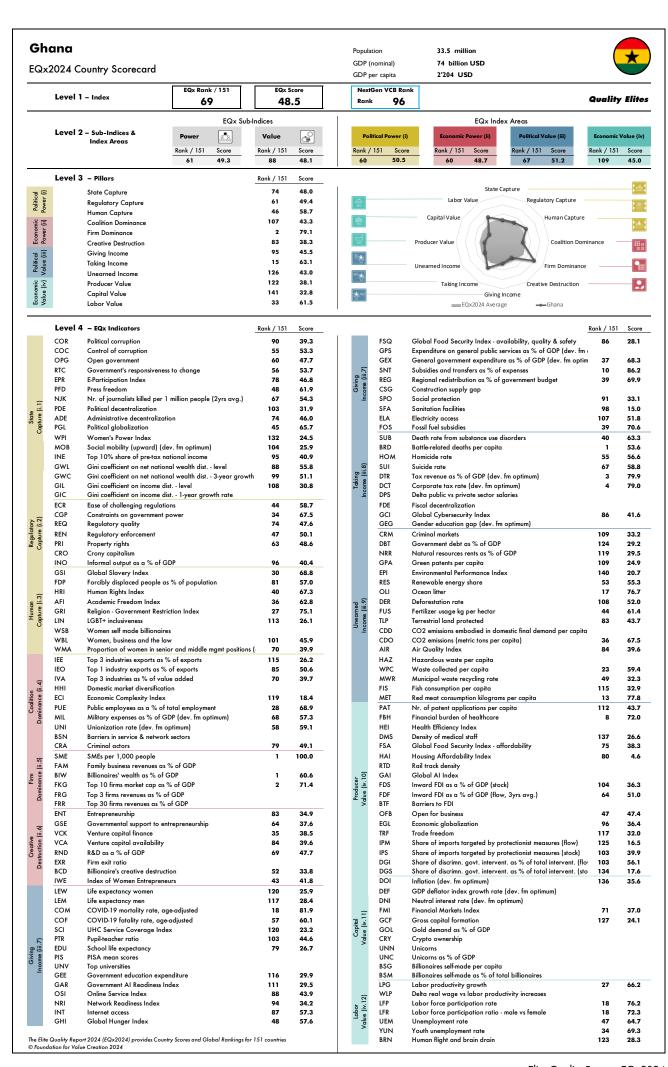
With a dismal rank of #116, the country's spending on its educational sector is also a huge concern (GEE, iii.7). While Ghana has made some substantial investments, for instance in its secondary education system where it has spent about US\$650 million and introduced free senior high school education as a flagship programme of the current government, the move has also received mixed reviews. Analysts and CSOs are calling for a reconsideration of key aspects of the programme, such as the sustainability of the full absorption of students' entire tuition costs by a government in the midst of budget constraints.

With high business tariffs and a variety of nuisance taxes such as an electronic tax on mobile money transfers, Ghana's *Trade freedom* rank of #117 (TRF, iv.10) needs improving. Already, key businesses such as Unilever Ghana and BIC have relocated their tea production and pen businesses to Nigeria and Cote D'ivoire respectively, due to barriers affecting the trade of goods and services.

While Ghana has performed considerably better since its inflation high of 54% declined to 23%, *Inflation* (DOI, iv.11) still ranks #136 in the EQx2024, an indication that the Bank of Ghana still has work to do to achieve macroeconomic stability for the country.

Overall, the country's governing elites would do well to pursue policies that promote value and employment creation for the country's teeming youth to arrest the slippery slope towards *Human flight and brain drain* (BRN, iv.12, rank #123). The concerns over an escalating brain drain are symptomatic of both low salaries and a rising cost of living in Ghana, with a UK House of Commons report indicating that more than 3,000 Ghanaian health professionals had left the country for the United Kingdom between 2018 and 2021.

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Japan

Seizing its Moment in the Spotlight?

Japan has maintained its position at #4 in the EQx2024 after radically improving from #18 in the EQx2022. In fact, Japan has been in the spotlight for the past year. On 20/21 May 2023, the Financial Times ran an article in its 'Big Read' section entitled: 'Japan gets its swagger back'. This reported a surge of interest among international investors in the Japanese market. An influx of foreign money followed, and in February 2024, this propelled the Nikkei Average, the country's representative stock market index, above the previous record set at the height of the asset price bubble in 1989.

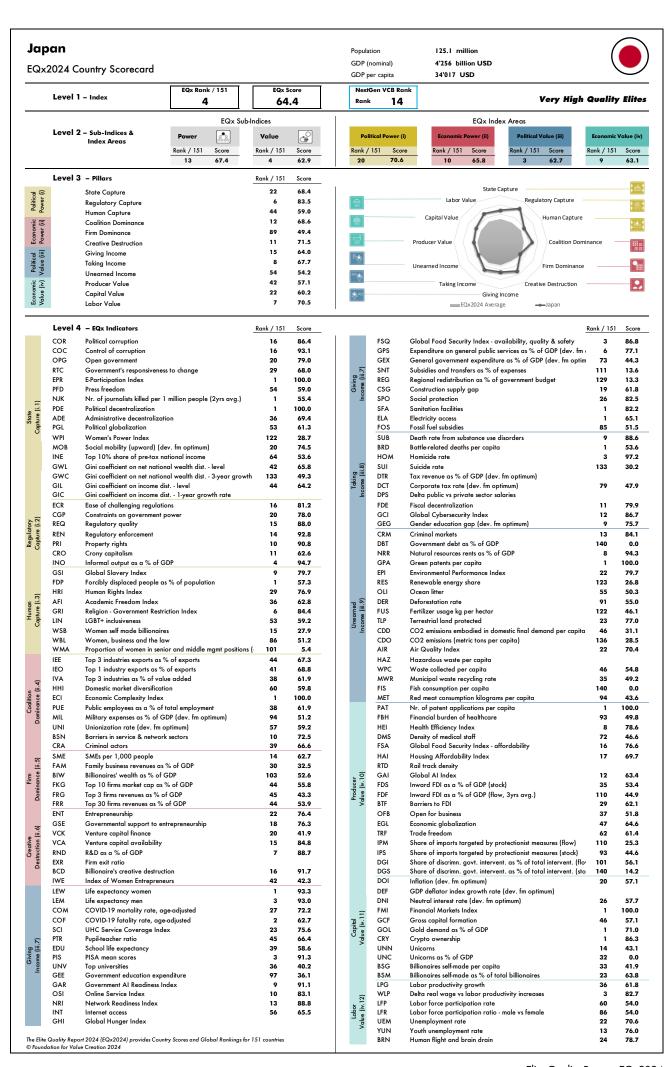
As the article mentioned above alludes to, the reasons for this influx of capital are, at least partly, geopolitical. Japan has benefited from not being China. Many investors and firms would like to maintain their presence in Asia, but are wary of the uncertainty surrounding China, both in terms of its relationship with the West and its regulatory policies. They are therefore re-discovering Japan as a stable democracy with rule-based economic policies. In the EQx2024, Japan is ranked #6 in the Regulatory Capture Pillar (i.2). Likewise, the Worldwide Governance indicators, published by the World Bank in 2022, ranked Japan within the better 20% for two of its categories and within the top 10% for the other four. The Democracy Index 2023, published by Economist Intelligence Unit, classifies Japan as a "full democracy", placing it second in Asia after Taiwan.

But such relative gains from de-risking and friend-shoring are likely to be short-lived. Japan is in the middle of the global supply chain and thrives and declines depending on the fluctuations of international trade. If Japan wants to prosper in the long run, it would have to lead international efforts, especially among Asian countries, to strengthen economic cooperation through deregulation and lowering barriers to trade. Hopefully, someday, the US and China will recognize that the benefits of re-joining such endeavors outweigh the costs.

However, the EQx2024 also highlights that for Japan to be a true leader in the path towards a more open and liberal world, it neets to do more domestically. Japan is near the bottom of the ranking when it comes to the Share of imports targeted by protectionist measures (both stock and flow) (IPM & IPS, iv.10, rank #110 and #93, respectively) and the Share of discriminatory government interventions as % of total interventions (both stock and flow) (DGI & DGS, iv.10, rank #101 and #140, respectively). It is also ranked #111 in Subsidies and transfers as % of expenses (SNT, iii.7) and #129 in Regional redistribution as % of government budget (REG, iii.7). Even though Japan ranks exceedingly highly in the Political Value Index Area (iii, rank #3), showcasing state capacity at its best, limiting the scope for governmental interventions and its inclination towards too much redistribution would not only set an example for others to follow but also provide widespread benefit to the country's own private sector.

Another warning sign is the *Suicide rate* (SUI, iii.8, rank #133), which is in sharp contrast to the *Homicide rate* (HOM, iii.8, rank #3). People who entered the labor market during the post-1990 stagnation have borne the brunt of the economic losses. They have had few chances to land formal, well-paid jobs with ample opportunities for on-the-job training and promotions. Many of them struggle to envision a brighter future. One way of addressing this would be to reconstruct a vibrant economy that produces many new businesses with flexible hiring practices. That would offer a second chance to the unfortunate generations, giving them much-needed hope for their lives.

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Norway

Diversification is Hard

The EQx2024 sees Norway's global ranking dropping a few places since last year, from #13 to #17. However, the country's scores have generally remained stable over the last three years, so the change in ranking may be due more to the improved performance of others rather than local developments in Norway. The pattern of rankings and scores for Norway in the latest iteration of the EQx seems to confirm the Elite Quality profile that has characterized the country in previous years.

First, energy and seafood production still dominates the country's economy. This causes moderate rankings in the Coalition Dominance Pillar (ii.4, rank #27) and very low rankings in the Firm Dominance Pillar (ii.5, rank #127). The over-reliance on natural resources also hits Norway in its ranking for Unearned Income (iii.9, rank #23), as is exemplified by Natural resources rents as a % of GDP (NRR, iii.9, rank #111). Similarly, Norway seems to have problems with ecological indicators such as the Deforestation rate (DER, iii.9, rank #100), Fertilizer usage kg per hectar (FUS, iii.9, rank #120) and CO2 emissions (metric tons per capita) if petroleum production is included (CDO, iii.9, rank #126). These indicators have become all the more important with the need over the last couple of years to replace Russian oil and gas capacity in Europe, while there is also a growing concern for more self-reliance on food production at a time of increasing international conflict. These topics are all hotly debated in Norwegian society at the moment, as it has slowly dawned on people that Norway's natural resources are finite, even in such a sparsely populated country.

On the positive side, Norway continues to score very highly on civil freedoms such as *Press freedom* (PFD, i.1, rank #1), *Open government* (OPG, i.1, rank #1), *Control of corruption* (COC, i.1, rank #1), *Constraints on government power* (CGP, i.2, rank #1), *Regulatory enforcement* (REN, i.2, rank #1), the *Human Rights Index* (HRI, i.3, rank #1), and the *Academic Freedom Index* (AFI, i.3, rank #1). Clearly, the political environment allows a very open exchange of information, opinions, and debate.

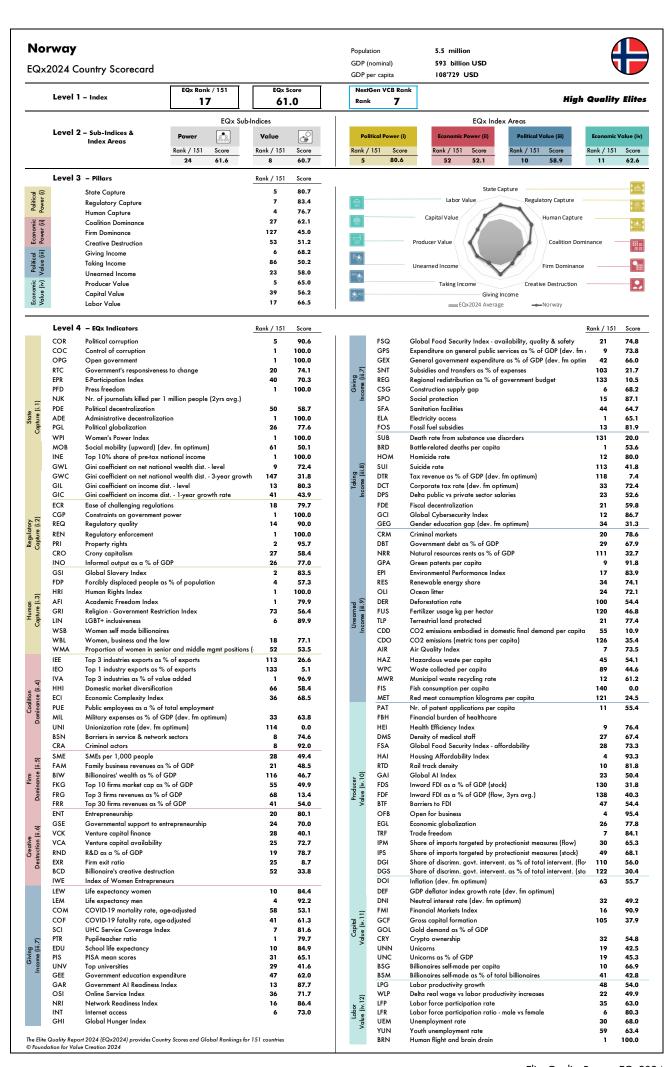
The continuing dynamic of this overall picture remains how to create a more diversified economy. This requires less reliance on natural resources and a more distributed network of industries and firms to diversify the sources and means of wealth creation. Increased lobbying for public money may stimulate new (and maybe greener) industries, but also carries the risk of political capture and value transfers hurting longer-term growth and innovation.

Discussion on how to create opportunities to open and grow new businesses in Norway is therefore a central topic. In fact, Norway already does reasonably well in this area. Its ranking in the *Open for business* indicator is good (OFB, iv.10, rank #4), as is its score for *Trade freedom* (TRF, iv.10, rank #7). The number of patent applications per capita is in line with its country ranking (PAT, iv.10, rank #11), and the number of *Unicorns* and *Unicorns* as a % of GDP is reasonable (UNN and UNC, iv.11, ranks #19), as is its *R&D* as a % of GDP (RND, ii.6, rank #19).

However, there is a tendency for capital in Norway to concentrate around billionaires, as their wealth as a percentage of GDP ranks #116 (BIW, ii.5). The *Labor productivity growth* rate is also not impressive (LPG, iv.12, rank #48), and even though the Gini wealth coefficient is generally good (GWL, i.1, rank #9), the Gini wealth coefficient growth over 3 years signals capital concentration and is moving in the wrong direction (GWC, i.1, rank #147).

The scores in the EQx2024 possibly signify current political and social pressures in Norway. While the currency exchange rate has dropped, and post-COVID inflation has reduced real purchasing power somewhat, the government has tried to subsidize transitions to greener energy sources and started taxing fish farming harder due to their exploitation of natural common resources. The new tax rates have led to the demonstrative exodus of some wealthy individuals, but this has not affected the country's ranking for *Human flight and brain drain* (BRN, iv.12, rank #1). In sum, the recent international crises have made Norway even more dependent on traditional industrial mechanisms, while attempts at diversifying the economy have led to political strife and been stymied by technological obstacles.

Professor Jan Ketil Arnulf, Professor Janicke Rasmussen, and Professor Dag Morten Dalen, BI Norwegian Business School



Peru

Political Crisis and Instability, but with Space for Higher Economic Growth

Peru's steady economic growth during the past two decades has been largely possible thanks to its macroeconomic stability, its openness to international trade, its favorable environment for foreign investment, and its relatively stable democracy. All of these are the result of the economic reforms that started at the beginning of the 1990s and have continued through the consistent work of successive governments. For example, the average rate of GDP growth during the 2010s was 4.5%. Moreover, according to the Central Reserve Bank of Peru (BCRP), between 2001 and 2023, Peru had the second highest (after Panama) rate of real GDP growth in Latin America with a yearly average of 4.1%. Peru also ranks as one of the countries with the lowest core inflation rates among its neighbors, and fares well even in comparison to many developed countries. For example, in January of 2024, the average headline inflation rate was 3%, lower than Colombia, Brazil, or the UK.

Openness to international trade has allowed Peru to become part of important multilateral economic blocks. Peru joined APEC in 1998 and was the founding member of the Pacific Alliance in 2011. It now has 22 free trade agreements in force with important economies including the United States (from 2009), China (2010), the European Union (2013) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership or CPTPP (2021). This integrationist vision has helped Peru to greatly expand its foreign trade, enjoy a continuous historic trade surplus, and have a high foreign exchange reserve.

Furthermore, the favorable environment for foreign investment and the freedom to invest in almost any economic activity has allowed Peru to attract important amounts of investment in its traditional main economic sectors such as mining, fishing, and hydrocarbons, and more recently in the infrastructure, telecommunications, and renewables sectors.

These policies have enabled Peru to elevate its standard of living, now becoming an upper middle-class country with GDP per capita increasing from US\$1,194 in 1990 to US\$7,125 in 2022. The country has also drastically reduced poverty. According to World Bank data, the level of poverty decreased from 59% of the total population in 2004 to 20% of the total population in 2019.

Despite these positive developments, the COVID-19 pandemic and other issues like political instability, social unrest, corruption, and no discernible progress on addressing climate change have shaken much of the Peruvian economy to its core, worsening and accelerating its structural problems and resulting in a recession last year with GDP decreasing by 0.6%

Peru has an overall ranking of #50 in the EQx2024 ranking of 151 countries. Peru's elites rank #49 and #52 in the Value and Power sub-indices respectively. In general, Peru's elites seem to be performing reasonably well and this fact is also reflected in the four Index Areas, especially in Economic Power (ii, rank #46), Economic Value (iv, rank #49), and Political Value (iii, rank #58). The country fares less well in Political Power (i, rank #82). Despite these results, each Index Area has some core issues that need to be urgently addressed for continued sustainable economic growth and development.

Regarding Economic Power, fundamental issues are evident in the Coalition Dominance Pillar (ii.4, rank #95) where Peru's economic model continues to rely of the exploitation of natural resources thus producing low value-added goods for export. In fact, 70% of Peru's exports are mining and energy products like copper, iron, gold, oil, and natural gas (IEE, ii,4, rank #88).

Consequently, Peru's economy has low economic complexity, as is explained by some of the indicators in the Creative Destruction Pillar (ii,6, rank #41) such as low R&D as a % of GDP (RND, ii.6, rank #98) and weak Government support for entrepreneurship (GSE, ii.6, rank #89). For instance, Peru's spends only 0.15% of its total GDP on R&D, well below the Latin American regional average of 0.5% and considerably below the OECD country average of 2%.

Moreover, in the Economic Value Index Area, it is important for a natural resource economy like Peru to place more importance on the Capital Value Pillar (iv.11, rank #107) and the Labor Value Pillar (iv.12, rank #30) if it wants to add more value to its production. For example, it is imperative that it increases its rate of *Gross capital formation* (GCF, iv.11, rank #90) that continues to be below an average of 23% in the last decade.

Furthermore, although Peru does well in the labor market mainly thanks to a high Labor force participation rate (LFP, iv.12, rank #16), investment in human resources is not high and due to the political turmoil and economic downturn in recent years there has been a spike in Peruvian emigration and a noticeable brain drain (BRN, iv.12, rank #82). For instance, it is estimated that 10% of the Peruvian population now live abroad. In addition, the high level of work force participation is largely due to the fact that that most of the employment is in the informal sector (there are no unemployment benefits in Peru and so people work in any job that generates even a meager income).

The Political Power Index Pillars, especially the State Capture Pillar (i.1, rank #96) and Regulatory Capture Pillar (i.2, rank #80) can also help to explain the current situation that Peru is experiencing.

In recent years, Peru has had a high degree of political instability. For example, between the years 2018 and 2023, six presidents have been in power. The main reason for this extraordinary turnover is that almost all of them have been accused of *Political corruption* (COR, i.1, rank #100), and this continuous change of government is also responsible for the low responsiveness to change. In other words, the authorities that should respond to the current challenges change too frequently, and their replacements have no time to grasp the magnitude of the task that they face (RTC, i.1, rank #109). Corruption is pervasive in Peru because the judicial system does not work properly. Besides this, governmental corruption is common because there is not a meritocratic system for choosing government officers.

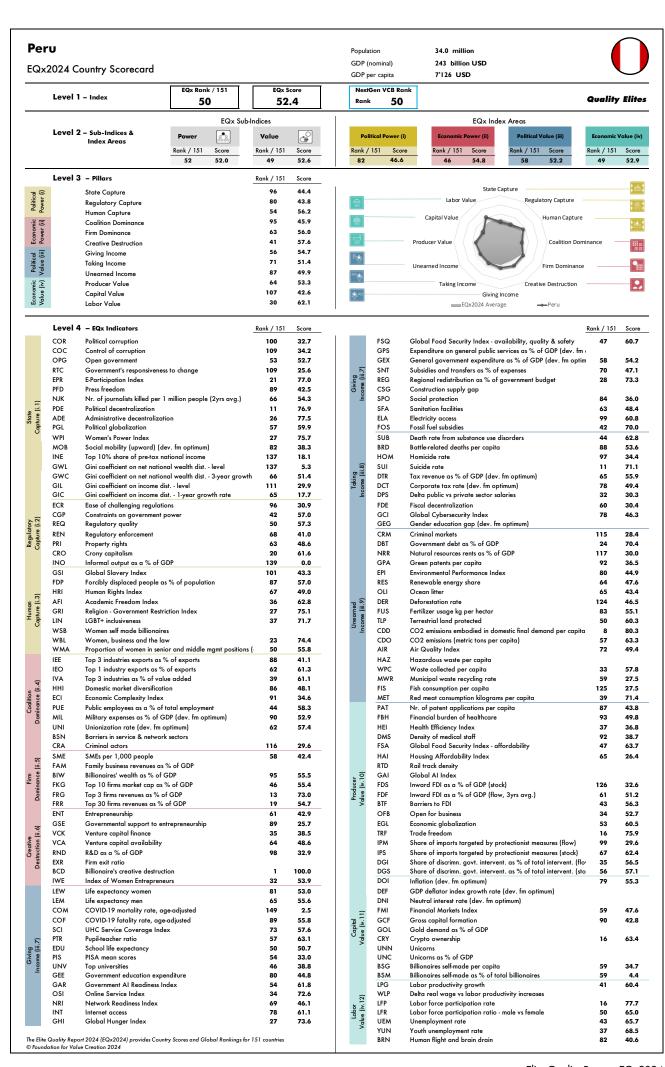
Another issue is poor *Regulatory enforcement* (REN, i.2, rank #68) that explains on the one hand the existence of oligopolies in several industries, and on the other hand the high level of informality in the economy (INO, i.2, rank #139) and employment. It is estimated that more than 70% of the employed are in the informal sector earning an income below the minimum wage. That is also why Peru has a very high GINI coefficient, with the majority earning very low incomes while a small number of people have very high incomes and don't fully pay the taxes that they should (GWL, i.1, rank #137).

In Peru, taxation revenues as percentage of GDP are very low—less than 14%—because both income and property taxes are not fully collected. The government should better enforce tax collection. This could be used to invest in areas such as, for example, improving the education sector, mainly at the primary and secondary levels, in order to help Peru improve its position in the PISA rankings (in 2022 the country ranked #58 out of 81 countries analyzed).

Peru also needs to produce goods with more value added. One sector that has quickly developed over the last twenty years and become competitive due to government incentives is agribusiness; Peru is a leading global exporter of avocados, berries, fresh grapes, and asparagus. Peru could also export more goods derived from its forestry resources (wood products) or from the fishing sector (aquaculture).

Peru has significant potential to grow if political instability was no longer an endemic problem. For example, 37 miles to the north of Lima, Chancay Port is now being built with an estimated investment of US\$3.6 billion that will make Peru the logistical and trade hub of the Latin American Pacific. There are also significant investments being made in other core transport infrastructure such as the modernization of the Port of Callao, and improvements to Jorge Chavez, Lima's main international airport. Besides that, as a traditional mining country, Peru boasts strategic resources that can continue to be exploited like copper (the world's second largest producer) and lithium, now in very high demand. As a recent report by Goldman Sachs states, by 2075, Peru could become the 31st largest economy in the world, a great leap from its current position of 50th.

Professor Maria Osterloh Mejia, The Center of Asian Studies, San Marcos National University, Peru



Portugal

Recovering Lost Ground in Power but not Value

In the EQx2024, Portugal's overall Elite Quality showed a significant improvement (up 1.4 points from 2023, to 58.4 points), recovering the fall recorded in 2023 (down 1.1 points), and resulting in a jump of five places in the rankings, back to where it was in 2022 (rank #25 out of 151 countries).

Despite this resurgence, the country's Value Sub-index registered a slight fall (rank #34, falling from #33 in 2023) as a result of a drop in Economic Value (iv, rank #48, falling from #39 in 2023), the Index Area that carries the most weight (circa 44%) in the EQx. Especially concerning are the trends in the Producer Value (iv.10, rank #47, falling from #28 in 2023) and Labor Value (iv.12, rank #66, falling from #54 in 2023) Pillars, which are due to a deterioration in several associated indicators, including the Financial burden of healthcare (FBH, iv.10, rank #113), Inward FDI as a % of GDP, stock (FDS, iv.10, rank #101), and Labor productivity growth (LPG, iv.12, rank #90). The new Producer Value (iv. 10) indicators that have been added to the EQx2024 also led to relatively worse EQx performance, as the country's rankings are below the Portuguese average (#25). For example, Portugal places #55 in the Housing Affordability Index (HAI, iv.10), #41 for Rail track density (RTD, iv.10) and #27 in the Global AI Index (GAI, iv.10).

The sharp rise in the Power Sub-index (#14, rising from #26 in 2023) explains the 1.4 point overall improvement (1.9 point contribution or 137%), but the gains made here only convey a (net) decrease in the potential for Value Extraction (since extraction cannot exist without power), not an effective reduction of Value Extraction per se, which is why it is assigned a lower weight (1/3) in the EQx index. The positive contribution of this sub-index can be traced to the Index Area of Economic Power (ii, rank #12, rising from #42 in 2023), and more specifically to the Creative Destruction Pillar (ii.6, #14, rising from #45 in 2023). Major improvements are evident in indicators within this Pillar such as Venture capital finance (VCK, ii.6, rank #29) and Billionaire's creative destruction (BCD, ii.6, rank #1), which had the highest EQx weights (2.3% and 2.8%, respectively) and together explain the bulk of Portugal's higher ranking in the EQx2024. We should note that these two indicators can vary widely in a relatively small economy such as Portugal (with only a few billionaires and a small venture capital market), and indeed they fluctuated significantly in previous years.

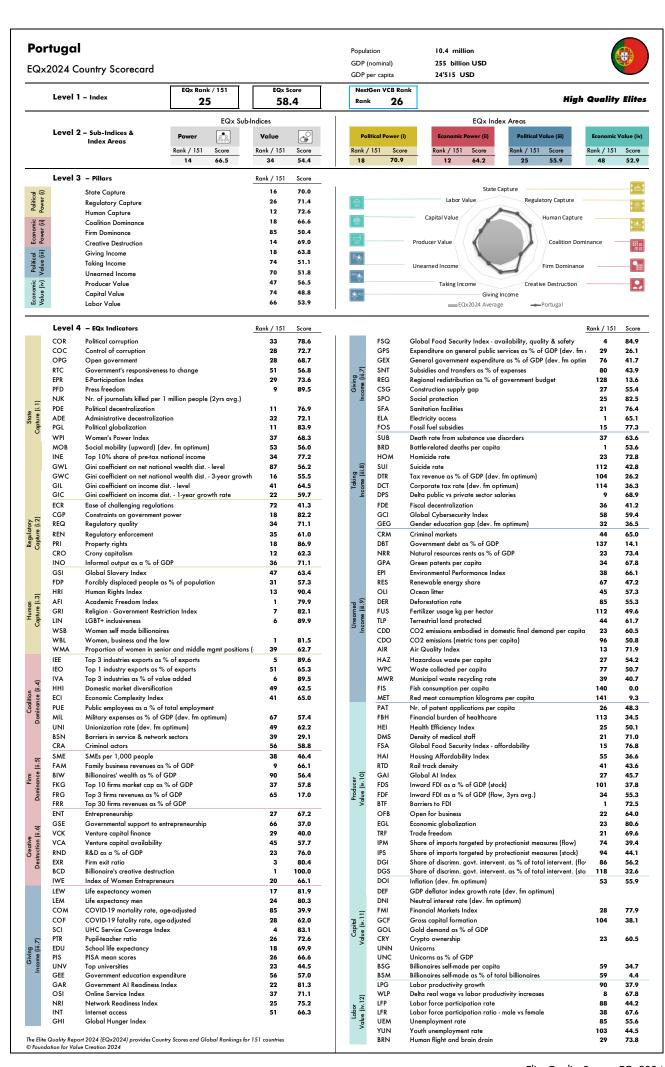
As this is the fifth year that Portugal has been ranked since the inception of the EQx, we now analyze the overall trends suggested by the main components of the index to smoothen the oscillating patterns described above, as well as mitigate the likely impacts of the COVID-19 pandemic and the war in

Ukraine. Despite yearly changes to specific indicators and their weights, the construction of the EQx is robust to those changes (namely due to the high correlation of indicators within Pillars) and allows for cross year comparability.

The first trend analysis compares the EQx2024 to the EQx2021 (the latter with indicators mostly using data from 2020), which should reflect the economic recovery path since 2020. The 1.2 point index rise in this period (from 57.2 to 58.4 points, leading to an improvement in the ranking from #30 to #25) is divided between the net contribution of 0.5 points in the Value Sub-index (1.3 points in Economic Value, and –0.8 points in Political Value, exhibiting a more extractive political elite) and 0.7 points in the Power Sub-index (0.6 points in Economic Power, and 0.1 points in Political Power), thus matching potential (power) and effective (net) Value Creation in the economic recovery phase.

The second trend analysis goes a little further back to incorporate pre-pandemic patterns, by comparing the EQx2024 to the EQx2020 (with indicators mostly using data from 2019). The EQx2020 used significantly less indicators, so the results should be treated with caution, but do appear to make sense. The increase is smaller in this case: 0.4 points, equating to a ranking improvement to 25th place from 26th or 27th place in EQx2020 (estimated using intervals of rank-to-index variation ratios with 151 countries), but most importantly, the Value Sub-index makes a negative contribution of -1.2 points to the EQx variation (-2.1 points in Economic Value and 0.9 points in Political Value). Therefore, the 1.6-point positive contribution in the Power Sub-index (1.4 points in Economic Power and 0.1 points in Political Power) represents positive potential not yet fully realized in terms of effective Value Creation, which still appears to be below pre-pandemic levels.

Dr. Nuno Torres, Professor Dr. Cláudia Ribeiro, Professor Dr. Óscar Afonso, Faculdade de Economia da Universidade do Porto (FEP.UP)



Singapore

State-mediated Value Creation Reclaims Top Spot for Elite Quality

After finishing in second position in the EQx2023, Singapore returned to the top of the rankings for the 151 countries assessed in the EQx2024. This achievement reflects Singapore's elite Value Creation performance relative to how other countries performed in 2023, and is a clear indication that the country is at the forefront of creating Political Value (rank #1) and Economic Value (rank #1) for its citizens. Particularly central to Singapore's extremely high quality elite Value Creation is the mediating role of the state, which has taken concerted efforts to maintain Singapore's open economy and coordinate social redistribution at a time of great political and economic uncertainty in the region and around the world.

The EQx2024 shows that Singapore's elites possess power relative to the value they create in the Power Sub-Index (rank #21). This suggests a comparatively high degree of coordination and control over the country's resources and institutions and, therefore, considerable potential for Value Extraction. As in previous years, Singapore ranks moderately highly on Political Power (i, rank #24), but exhibits exceptional performance in the areas of Political corruption (COR, i.1, rank #2), Control of corruption (COC, i.1, rank #1), Government's responsiveness to change (RTC, i.1, rank #1), E-Participation Index (EPR, i.1, rank #3), Regulatory quality (REQ, i.2, rank #1), and Regulatory enforcement (REN, i.2, rank #1). This is to be expected given the Singapore government's firm stance on corruption and regulation, a reputation it has fostered since the republic's early commitment to open and transparent governance. In a high profile 2023 case, for instance, the government moved swiftly on graft charges against a minister and member of the ruling political party.

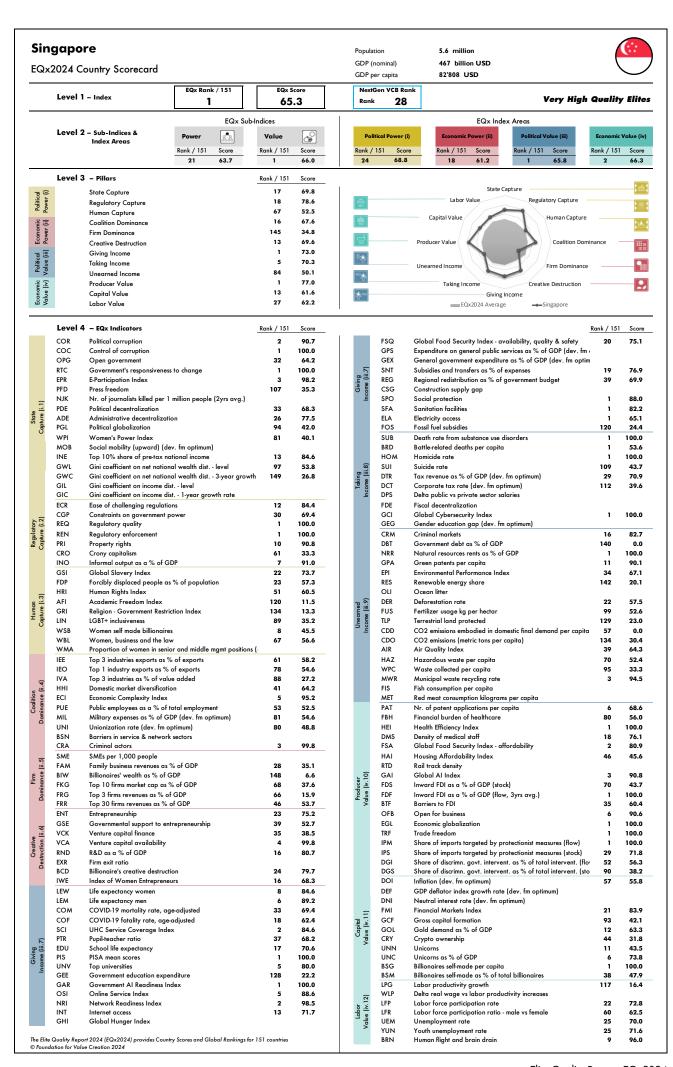
Singapore's elites appear to have slightly lost some Economic Power since they have improved in the rankings (ii, rank #18) compared with last year (rank #22). Here, there are strong showings in the Economic Complexity Index (ECI, ii.4, rank #5), the low number of Criminal actors (CRA, ii.4, rank #3), and Venture capital availability (VCA, ii.6, rank #4). Notably, in 2023, the Singapore authorities arrested a group of foreign persons allegedly involved in a transnational billion-dollar money-laundering network. However, despite Singapore's stellar economic performance, while its scores in the Coalition Dominance (ii.4, rank #16) and Creative Destruction (ii.6, rank #13) Pillars are strong, this is not the case in the Firm Dominance (ii.5, rank #145) Pillar, indicating that there are powerful players in the economy that need to be balanced with Political Power and high quality institutions.

On the other hand, Singapore continues to deliver excellent performance in the Value Sub-Index (rank #1), ranking first and second in delivering Political and Economic Value, respectively. Singapore's elites deliver top-notch Value Creation in the areas of PISA mean scores (PIS, iii.7, rank #1), the Government AI Readiness Index (GAR, iii.7, rank #1), Social protection (SPO, iii.7, rank #1), Sanitation facilities (SFA, iii.7, rank #1), Electricity access (ELA, iii.7, rank #1), a low Death rate from substance use disorders (SUB, iii.8, rank #1), a low Homicide rate (HOM, iii.8, rank #1), in the Global Cybersecurity Index (GCI, iii.8, rank #1), and for low Natural resources rents as % of GDP (NRR, iii.9, rank #1).

In terms of Economic Value, Singapore's elite models have led to exceptional performance in the Health Efficiency Index (HEI, iv.10, rank #1), Inward FDI as a % of GDP (flow, 3yrs avg.) (FDF, iv.10, rank #1), Economic globalization (EGL, iv.10, rank #1), Trade freedom (TRF, iv.10, rank #1), a low Share of imports targeted by protectionist measures (flow) (IPM, iv.10, rank #1), and the number of Billionaires self-made per capita (BDG, iv.11, rank #1). This excellent performance across many indicators of Political and Economic Value is largely due to how elite Value Creation is powered by a combination of state mediation and economic openness, given that Singapore is a small country with few natural resources that relies heavily on its relationship with the rest of the world.

In the past year, Singapore has endeavored to chart a course through uncertain global political and economic circumstances. Uneven global recovery after the COVID-19 pandemic, supply chain disruptions due to global political conflicts, and rising inflation have severely challenged the ability of Singapore's elites to rely on globalization for Value Creation. Nevertheless, Singapore's state-capitalist framework, in which the state plays an active role in channeling the profits of economic openness to providing social benefits for its population, has proved robust. It is a testament to Singapore's elite Value Creation model that the country once again leads the EQx amidst these global challenges.

Alwyn Lim, Associate Professor of Sociology, Singapore Management University



Spain

Political Elites Create More Value than Economic Elites

The first notable thing about Spain's EQx2024 scores is the continuous improvement of the country's ranking. It has risen one place this year and made great strides since 2022 (EQx2024 #24; EQx2023 #25; EQx2022 #34). While the advance this year is minor and could ultimately be the result of small details or variations in the Elite Quality of other countries, the trend is clear. Secondly, it is apparent that there is a considerable disparity between Spain's ranking for Political Value (iii, #9) and Economic Value (iv, #23). This contrasts with very similar rankings for Political Power (i, #21) and Economic Power (ii, #23). How can this divergence be explained?

The quasi-federal Spanish state is associated with local political elites that possess increasing state capacity and the power to influence government policy and the business environment. At a time when the situation in Catalonia is reducing in intensity, achieving the integration of regional elites in the construction of a common project for the entire country is one of the major challenges that Spain faces. Currently, the distribution of powers between the different regions and the center is still not settled, with the former demanding more powers and resources. The challenging situation is exemplified by the fact that Spain will soon need to approve a new regional financing law, as the previous version not only expired in 2014 but it is also outdated in terms of the services that the regions must provide to their citizens. The consequence is that there is stark competition for public resources between the different territories and a great deal of political uncertainty.

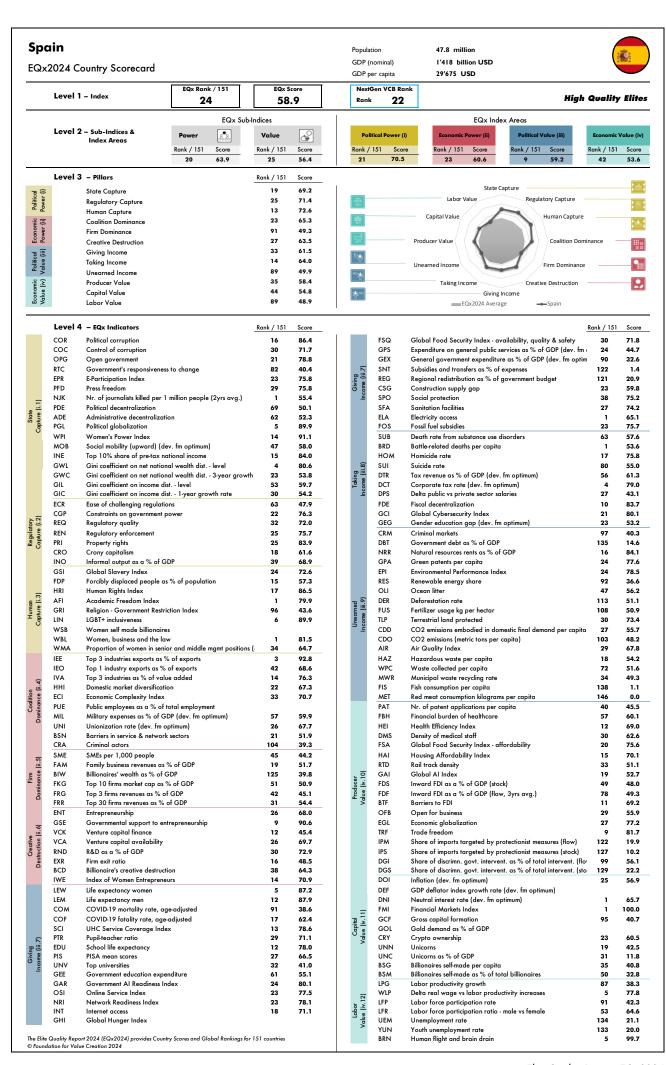
However, this competition also entails positive aspects, such as the stimulus to attract more investments and the creation of more stable economic hubs. This increases creativity and commitments to innovative ways of avoiding being left behind, as we can see in the ongoing contest for innovation between Barcelona and Madrid. This could be an explanation why Political Value is so high, despite the existence of serious problems such as *Government debt as % of GDP*, (DBT, iii.9, #135). Still, to improve the country's competitiveness at the European and global levels, it is necessary to achieve more effective coordination across the territories to allow for the generation of synergies.

Furthermore, one cannot ignore certain issues where political and economic elites must find sustainable solutions together. For example, Spain's Labor Value Pillar rank (#89) is dismal, afflicted by an inflexible labor market as evidenced in low Labor productivity growth (LPG, iv.12 #87), high levels of Unemployment (UEM, iv.12 #134), and particularly Youth unemployment (YUN, iv.12 #133). There is also an excessive bureaucracy that creates an environment that discourages Entrepreneurship (ENT, ii. #26). This is exacerbated by structural issues such as the entrenchment of existing elite business models, as is seen in very high Firm Dominance (ii.5, #91).

Spain will very soon have to grapple with the problems that come with being one of the European countries most at risk to the effects of climate change. Its leading agricultural and tourism industries will need to find solutions to adapt to this new environment. Nevertheless, the country's large production of clean energy will be of great help in this process. Overall, the country is currently doing well, as is illustrated in the Ecology Family Index, where Spain ranks #24.

A final critical issue is the risk of creating two different sections of Spain, each with very different needs and demands. First, a Spain of the coasts, the islands, and Madrid, that attract investment and human capital, that are prosperous, but have problems associated with the high cost of living. Second, an interior Spain that continues to become depopulated, is unattractive for investment, has less logistical and infrastructural capacity, but that enjoys a very low cost of living. Is this a solvable problem, and if so, what are the costs and benefits of repairing this growing fracture?

Carlos Gómez Ribas, PhD, Independent Researcher



Switzerland

A Surprisingly Stable and Sustainably Strong Runner-up

After taking the top spot in the EQx2023, Switzerland returned to an overall EQx rank of #2 in 2024, a position it held in previous years (2000-2022). While Switzerland was able to defend its strong position in terms of Value Sub-Index (rank #2), it fell from #11 to #17 in the Power Sub-index. How can the simultaneous sustained strength in Value and the noticeable decline in Power be explained?

Switzerland has once again demonstrated its reputation as an anchor in a storm during turbulent times, as is evidenced by its ranking of #1 for *Inflation* (DOI, iv.11), an improvement from rank #6 in 2023. Despite the political and economic turmoil around the globe, Switzerland has been able to rely on its structural and even cultural strengths, both of which are deeply rooted in the Swiss elite system.

The national system of governance is designed for stability. With its direct democracy (ECR, i.2, rank #1) and federal and decentralized structures (rank #1 in PDE, ADE, both i.1, and FDE, iii.8) Switzerland has been able to excel. This is also reflected in a liberal and tolerant culture that accepts different points of view (HRI and AFI, both i.3, rank #1), is *Open for business* (OFB, iv.10, rank #1), and provides excellent conditions for *Family Businesses* (FAM, ii.5, rank #1) and *Entrepreneurship* (ENT, ii.6, rank #1), while topping the index in the number of *Billionaires self-made per capita* (BSG, iv.11, rank #1). This stability is based on the needs of the elites of a small landlocked country without natural resource rents (NRR, iii.9, rank #1) to maintain trust and fair process, as is evidenced by *Control of corruption* (COC, i.1, rank #1) and *Informal output* as a % of GDP (INO, i.2, rank #1).

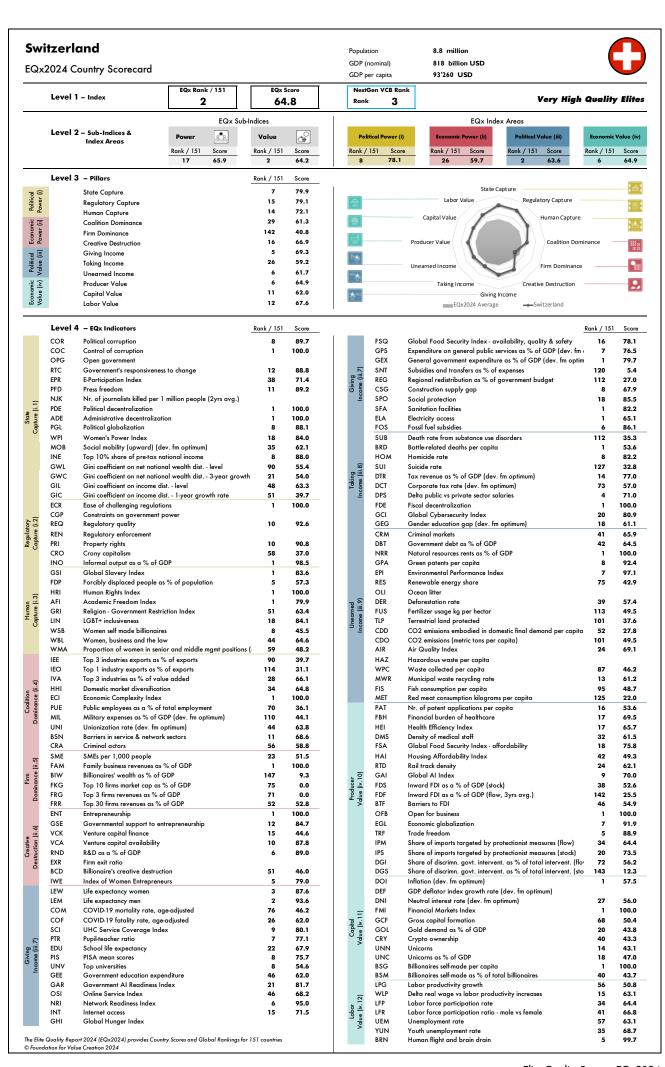
In considering why Switzerland has lost its 2023 leading position in the EQx despite these strengths, we must turn to the Sub-index area of Power where two observations stand out.

First, the decline in its ranking for *Crony capitalism* (CRO, i.2, falling from rank #48 to #58), *Billionaire's creative destruction* (BCD, ii.6, falling from rank #44 to #51), and *Unicorns as % of GDP* (UNC, iv.11, falling from rank #6 to #18), need to be viewed in the context of single events and the disproportionate effect of those on a small country. The orchestrated integration of Credit Suisse into UBS, Switzerland's two largest banks, led to a general shift in the sector mix of listed companies. The loss in value of some mature unicorns and a dried-up pipeline of new scale-ups further intensified this effect.

Second, the decline in the Capital Value Pillar (iv.11) from #3 to #11 is mainly due to a decline in *Gross capital formation* (GCF, iv.11, falling from rank #46 to #68) and the *Neutral interest rate* (DNI, iv.11, falling from #3 to #27). The substantial write-downs by some companies and the consequences of the Swiss National Bank's policy of keeping inflation low while accepting a strong Swiss franc led to a further relocation of assets abroad.

In summary, while Switzerland has been able to consolidate its leading position in the EQx2024 on the basis of its structural and cultural strengths, resulting in elite business models that have excelled in Value Creation, the decline in Power highlights the hazards and dilemmas that face a small and highly interconnected country at a time of global turmoil. While elites cannot change global realities, they can play an important role in finding inclusive and value-creating solutions to these dilemmas. To successfully manage future shocks, elites in Switzerland would be well advised to continue to invest in new sources of Value Creation while maintaining the integral strengths of the elite.

Michael Hilb, Titular Professor, University of Fribourg



The United Kingdom

A Further Slow Decline as Political Instability Combines with Economic Stagnation

Last year I highlighted the fact that the UK was grappling with a period of political instability during its post-COVID economic recovery. I also pointed to the negative headwinds of Brexit, which had become a drag on economic performance. During 2023, the economy continued to weaken. Tight monetary policy sought to control the inflationary surge of 2022–23, and the fiscal policy space was limited by the slow economic recovery and higher debt interest costs.

In the EQx2023, the UK fell 5 places in the overall global ranking and in the EQx2024, it has fallen a further two places—now ranking #11 overall. This year saw poorer performance in several areas. It dropped in both the Power and Value Sub-Indices and across all Index Areas. There were particularly precipitous falls in Political Power (i), Economic Power (ii), and Political Value (iii).

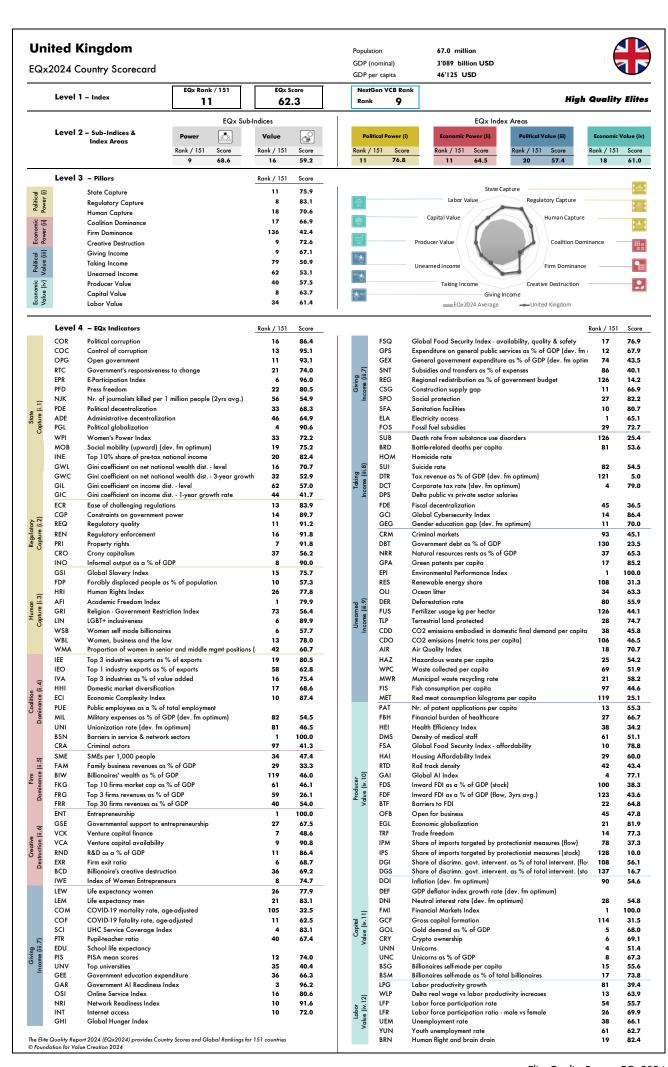
In Political Power (i), the UK fell from rank #8 in the EQx2023 to rank #11 in the EQx2024. The UK has now dropped by 7 places over two years in this Index Area. The Human Capture Pillar exhibits a particularly notable deterioration this year. This seems less about any specific factor but a failure to improve relative to other leading economies. For instance, of note is the lack of improvement in the proportion of women in senior and middle management positions (i.3, WMA) and Religion –Government Restriction Index (GRI) where the UK ranks much lower than its overall position.

In Economic Power (ii, rank #11, falling from #6 in the EQx2023), the areas of weakness seem linked to trade. For instance, there was a marked drop for scores in the sub-indices linked to major export industries (in ii.4). Despite some improvement in R&D spending (this was due to a re-estimation of R&D spending in the national accounts, RND, ii.6) that improved the UK's ranking from #21 to #11, this was not enough to outweigh other factors dragging the country down. Firm dominance (ii.5, rank #136) remains an area of relative weakness for the UK.

Political Value (iii) saw a major decline in the EQx2024. The UK's overall rank in this Index Area fell from #12 to #20, more than reversing the gain of the previous year. Some of this weakness was due to fiscal policy indicators like tax revenues and fiscal spending. Some of the other major indicators that slipped include the *Deforestation rate* (DER, iii.9, rank #80) and *Fertilizer usage kg per hectar* (FUS, iii.9, rank #126), suggesting that there have been setbacks in important areas of the green economy. Interestingly, the UK also fell back in terms of universal health coverage (SCI, iii.7, rank #4) and dropped considerably in terms of its score for *Top universities* (UNV, iii.7), falling from #12 to #35.

The UK's performance in Economic Value (iv) in the EQx2024 is more in line with the previous year. In this Index Area its ranking only fell one position, from #17 to #18. Here, the main area of concern is the significant drop in the UK's ranking for Inward FDI as a % of GDP (stock) (FDS, iv.10) that fell from #29 to #100. This is undoubtedly due to the continuing impact of Brexit. The fall in the UK's ranking for Labor productivity growth (LPG, iv.12, rank #81) is also very marked. The UK is still struggling to recover its economic trend rate of growth since the shocks of the 2007-2008 financial crisis and the recent pandemic, and the constraints on trade and access to skilled labor that have followed Brexit will only make this harder to achieve going forward.

Professor Sir Anton Muscatelli, University of Glasgow, United Kingdom



The United States

How to Preserve a Dynamic, Future-oriented Economy Without Leaving a Large Part of Society Behind?

Owing to the evolving composition of the Elite Quality Index to reflect emerging requirements (such as the inclusion of the SDGs) or events (like COVID-19) affecting Sustainable Value Creation, one needs to be careful when performing longitudinal analyses. Nonetheless, the EQx2024 reveals continuing strengths and some important improvements that have contributed to the United States' overall EQx rank of #16, a 5-position improvement on last year's ranking of #21. The EQx's level 4 indicators provide nuanced evidence of these strengths and improvements, especially in new categories that reveal areas where the US excels. Unfortunately, many indicators also contain signs of persistent weaknesses that serve as a drag on otherwise positive developments, including evidence that the US remains an outlier among major industrial democracies in key areas of social welfare.

First, let us consider the good news. The US retains its top slot for Entrepreneurship (ENT, ii.6, rank #1) and also leads the Index of Women Entrepreneurs (IWE, ii.6, rank #1). This no doubt reflects high scores for the ease with which economic actors can challenge burdensome regulations, where the US ranks #6 overall (ECR, i.2), and a strong Property rights regime (PRI, i.2, rank #7). Political decentralization, where the US leads the world (PDE, i.1, rank #1), and a high degree of Fiscal decentralization (FDE, iii.8, rank #6), mean that relevant governmental officials are close to societal and economic actors. This brings advantages to both the private and public sectors, a fact reflected by the country's top position in the Government AI Readiness Index (GAR, iii.7, rank #1). For entrepreneurs, a conducive regulatory environment is matched by a facilitative venture capital ecosystem, with the US ranked first in both Venture capital finance (VCK, ii.6, rank #1, up from #4 last year) and Venture capital availability (VCA, ii.6, rank #1).

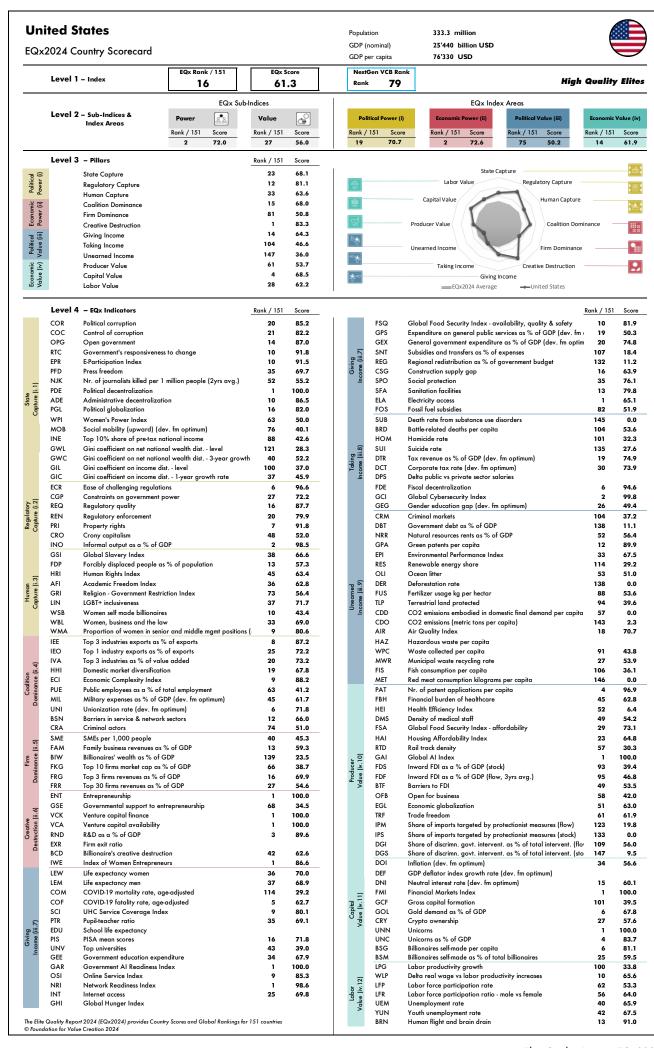
The strong entrepreneurial sector certainly contributes to the overall positive macroeconomic picture painted by the EQx2024 data. The US improved on its 2023 second-place in the Creative Destruction Pillar (ii.6), taking the top spot this year. The significant jump from #18 to #4 in the Capital Value Pillar (iv.11) also stands out. The US again comes first for its Financial markets (FMI, iv.11, rank #1). A strong improvement in the General government expenditure as % of GDP (GEX, iii.7), where the US jumped from #62 to #20, likely reflect not only an expanding economy but also large reductions in pandemic-related expenditures as well as the end of America's twenty-year military operation in Afghanistan. The latter certainly accounts for the dramatic shift from last year's #1 to this year's #104 rank for Battle-related deaths per capita (BRD, iii.8).

Nonetheless, the 5-position jump in the US' overall Elite Quality ranking occurred against the backdrop of rather stubborn measures of economic inequality. The US came in at a lowly #121 on the GINI coefficient on net national wealth distribution (GWL, i.1) and at #100 on the GINI coefficient on net income distribution (GIL, i.1). But there is some room for optimism. A significant improvement in the Giving Income Pillar rank (iii.7), from #56 a year ago to #14, suggests that there is potential for broad-based societal improvements. The first signs might be exhibited by impressive improvements to the PISA mean scores (PIS, iii.7), with the US now ranked #16, up from #23 a year ago. Nonetheless, a poor rank for Social protection (SPO, iii.7, rank #35) is still embarrassingly low for the world's largest economy.

The latter score reflects the fact that the US remains an outlier among the world's advanced economies along significant dimensions that measure the quality of life. Life expectancy for both men (LEM, iii.7, rank #37) and women (LEW, iii.7, rank #36) are towards the bottom of the top-25% of the EQx2024 country scorecards. The index also shows no improvement in the Death rate for substance use disorders (SUB, iii.8, rank #145) or the Homicide rate (HOM, iii.8, rank #101) since last year, and only a slight decrease in the terrible Suicide rate (SUI, iii.8, rank #135). Once a leader in minority inclusion, the US continues to backslide, as is evidenced by its #37 rank in LGBT+ inclusiveness (LIN, i.3) down from #29 last year.

The big picture revealed by the EQx2024 scorecard is clear: the challenge for US elites remains how to preserve a dynamic, future-oriented economy without leaving a large part of its society behind.

James W. Davis, Professor of International Relations, University of St.Gallen, Switzerland



Artificial intelligence (AI) has generated great expectations for technological breakthroughs, such as natural language processing, facial recognition, and robotics. As the use of AI has grown across a wide range of sectors, more countries are applying AI technologies to update the quality and coverage of public services and mobilizing more resources to facilitate the development of AI industries. Although AI is deemed by some to pose an existential threat, the EQx2024 sees it as the potential source of great Value Creation. Here, the focus is on how countries use AI through a Value Creation lens. Two datasets for AI are used for the first time in the EQx2024: the Government AI Readiness Index (GAR, iii.7) in the Giving Income Pillar to indicate Political Value; and the Global Al Index (GAI, iv.10) in the Producer Value Pillar to indicate the Sustainable Value Creation agency of firms.

In the EQx2024, the United States, Singapore, the United Kingdom, Finland, Canada, France, the Republic of Korea, Germany, Japan, Netherlands, Denmark, Australia, Norway, Sweden, and Austria, have emerged as the leading fifteen nations in the Government AI Readiness Index (GAR, iii.7). This index is a crucial benchmark for assessing a country's preparedness for AI adoption. These countries, with a mean overall GAR score of 92.2 and a standard deviation of 4.10, are tightly clustered at the top of the index. Their high rankings are a testament to their significant efforts in enacting laws and legislation to promote and regulate AI development, with the US being a regulative frontrunner. In 2019, then-President Trump released an executive order, "Maintaining American Leadership in Artificial Intelligence", committing to sustain and enhance the scientific, technological, and economic leadership of the United States in AI research and development. In 2020, the US passed the National Artificial Intelligence Initiative Act to establish national agencies to support federal Al activities at several core national foundations and research facilities. Further, in 2023, the Biden Administration convened representatives from seven top American Al companies; Amazon, Anthropic, Google, Inflection, Meta, Microsoft, and OpenAI, and announced voluntary commitments from each of them to contribute to the safe, secure, and transparent development of AI technology.

While advanced countries excel in AI readiness, China shares the #1 ranking with the US in the Global AI Index (GAI, iv.10). Moreover, China's unique approach to AI regulation sets it apart as a global frontrunner in generative AI. In 2023, China introduced a critical regulation, "Measures for the Administration of Generative Artificial Intelligence Services", with open and supportive requirements for generative AI developers and security standards, demonstrating its commitment to staying ahead in this rapidly evolving field. China's emphasis on international coordination in AI regulation is also noteworthy, as evidenced by its signing of the Bletchley Declaration with twenty-seven other governments. This declaration aims to foster collaboration on AI safety research and global governance. Despite its regulatory efforts, China is also actively pushing the development of its AI industry, with 232 investments recorded in 2023 and an estimated total amount raised by Chinese AI firms of US\$2 billion (CBInsights, 2024), an important number, but one that pales when compared with the US, where Microsoft's investment into OpenAI alone amounts to US\$10 billion. Chinese AI firms became more competitive when Baidu launched ERNIE Bot to enter the fray of large language models with start-ups like Zhipu AI, MiniMax, Baichuan AI, and 01.AI demonstrating remarkable innovation capacities. However, China still lags in Al talent, diversity of talent, and economic digitalization compared to the United States (Chakravorti, B. et al., 2023). Chinese Al firms are also banned from purchasing American advanced chips, resulting in enormous challenges for China to catch up with the United States in the short run.

Political and economic elites in advanced countries and China are embracing AI technologies for Value Creation. They are interested in the opportunities created by the development of AI but are also concerned about risks, as AI could be a factor in privacy and national security. However, the era of AI is now inevitable, and first-mover countries have accumulated key advantages, possibly of a decisive nature, over latecomers. The more critical challenge is thus to reduce the global technology and then development gap generated by the rise of AI. Our human civilization depends on the elite coordination capacity of global leaders as the elites from different countries collaborate to manage the massive Value Creation potential of AI.

> Shi Shuo, Post-doctoral fellow, Fudan Development Institute, Fudan University

> > Ouyang Hanzhen, Post-doctoral fellow, School of Management, Fudan University

100



EQx2024 Indicator Scorecard

Government AI Readiness Index

Sub-Index (Level 2)

Value

Index Area (Level 2) Political Value Pillar (Level 3) Giving Income Indicator ref. (Level 4)

iii.7_GAR Indicator wgt. (in EQx) 0.3% Indicator wgt. (in Pillar) 4.1% Countries covered 151 Inclusion year 2024

Conceptual optimum

Oxford Insights, the Government Data Source

Nο

Al Readiness Index

Description

Government AI readiness measures how prepared a country's national government is for implementing Artificial Intelligence in the delivery of public services.

Rationale

Al will transform and supercharge value creation as well as patterns of investment, R&D, and business models. Cutting-edge AI technologies and AI firms are thus critical determinants in international competition. A government's capacity for utilizing AI reflects its performance in creating economic value.

/151	Country	Score	Rank /151	Country	Score	Rank /151	Country	Score
1	Singapore	100.0	51	Jordan	64.7	101	Bolivia	33.3
1	United States	100.0	52	Bahrain	63.6	102	Kyrgyz Republic	31.7
3	United Kingdom	96.2	53	Serbia	62.8	103	Uganda	30.7
4	Finland	94.5	54	Peru	61.8	103	Iraq	30.7
5	Canada	94.0	55	Vietnam	61.2	105	Lao PDR	30.2
6	France	92.6	56	Mauritius	59.5	105	Gabon	30.2
7	Korea, Rep.	92.0	56	Ukraine	59.5	107	Tanzania	29.9
8	Germany	91.4	58	Egypt, Arab Rep.	58.7	108	Cote d'Ivoire	29.8
9	Japan	91.1	59	Romania	58.1	109	Ghana	29.5
10	Netherlands	90.3	60	Philippines	57.6	109	Honduras	29.5
1	Denmark	89.4	61	Dominican Republic	55.8	109	El Salvador	29.5
1	Australia	89.4	62	Mexico	55.3	109	Ethiopia	29.5
3	Norway	87.7	63	Kuwait	54.5	113	Zambia	29.1
4	Sweden	87.5	64	Croatia	53.8	114	Cambodia	28.5
15	Austria	87.2	65	Costa Rica	53.5	115	Turkmenistan	27.4
16	China	85.1	66	Kazakhstan	52.7	116	Myanmar	27.0
17	Estonia	85.0	67	Azerbaijan	52.1	117	Nepal	26.8
8	United Arab Emirates	84.4	68	Lebanon	51.3	117	Zimbabwe	26.8
9	Ireland	83.5	69	South Africa	50.8	119	Papua New Guinea	26.3
20	Malaysia	81.9	70	Bangladesh	49.0	120	Gambia, The	26.1
21	Switzerland	81.7	70	Tunisia	49.0	120	Cameroon	26.1
22	Portugal	81.3	72	North Macedonia	48.1	122	Timor-Leste	25.4
23	Italy	80.3	72	Rwanda	48.1	122	Nicaragua	25.4
24	Spain	80.1	74	Armenia	47.8	124	Togo	25.3
25	Belgium	79.8	75	Panama	45.9	125	Venezuela, RB	24.6
26	Saudi Arabia	79.5	76	Uzbekistan	45.7	126	Angola	24.5
20 27	Israel	77.3 77.2	77	Morocco	45.1	127	Madagascar	23.5
28	Czech Republic	76.8	78	Albania	45.0	128	Eauatorial Guinea	22.9
20 29	Brazil	76.6 74.6	79	Moldova	44.5	128	Burkina Faso	22.9
29 30	Qatar	74.5 74.5	80		44.0	130	Guinea	22.1
30 31	Lithuania	74.5 74.1		Senegal	43.4	130	Mali	22.0
			81	Pakistan				
32	Poland	73.8	82	Iran, Islamic Rep.	43.2	132	Mauritania	21.5
33	Thailand	73.7	83	Sri Lanka	43.0	133	Eswatini	21.4
34	Russian Federation	73.5	84	Jamaica	42.2	134	Lesotho	20.2
35	Slovenia	73.1	84	Benin	42.2	135	Mozambique	19.4
36	India	73.0	86	Georgia	42.1	136	Libya	18.9
37	Chile	72.1	87	Ecuador	41.5	137	Malawi	18.3
38	Indonesia	70.8	88	Kenya	40.5	138	Sierra Leone	18.2
39	Cyprus	70.5	89	Nigeria	40.1	139	Niger	18.0
40	Slovak Republic	70.3	90	Trinidad and Tobago	39.4	140	Sudan	17.8
41	Hungary	70.2	91	Belarus	39.1	141	Congo, Rep.	17.3
42	Uruguay	70.1	92	Mongolia	38.8	142	Guinea-Bissau	17.2
13	Turkey	70.0	93	Botswana	38.6	143	Chad	16.2
14	Latvia	69.7	94	Tajikistan	38.5	144	Liberia	14.5
1 5	New Zealand	69.5	95	Paraguay	35.7	145	Haiti	14.1
16	Oman	67.7	96	Bosnia and Herzegovina	35.1	146	Congo, Dem. Rep.	13.3
47	Bulgaria	67.3	97	Algeria	34.4	147	Afghanistan	13.1
48	Greece	66.3	98	Guatemala	34.1	148	Burundi	12.5
19	Colombia	66.1	99	Cuba	33.7	149	Yemen, Rep.	11.1
50	Argentina	66.0	100	Namibia	33.5	150	Central African Republic	10.8
	ulity Report 2024 (EQx2024) p		1			151	Syrian Arab Republic	8.5

Finetuning the Political Economy for Value Creation in the Real Estate Sector

Housing is essential for humans, and hence a source of Value Creation in the economy. Yet it is also possible for real estate to be extractive as is evidenced by shortages, rent inflation, or price bubbles. Given the importance and the income that the sector generates it is clearly an elite business model in most political economies. The EQx, in partnership with Swiss Forecast, has chosen two indicators to establish the Value Creation or extraction of the sector in the economy: the *Housing Affordability Index* (iv.10, HAI) and the *Construction supply gap* (iii.7, CSG), both of which are now discretely analyzed.

The Housing Affordability Index (HAI): Targeting Policies for Inclusiveness

Housing affordability indicates how much of an individual's available income is spent on residential costs. In this model, housing can be obtained both through renting and home ownership. While rental rates must be high enough to produce profitability for investors, home ownership is driven by low financing rates, reducing building and planning costs, and land supply. High ownership rates moderate high rental expenses on the demand side. They can be boosted by regulatory measures to reduce construction costs, provide preferred financing rates, curb bureaucracy, ensure sufficient land supply, offer low property taxes, and institute preferable inheritance laws. Low financing rates, however, can be a double-edged sword, as they may not only lead to an increase in new construction but also increase transaction volumes and, through that, raise inflationary tendencies in the available housing stock. Furthermore, the asset-based securitization of mortgages requires at least moderately rising housing prices to stabilize the financial viability of lenders. This poses high risks for financial stability and ownership affordability. For example, the 2008 US financial crisis triggered a drop in housing affordability, even in a housing market with declining prices, resulting in diminishing home ownership as a consequence of financial turmoil.

Generally speaking, countries and regions where property prices have been subject to speculative pressures see declining housing affordability because rental rates increase while home ownership falls. Such tendencies can be reduced by targeted taxes and regulations that reduce incentives to speculate on future price rises. However, utmost caution is required: government interference in rental prices under high-demand scenarios could potentially spark a cycle of low construction activity and subsequent undersupply.

The availability of infrastructure can mitigate geographical housing supply and demand imbalances by affecting commuting times and the desirability of certain regions.

The model used for the *Housing Affordability Index* (HAI) contains the ratio of household income in USD at purchasing power parity (ppp)—normalized on the average of the listed countries—in relation to the normalized rent per square meter moderated by the home ownership percentage rate.

In this year's HAI (iv.10), the top countries were Oman and Saudi Arabia (jointly ranked #1), followed by India (rank #3) and Norway (rank #4). Countries with considerable room for improvement include the Philippines (rank #81), Ghana (rank #80), and Kenya (rank #79).

Beyond these described policy measures, housing affordability and stable housing markets are driven by an optimal ratio of underlying housing demand and supply, which is quantified by the *Construction supply gap* (CSG). As can be seen, the positioning of this indicator is dependent on the basket of countries and regions ranked, though the factors determining a similar ranking can be the result of very different policies and economic factors.



EQx2024 Indicator Scorecard

O Housing Affordability Index

Description The Housing Affordability Index measures national average house prices against local incomes. A high value in the HAI indicates affordable residential housing prices compared to local incomes. A low value indicates unaffordable house prices compared to local incomes.

Sub-Index (Level 2) Value Index Area (Level 2) Economic Value Pillar (Level 3) **Producer Value** Indicator ref. (Level 4) iv.10_HAI Indicator wgt. (in EQx) 0.6% Indicator wgt. (in Pillar) 5.0% Countries covered 81 2024 Inclusion year Conceptual optimum Νo

Data Source Swiss Forecast (proprietary data)

Rationale

To be able to afford a house is relevant in relation to the development of children, life satisfaction, and in addressing wealth inequalities. A widening gap between house prices and local incomes represents Value Extraction, as a reduction of affordability raises inequalities, and contributes to the segregation of social classes. House price growth that outpaces income growth translates into the elite business model of capital gains. Eventually, the decoupling of prices from incomes points to unsustainable development and is a predictor of financial (and social) fragility. Affordable housing is Value Creation.

ank /81	Country	Score	Rank /81	Country	Score	Rank /81	Country	Score
1	Oman	100.0	51	Iraq	41.5			
1	Saudi Arabia	100.0	52	Argentina	38.9			
3	India	93.6	53	Serbia	37.7			
4	Norway	93.3	54	Vietnam	36.7			
5	Korea, Rep.	86.0	55	Portugal	36.6			
6	Finland	84.6	56	Cyprus	35.3			
7	Belgium	82.7	57	Azerbaijan	35.2			
8	Latvia	77.8	58	Brazil	35.0			
9	Croatia	76.0	59	Mexico	33.9			
10	Bangladesh	74.6	60	Ukraine	33.5			
11	Estonia	74.3	61	Morocco	32.3			
11	Sweden	74.3	62	Kazakhstan	31.3			
13	Netherlands	73.1	63	Bolivia	30.8			
14	Romania	72.2	64	United Arab Emirates	26.8			
15	Spain	70.1	65	Peru	26.4			
16	Bulgaria	69.9	65	Indonesia	26.4			
17	Japan	69.7	67	Egypt, Arab Rep.	24.9			
18	France	69.1	68	Nigeria	24.7			
19	South Africa	69.0	69	Thailand	23.1			
20	Hungary	67.3	70	Turkey	22.6			
21	Denmark	67.0	71	Mongolia	20.4			
22	North Macedonia	66.7	72	Uzbekistan	20.2			
23	United States	64.8	73	Armenia	19.9			
24	Malaysia	64.4	74	Honduras	18.6			
25	Slovak Republic	63.6	75	Guatemala	15.6			
26	Italy	62.9	76	Georgia	13.1			
27	Czech Republic	61.9	77	Iran, Islamic Rep.	12.7			
28	Lithuania	61.6	78	Ethiopia	9.0			
29	United Kingdom	60.0	79	Kenya	8.2			
30	New Zealand	59.2	80	Ghana	4.6			
31	China	58.9	81	Philippines	3.6			
32	Slovenia	57.4						
33	Canada	57.1						
34	Poland	55.7						
35	Germany	55.2						
36	Australia	54.9						
37	Austria	54.7						
38	Israel	54.0						
39	Moldova	53.0						
40	Russian Federation	52.6						
41	Greece	50.2						
42	Switzerland	49.3						
43	Nepal	47.2						
44	Ireland	46.4						
45	Algeria	46.1						
46	Singapore	45.6						
40 47	• .	45.0 45.0						
	Jordan Allanain							
48	Albania	44.6						
49	Tunisia	44.1						
50	Pakistan	42.8	1					

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The Construction Supply Gap (CSG): When Real Estate Markets are Healthy

Real estate encompasses a significant sector of industrial activity, playing a pivotal role in societal development across its comprehensive value chain and in determining housing affordability. A meticulously managed real estate market contributes substantially to a nation's economic prosperity and the welfare of its citizens. Nonetheless, instances of Value Extraction are evident in scenarios where the equilibrium between supply and demand diverges due to a variety of potential factors.

The supply and demand dynamics within the real estate sector and the construction industry are interconnected, albeit with a time lag. An upsurge in demand for residential properties is indicative of heightened rental and purchasing costs that, in turn, ought to catalyze an increase in construction activities. However, given the substantial nature of real estate as an asset class and the characteristically prolonged duration of its delivery, a transient discrepancy, referred to as the Construction supply gap (CSG) typically emerges. During periods of supply deficit, investors are inclined to capitalize on the prospects of elevated project yields, guided by a homogeneity in investment decisions. This can eventually precipitate a scenario of oversupply, culminating in a reduction in property prices. In severe instances, this phenomenon manifests as 'real estate bubbles', the bursting of which transcends the confines of the real estate sector, significantly undermining the stability of the financial system.

The CSG serves as way to gauge the vitality of a nation's real estate sector. Empirical research underscores that a marginal undersupply not only facilitates housing affordability but also enhances the sector's profitability, thereby invigorating investment. Conversely, significant supply discrepancies or oligopolistic frameworks are deemed to be extractive, analogous to the conditions of oversupply, where investment is diverted to alternative sectors, leading to a contraction in construction output.

From the perspective of demand, the CSG is instrumental in assessing the requisite increment in household numbers, domestic migration patterns, and alterations in household dimensions. Supply-side considerations encompass the net valuation of new constructions and demolitions, the inventory of second homes, and the provision of tourist-oriented real estate. The influence of second homes on the market varies by country, with notable prominence in nations such as France. Although these properties contribute to construction output, they do not augment the housing supply for additional households.

The CSG is calibrated to a baseline of 100, signifying the complete satisfaction of residential real estate demand. It is posited that achieving a perfect equilibrium between supply and demand at a CSG level of 100 is suboptimal; a slight undersupply is advocated to stabilize market dynamics, preserve real estate values, and foster further investment, thereby safeguarding the financial sector against the ramifications of non-performing loans.

An oversupply, indicated by a CSG exceeding 100, can inflict severe repercussions on property owners, the financial sector, and investment availability. Historical precedents of such adverse outcomes have been observed in Spain, the United States, and Ireland.

In this year's CSG ranking, the top performers were Turkey and Ireland (jointly ranked #1), followed by Belgium (rank #3) and Sweden (rank #4). Countries with room for improvement include Serbia, Lithuania, and South Korea (all ranked #47). China, given its considerable oversupply and current real estate crisis, stands at rank #45.

Given the integral role that construction plays in financial institutions, and its potential to ensure affordable housing for the populace, the CSG is a critical indicator. Its inclusion in the EQx2024 provides a valuable reference for evaluating the Value Creation or extraction that the sector is responsible for in a national economy and the impact this has on living standards.

The Housing Affordability Index (HAI) analysis was written by Dr. Marcus Schütz (Swiss Forecast) and the Construction supply gap (CSG) by Martin Langen (Swiss Forecast)





Sub-Index (Level 2)

Value

Index Area (Level 2) Pillar (Level 3) Indicator ref. (Level 4) **Political Value** Giving Income iii.7_CSG

Indicator wgt. (in EQx) 0.3% Indicator wgt. (in Pillar) 4.1% 49 Countries covered

Inclusion year 2024 Conceptual optimum Yes

Swiss Forecast (proprietary Data Source

Indicator)

Description

The Construction supply gap Indicator measures the health of a national real estate sector by comparing demand for dwellings in relation to available dwellings. This Indicator therefore measures supply as a percentage of demand. A positive value indicates an oversupply of housing while a negative value indicates an undersupply.

Rationale

Housing is an important public good and its adequate supply affects a nation's economic growth. It plays a key role in wealth creation and preservation and is an important factor in financial crises. The construction industry is a major employer and contributor to GDP. It is crucial to stabilize house prices as on the one hand undersupply leads to price appreciation, reduced affordability, inequality, speculation, and the formation of price bubbles, as well as impaired economic growth. On the other hand, housing oversupply leads to the misallocation of resources, falling prices, and a drop in investment levels, causing a downturn in construction output. When housing supply is in line with demand, it promotes the sustainable development of real estate value, encourages further investment, and ensures affordability. Due to the time lags associated with construction, a slight undersupply of housing in relation to demand is the optimal scenario.

Rank /49	Country	Score
1	Ireland	68.9
1	Turkey	68.9
3	Belgium	68.7
4	Sweden	68.5
5	Chile	68.4
6	Norway	68.2
7	Iran, Islamic Rep.	67.9
7	Switzerland	67.9
9	Latvia	67.3
10	Greece	66.9
10	United Kingdom	66.9
12	Austria	66.6
13	Slovak Republic	65.5
13	Romania	65.5
15	Germany	65.2
16	United States	63.9
17	Netherlands	63.3
18	Cyprus	62.1
19	Japan	61.8
20	France	61.6
21	Hungary	61.4
22	Czech Republic	60.8
23	Spain	59.8
23	Colombia	59.8
25	Poland	57.0
26	Australia	55.7
27	Portugal	55.4
28	Russian Federation	53.6
29	Ukraine	52.9
30	Kazakhstan	50.8
31		48.4
	Italy	
32	Bosnia and Herzegovina	48.3
33	Albania	47.2
34	Slovenia	46.9
35	Denmark	46.7
36	Philippines	45.0
37	Canada	44.4
38	South Africa	44.0
39	Qatar	43.8
40	North Macedonia	41.9
41	Israel	41.2
42	Estonia	41.0
43	Croatia	40.1
44	Finland	31.9
45	China	23.4
46	Bulgaria	18.0
47	Korea, Rep.	0.0
47	Lithuania	0.0
47	Serbia	0.0

The Elite Quality Report 2024 (EQx2024) provides Country Scores and Global Rankings for 151 countries @Foundation for Value Creation 2024

The Elite Business Model of Drugs: A Fatal Form of Value Extraction

According to the United Nations World Drug Report (UNO-DC, 2023), 5.8% of the global population aged 15 to 64 is estimated to have used some type of drug in 2021, an increase of 23% compared to a decade ago. Drugs are manifold in their appearance and effects, in the risk they pose for addiction, and their social acceptance (National Institute on Drug Abuse, 2023). There are drugs that are 'en vogue' or are taken at parties, in Silicon Valley offices, or in university dorms. There are hallucinogens, such as LSD, magic mushrooms, or ketamine; and stimulating and arguably performance enhancing drugs, including cocaine, amphetamines, ecstasy, Ritalin, and steroids. There are also drugs intended for the medication of anxiety and depression, like Benzodiazepines; and opioids such as Fentanyl or Tramadol for pain management. There are further 'hard' drugs, such as heroin, an opioid, or crystal meth, an amphetamine. There is also cannabis, legalized in some countries, prohibited in others, and sometimes used for medical reasons.

The production and trading of illicit drugs is a lucrative business model for many elites worldwide, even though the deaths related to their production and consumption are an intrinsic part of this extractive elite business model. They reflect the 'Taking' of the ultimate form of value: life itself. The EQx thus attempts to measure this business model using an indicator: Death rate from substance use disorders (SUB, iii.8). With state institutions failing in their responsibility to constrain such business models, this indicator provides a reflection of Political Value or its absence. The indicator uses data from the Global Burden of Disease Collaborative Network. The substances considered include opioids, cocaine, amphetamines and others. The indicator thus focuses on the consequences of the consumption side of this elite business model, though the production of drugs can also be dangerous and deadly. As a result of the impact of this business model, this article offers an extended analysis that delves into the details of the extraction at play and potential public policy approaches and remedies.

Death and Other Externalities

Violence against civilians is soaring in Latin America as drug cartels expand their reach across the region. Organized crime and drug cartels also pose an increasingly serious threat to democratic systems on the Latin American continent. In Ecuador (SUB rank #99), President Daniel Noboa has declared the country to be in a state of "internal armed conflict", mobilising more than 22,000 soldiers to confront the drug cartels. The Ecuadorian crisis recently reached a tragic zenith with an armed attack on a TV studio during a live broadcast, and then the killing of the Ecuadorian prosecutor, César Suàrez, who investigated the dramatic attack. In Mexico (rank #113), cartel violence continues to spread. With the majority of guns being smuggled from the United States, heavily armed drug cartels have adopted an increasingly militarized approach with their weaponry and tactics, leading to tens of thousands of people dead or going missing every year. Drug-related violence is also being pushed to record levels in Costa Rica (#83), Chile (#104), Venezuela (#15) and the Argentinian (#63) city of Rosario. Columbian (rank #5) president, Gustavo Petro, recently argued that the US-led 'war on drugs' had failed, suggesting that these efforts to address drug trafficking had swallowed billions of dollars, but led to the loss of millions of lives in Latin America, as well as the imprisonment of millions of people in the United States, many being drua users.

Indeed, the fatal consequences of drug consumption are particularly evident in the United States (SUB rank #145). The crack epidemic that raged throughout the 1980s and 1990s (leading to the 'war on drugs') has been followed by an opioid crisis that began in the late 1990s. The crisis has one of its roots in the business model of a pharmaceutical company, Purdue Pharma, the manufacturer of the pain medication oxycodone under the brand name OxyContin. The company used aggressive marketing tactics that understated the risk of addiction in order to persuade doctors to prescribe the opioid. The company's business model is thus inextricably linked to the opioid addiction of hundreds of thousands of people. As civil lawsuits against the company multiplied, Purdue Pharma

filed for bankruptcy in 2019. In the preceding years, the company had paid out more than US\$10 billion to members of the Sackler family, who owned and controlled Purdue Pharma, illustrating just how profitable the business model has been. Today, the opioid crisis has spread into all segments of society across the US, with many addicts now resorting to the use of fentanyl, a synthetic opioid vastly more potent than heroin that is mostly trafficked from Mexico using chemicals sourced from China (rank #57). A grim milestone for the US was reached in 2021, when, for the first time, more than 100,000 people died from a drug overdose within a single year, with the majority of deaths linked to fentanyl. This threshold was exceeded again the following year, and is expected to rise again in 2023. In total, more than 1 million people have died in the US from drug overdoses since 1999.

On the other side of the Atlantic, Europe as a whole is not currently experiencing an opioid crisis of US proportions, partly due to the existence of universal health and addiction care. Still, within the EU, opioids (usually in combination with other substances) are implicated in roughly three quarters of drug-induced deaths. In addition, it appears that Europe is currently being "flooded with cocaine" (Petrequin, 2024). In 2021, EU member states seized a record 303 tonnes of cocaine, the most used illicit drug in Europe after cannabis. A notable outlier in the EU in terms of drug-related deaths is Scotland in the United Kingdom (rank #126), where 1,051 people died in 2022 alone. There are also worrying trends elsewhere, especially in Germany (rank #128), where the yearly number of drug-related deaths amounted to 1,990 in 2022 and has now increased for 10 years in a row.

Moreover, the fatal consequences of drug trafficking in Europe are not limited to the consumers that succumb to their drug addiction. Drug cartels and drug-related organized crime gangs have increasingly taken root in the EU. In recent years, several violent incidents have shone a spotlight on the growing European drug trade. In 2020, a sound-proofed shipping container allegedly used as torture chamber and

several containers allegedly used as cells by a narcotics gang were discovered in the Netherlands (rank #100). A year later, prominent Dutch crime reporter Peter R. de Vries was shot in the head in a busy Amsterdam street as he was advising a witness in the trial of an accused drug baron. In Sweden (#130), rivalries between drug trafficking gangs have led to a spiral of violence, culminating in the deadly shooting of a drug lord's mother in Uppsala in September 2023, one of more than 50 fatal shootings in Sweden in that year alone. In Germany, authorities appear to be at a loss in how to deal with several drug trafficking family clans. With most of the families originally coming from Lebanon, Syria, Iraq, and Turkey, their criminal activities are an issue that also touches on widely criticized immigration policies (Goertz, 2020).

In India (rank #96), opioid use has also become more prevalent, although it varies considerably across states. According to a 2019 government report, opioid use is reported in 2.1% of the country's population. Opioids are thus the most commonly used illicit drug in India after cannabis, which is consumed by 2.8% of the population.

What are the Best Remedies and Policies?

The EQx aims to link extractive business models with policy suggestions for transformational elite leadership. How can drug production and trading, a highly lucrative elite business model, be addressed? Generally, it seems that experts often appear to be at a loss when asked for comprehensive strategies to combat the production of illegal drugs. Past initiatives to incentivize farmers to cultivate roses instead of poppies in Afghanistan (#91), or cocoa instead of coca in Latin America, have mostly failed. The production of drugs is often more profitable, and the power of increasingly militarized cartels and drug lords appears to be insurmountable.

Colombia and Mexico appear to be shifting their efforts towards a public health approach. Mexican president, López Obrador, used the slogan "Abrazos, no balazos" (commonly translated as "hugs, not bullets") to describe his security policy during his election campaign. Critics suggested that this policy shift, tantamount to surrender in the dire situation, represents a politically more promising approach in acknowledging that little can be gained from a focus on security policies in an environment where the population has become somewhat desensitized to persistently high levels of violence. However, tangible benefits from this policy shift have so far failed to materialize.

In the Philippines (#38), the Duterte administration launched an unprecedented and brutal anti-drug campaign that appears to have reduced the proliferation of drugs throughout the country. However, human rights organizations have claimed that thousands of Filipinos were killed during the initiative and that police were falsifying evidence to justify unlawful killings.

Particularly punitive policies are also often applied in Muslim countries, with high rates of capital punishment for drug-related offenses, because of laws "based on religious doctrine prohibiting the consumption of mind-altering substances" (Tinasti, 2020). In Indonesia, for instance, (rank #6), the country's strict drug policy has resulted in more than half of current prison detainees serving time for drug-related offences.

A security strategy addressing gangs and cartels that has attracted much attention can be observed in El Salvador (#145). For years, its drug gangs had brought violence and extortion to the country. Then, in a nation with just over 6 million inhabitants, the government incarcerated more than 70,000 suspects under harsh conditions, mostly in a 'mega prison' erected solely for this purpose. Today, the country appears to have one of the lowest homicide rates in the region and its president, Nayib Bukele, is polling as one of the most popular leaders in the world. However, to what extent is this a model worth emulating? El Salvador, the size of New Jersey, is a small country. Furthermore, since 2022, the country has been under a state of exception, limiting constitutional rights and civil liberties. Critics fear an autocratic system is in the making, violating human rights and carrying out arrests with scant evidence.

Considering the truly difficult task of reducing the production and trade of illicit drugs, it appears that societies worldwide will continue to face an unwavering supply of drugs, at least in the foreseeable future. How can countries address this, in order to protect their populations and, as a second step, make this business model as profitless as possible?

Concerning 'party drugs' such as cocaine, individuals should be made more aware of their own responsibility and the consequences of their consumption, since, to put it bluntly, there is simply no cocaine with a 'Fair Trade' label. Furthermore, substance use disorders should be viewed as what they are: a chronic disease. While some individuals are more vulnerable than others, anyone can fall foul of addiction. Sick people should be treated with dignity and societies should ensure access to medical care, as is the case for other diseases.

Holding elites accountable for pursuing illicit value extractive business models is vital. In the US, the political and legal processing of the role of pharmaceutical companies in the opioid epidemic is far from being concluded. A Purdue Pharma bankruptcy settlement deal, negotiated over the course of several years, proposed shielding the Sackler family from future liability in this matter without having to declare bankruptcy themselves. In exchange, the family would make up to US\$6 billion available to initiatives intended to ease the opioid epidemic. This deal, along with reports that the Sackler family had previously moved assets out of Purdue Pharma into offshore accounts, sparked outrage and public protest. At the same time, it was met with blunt pragmatism; the promised funds are urgently needed to deal with the public health crisis. The case is currently under review at the US Supreme Court.

In Singapore, the main legislation addressing drug offenses, the Misuse of Drugs Act (MDA), specifies severe penalties—including the death penalty—for traffickers and users alike. This drastic approach is rewarded with the #1 ranking for this indicator in the EQx2024.

An alternative to such punishment-driven policies can be observed in Portugal (#37). The small Southern European country decriminalized the consumption of all drugs in 2001, and focused on harm reduction policies. As long as the possessed amount of any drug does not exceed a 10 day supply, it is deemed an administrative offense and the case is transferred to so-called 'Commissions for the Dissuasion of Drug Addiction', where fines, counselling, or referral to a rehab clinic are advised, though all are non-mandatory. The aim is thus to treat substance abuse as a health rather than a criminal justice issue. In the years following the reforms, Portuguese drug mortality rates plummeted. In 2012, however, after years of economic crisis, the country's policy faced a substantial drop in funding. More recently, it seems that the police are registering drug users with the dissuasion commissions less frequently, and state-funded rehabilitation treatments are only available after considerable waits. The programme appears to be showing first signs of fatigue. Since 2011, Portuguese drug mortality rates, while still below European averages, are increasing again.

Finally, the so-called Icelandic Model offers an alternative approach that aims to prevent teenage substance use in the first place. The program attempts to help the young, prone to chasing dopamine kicks, to get their highs elsewhere. The approach was pioneered by the scientists Dr. Harvey Milkman and Dr. Gudberg K. Jonsson (2019). In a nutshell, the model offers a three-part programme to help curb youth drug abuse: first, support children and adolescents in following their interests and thus experiencing 'natural highs'; second, encourage parents to spend more time with their children and to get to know their children's friends; and finally,

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strengthen the legal environment, e.g., by enforcing teen curfews. Thus, the emphasis is on environmental rather than individual change, introducing long-term programs in local communities, and allocating funds to youth activities such as music, dance, hip hop, art, or martial arts, that serve to provide kids with 'natural highs'. The program has helped to dramatically curb substance abuse in Iceland.

In summary, from the harsh measures utilized in Singapore and El Salvador to the more liberal approaches taken by Portugal and Iceland, there are many different ways to address the production and consumption of illicit drugs. What is clear is that elites must assume their responsibility in addressing the horrific business model of drug production and trafficking, so that people around the world can lead lives free of addiction and drug related crime. This is essential for equitable economic and human development.

Céline Diebold, University of St.Gallen, Switzerland

Visual 4.1: Substance use in OECD countries

Indicator: Death rate from substance use disorders (iii.8_SUB, raw values)

EQx rank	Country	Death rates	EQx rank	Country	Death rates
4	Japan	0.59	15	Austria	4.99
62	Turkey	0.64	26	Ireland	5.37
31	Italy	1.19	19	France	5.56
7	Israel	1.27	11	United Kingdom	5.73
6	Korea, Rep.	1.32	13	Australia	5.9
25	Portugal	1.46	8	Germany	6.35
24	Spain	1.81	9	Sweden	6.75
44	Greece	2.14	17	Norway	6.98
5	New Zealand	2.32	33	Slovenia	7.24
3	Netherlands	2.63	36	Poland	8.63
30	Chile	2.69	12	Canada	8.73
28	Slovak Republic	3.16	14	Finland	11.57
23	Czech Republic	3.94	10	Denmark	11.82
2	Switzerland	4.03	38	Latvia	13.09
52	Mexico	4.06	42	Lithuania	14.26
40	Hungary	4.06	16	United States	22.03
22	Belgium	4.65	20	Estonia	22.12

Note: Table lists the death rate from substance use disorders (i.e., number of deaths due to substance use disorders, by mid-year population) in OECD countries where data was available. Rates are rounded to two decimal places. Substances cover both alcohol and drugs (opioids, cocaine, amphetamines, others). Data: Global Burden of Disease Collaborative Network, 2019.



Inclusion year Conceptual optimum

EQx2024 Indicator Scorecard

OO Death rate from substance use disorders



Sub-Index (Level 2) Value Political Value Index Area (Level 2) Pillar (Level 3) Taking Income Indicator ref. (Level 4) iii.8_SUB Indicator wgt. (in EQx) 1.2% Indicator wgt. (in Pillar) 15.4% 151 Countries covered 2021

Data Source Institute for Health Metrics and Evaluation (IHME), Global Burden of Disease Collaborative

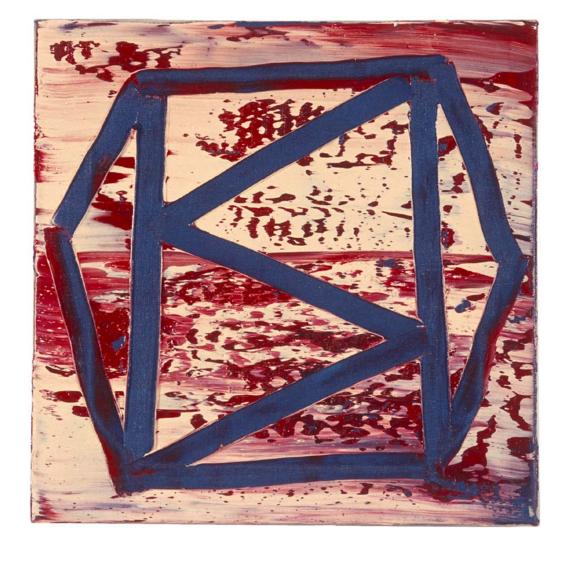
Nο

Description

Death rate from substance use disorders measures direct deaths from alcohol or illicit drug abuse. Death rates are measured as the number of deaths per 100,000 people. Illicit drugs include opioids, cocaine and amphetamines.

Substance abuse deaths are an intrinsic part of extractive elite business models. They reflect the Taking of the ultimate form of Value: life itself, and evidence the absence of Political Value.

	Country	Score	Rank /151	,	Score	Rank /151	,	Score
1	Singapore	100.0	51	Algeria	61.6	100	Lebanon	47.2
1	Egypt, Arab Rep.	100.0	52	Sudan	61.5	102	Lesotho	46.7
1	Jordan	100.0	53	Madagascar	61.2	103	Chile	46.6
4	Bangladesh	98.6	54	Cyprus	61.1	103	Uruguay	46.6
5	Colombia	94.5	55	Cote d'Ivoire	59.9	105	Mozambique	44.3
6	Indonesia	93.7	55	Kenya	59.9	106	Libya	43.4
7	Jamaica	92.3	57	China	59.8	107	Slovak Republic	42.0
8	Qatar	91.2	58	Papua New Guinea	59.7	108	Iran, Islamic Rep.	40.0
9	Japan	88.6	59	Equatorial Guinea	59.1	109	Cuba	39.6
10	Bahrain	88.2	60	Cameroon	59.0	110	Serbia	39.0
11	Turkey	86.7	61	Syrian Arab Republic	58.5	111	Czech Republic	35.9
12	Oman	85.8	62	Argentina	58.1	112	Switzerland	35.3
13	Saudi Arabia	80.3	63	Spain	57.6	113	Mexico	35.1
14	Kuwait	79.8	64	Iraq	57.4	114	Hungary	35.0
15	Venezuela, RB	76.3	65	Ethiopia	57.2	115	Bolivia	33.2
16	Timor-Leste	76.3 75.8				116	Brazil	32.8
17		75.8 74.1	66 67	Congo, Dem. Rep.	56.9	117		
	Mauritania			Eswatini	56.7	117	Belgium	31.3 31.2
18	Malaysia	74.0	68	Tanzania	56.4		Haiti	
19	Nepal	72.7	69	Uganda	56.3	119	Turkmenistan	30.3
20	Myanmar	70.9	70	Malawi	56.1	120	Austria	29.3
21	Uzbekistan	70.7	70	Bosnia and Herzegovina	56.1	121	Croatia	29.0
22	Italy	69.4	70	Angola	56.1	122	Ireland	27.3
22	Cambodia	69.4	73	Burundi	55.9	123	Mauritius	26.9
24	Mali	69.3	74	Guinea-Bissau	55.8	124	Paraguay	26.4
25	Panama	68.7	74	Pakistan	55.8	125	France	26.3
26	Senegal	67.5	76	Zimbabwe	55.6	126	United Kingdom	25.4
27	Israel	67.4	77	Bulgaria	55.2	127	Australia	24.6
27	Thailand	67.4	77	Dominican Republic	55.2	128	Germany	22.6
27	Niger	67.4	79	Botswana	55.0	129	United Arab Emirates	22.4
30	Korea, Rep.	66.4	80	Burkina Faso	54.8	130	Sweden	20.9
31	South Africa	65.6	81	Vietnam	54.5	131	Norway	20.0
32	Sierra Leone	65.4	81	Namibia	54.5	132	Slovenia	18.9
33	Benin	64.8	83	Costa Rica	53.4	133	Honduras	18.4
34	Albania	64.7	84	Armenia	53.0	134	Nicaragua	16.9
35	North Macedonia	64.0	84	Sri Lanka	53.0	135	Kyrgyz Republic	16.5
36	Portugal	63.6	86	Greece	52.9	136	Poland	14.0
36	Nigeria	63.6	87	Rwanda	52.4	137	Canada	13.7
38	Philippines	63.5	88	Tajikistan	51.7	138	Moldova	12.8
39	Morocco	63.4	89	Congo, Rep.	51.6	139	Finland	5.8
						140		5.8 5.3
40	Ghana Libertin	63.3	90 91	Gabon	51.4		Denmark Kazakhstan	3.8
41	Liberia	63.1		Afghanistan	51.3	141		
42	Lao PDR	63.0	92	Zambia	51.1	142	Latvia	2.4
43	Peru	62.8	93	New Zealand	50.7	143	Guatemala	0.4
43	Georgia	62.8	94	Trinidad and Tobago	49.9	144	United States	0.0
45	Tunisia	62.7	95	Azerbaijan	49.8	144	Estonia	0.0
46	Togo	62.5	96	India	49.3	144	Lithuania	0.0
47	Guinea	62.4	97	Romania	48.7	144	Mongolia	0.0
48	Chad	62.0	98	Central African Republic	48.6	144	Belarus	0.0
49	Gambia, The	61.7	99	Ecuador	48.1	144	Russian Federation	0.0
49	Yemen, Rep.	61.7	100	Netherlands	47.2	144	Ukraine	0.0
	lity Report 2024 (EQx2024)					144	El Salvador	0.0



The Unseen Price: Suicide's Impact on Value Creation

Suicide is a truly unsettling phenomenon that has been part of the human experience throughout history. It is widely recognised as an exit response associated with Value Extraction. In this chaotic day and age, it has been overshadowed by other pressing issues and thus neglected by many. Also, the horrendous global numbers—more than 700,000 people take their own lives in the world every year—is only the tip of the iceberg in depicting the severity of the suicide rate's impact on the sustainability of global economy. In this article, I will examine and emphasize the extractive nature of suicide in the context of the EQx2024, primarily focusing on East Asia, i.e., South Korea (28.6 people per 100,000, rank #148), Japan (15.3 people per 100,000, rank #133), China (8.1 people per 100,000, rank #85), and its Hong Kong Special Administrative Region (HKSAR) (12.1 people per 100,000). For reference, the global average is 9.0 people per 100,000.

The Suicide rate (SUI, iii.8) is often thought of as an indicator that provides insight into the stability of a country, whether economic, social, or political. Conventional wisdom has it that the more stable and prosperous a country is, the lower the suicide rate should be. Below, Visual 4.2 displays the correlation between the overall EQx rankings and the Suicide rate (SUI, iii.8) scores. It should be noted that higher suicide rate scores in the EQx indicate lower suicide rates. Counterintuitively, the graph reveals a negative correlation between the EQx rankings and Suicide rate scores. That is, countries that are more prosperous seem to have higher suicide rates.

When we focus on East Asian countries, an alarming pattern emerges. The number of East Asian countries that possess high quality elites and appalling suicide rates should be a matter of great concern. Especially shocking is South Korea, ranked #6 in the overall EQx2024 ranking, but ranked #148 for its *Suicide rate* (SUI, iii.8). Similarly, Japan, ranked #4 in the overall EQx2024 ranking, falls to #133 (SUI, iii.8), and China, ranked #21 overall, falls to #85 (SUI, iii.8).

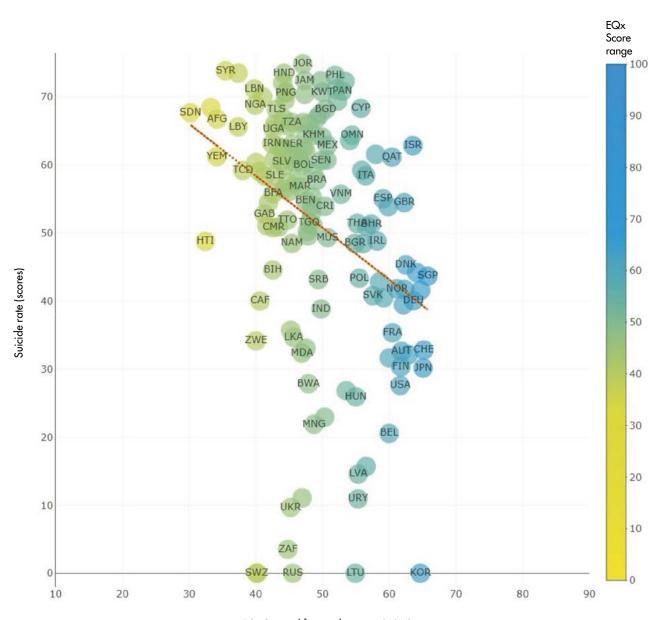
Suicide rates have been conceived as a leading indicator that links the present to the future. As early as in the 1800s, Durkheim identified the phenomenon of anomic suicide. That is, suicide caused by economic and social uncertainty, change, and upheaval, which lead to an individual's moral and social disorientation, the proximate cause for the fatal decision. Extrapolating from that, suicide can be viewed as a generation's anticipation of their country's development and the position of an individual within society. The high suicide rates of today might compromise future productivity and economic development of a country through the destruction of human capital.

Further, the age of the individuals taking their own lives should also raise alarm bells. Japan, China, and HKSAR all suffer from an extremely high youth suicide rate (not an EQx indicator). In 2022, Japan had 17.5 suicides per 100,000 people for children attending elementary, junior high, and high schools. As for HKSAR, the suicide rate for the 15-24 age group doubled from 6.1 per 100,000 people in 2014 to 12.2 per 100,000 people in 2022. Despite having a suicide rate below the global average, China has seen a dramatic surge in the 15-24 age group's suicide rate, with a worrying 19.6% annual increase from 2017 to 2021, the only demographic that experienced an upward surge. Youth are the foundation of the future; their early exit has serious implications on future development. Research has pointed out that suicide is especially "contagious" among the young (Swanson & Colman, 2013). Hence, the current spiking youth suicide rate will likely snowball, worsening the outlook of future economic and social stability.

Suicides might seem to be relatively unimportant among other pressing issues the world currently faces, but countries must be alert to this phenomenon and treat it as an indicator that presage other maladies. Addressing this issue by mitigating and reversing the present trends might take years, but neglecting it will certainly put a country's future at risk.

Hung Zhen Feng, Johnson, Masters Student at the London School of Economics and Political Science

Visual 4.2: Correlation between the overall EQx rankings and Suicide rate (scores)



EQx (purged from indicator iii.8_SUI)

Note: Vertical axis plots indicator iii.8_SUI: Suicide rate.
Horizontal axis plots the EQx, purged from indicator iii.8_SUI.
Orange dashed line indicates a fitted regression line. Adjusted R-squared: 0.099.
Random selection of country codes are printed in case of country overlaps, colour code illustrates overall EQx score.



EQx2024 Indicator Scorecard

Suicide rate

Description

Suicide rate refers to the number of lives taken on a voluntary and intentional basis.

Sub-Index (Level 2) Value
Index Area (Level 2) Political Value
Pillar (Level 3) Taking Income
Indicator ref. (Level 4) iii.8_SUI
Indicator wgt. (in EQx) 0.9%
Indicator wgt. (in Pillar) 11.5%
Countries covered 151

Inclusion year 2021
Conceptual optimum No

Data Source The World Health Organization (retrieved from The Global

Economy)

Rationale

Suicides represent a form of exit from the political economy. While a proportion of suicides are inevitable, significant differences exist in the rates across countries. Exits as suicide might be the result of mental health issues, despondent life circumstances or as the result of being at the receiving end of Value Extraction business models. Institutions that address the various causes of suicide effectively create Political Value.

Rank /151	Country	Score	Rank /151	Country	Score	Rank /151	Country	Score
1	Jordan	74.8	51	Turkmenistan	61.7	101	Ireland	48.8
2	Syrian Arab Republic	73.8	52	Malaysia	61.6	101	Haiti	48.8
3	Honduras	73.5	53	Qatar	61.2	103	Bulgaria	48.5
3	Venezuela, RB	73.5	53	Yemen, Rep.	61.2	103	Namibia	48.5
5	Philippines	73.2	55	Guatemala	60.9	105	Romania	48.4
6	Turkey	72.4	56	Saudi Arabia	60.7	106	Denmark	45.3
6	Jamaica	72.4	57	Senegal	60.6	107	Bosnia and Herzegovina	44.6
8	Indonesia	72.3	58	Paraguay	60.5	108	New Zealand	44.2
9	Algeria	72.1	58	El Salvador	60.5	109	Singapore	43.7
10	Lebanon	71.2	60	Angola	60.4	110	Poland	43.4
11	Peru	71.1	61	Kenya	60.3	111	Serbia	43.2
12	Panama	70.9	62	Bolivia	59.9	112	Portugal	42.8
13	Kuwait	70.7	62	Burundi	59.9	113	Norway	41.8
13	Myanmar	70.7	64	United Arab Emirates	59.2	114	Canada	41.7
15	Papua New Guinea	70.6	64	Chad	59.2	115	Netherlands	41.6
16	Egypt, Arab Rep.	70.4	66	Congo, Rep.	59.1	116	Slovak Republic	40.8
17	Mauritania	70.0	67	Ghana	58.8	117	Czech Republic	40.5
18	Tunisia	69.5	68	Sierra Leone	58.5	118	Germany	40.1
19	Armenia	69.4	69	Italy	58.4	119	Central African Republic	40.0
20	Nigeria	68.8	69	Congo, Dem. Rep.	58.4	120	Australia	39.5
21	Iraq	68.4	71	Brazil	57.7	121	India	38.8
22	Cyprus	68.3	72	Guinea-Bissau	57.5	122	Mozambique	35.7
23	Bangladesh	68.2	73	Guinea	57.4	123	France	35.3
23	Timor-Leste	68.2	74	Morocco	56.8	124	Sri Lanka	34.7
25	Sudan	67.7	75	Zambia	56.4	125	Zimbabwe	34.1
26	Colombia	67.5	76	Kyrgyz Republic	56.1	126	Cuba	33.1
27	Azerbaijan	66.9	77	Burkina Faso	55.8	127	Switzerland	32.8
28	Mali	66.8	78	Vietnam	55.7	128	Austria	32.6
29	Afghanistan	66.7	79	Ecuador	55.3	129	Moldova	32.4
30	Tanzania	66.3	80	Spain	55.0	130	Sweden	32.1
31	Tajikistan	66.2	81	Benin	54.7	131	Estonia	31.6
32	Albania	66.0	82	United Kingdom	54.5	132	Finland	30.3
32	Nicaragua	66.0	83	Equatorial Guinea	54.4	133	Japan	30.2
34	Liberia	65.7	84	Uzbekistan	54.0	134	Botswana	27.9
35	Libya	65.6	85	China	53.9	135	United States	27.6
36	Uganda	65.2	85	Costa Rica	53.9	136	Croatia	26.8
37	Gambia, The	64.5	87	Argentina	52.9	137	Hungary	25.9
38	Oman	64.4	88	Gabon	52.8	137	Kazakhstan	22.9
38	Cambodia	64.4	89	Trinidad and Tobago	51.9	139	Mongolia	21.9
40	Dominican Republic	64.1	90	Togo	51.5	140	Belgium	20.6
41	Greece	63.6	91	Thailand	51.4	141	Slovenia	15.7
42	Iran, Islamic Rep.	63.1	91	Bahrain	51.3	141	Latvia	14.6
42	Niger	63.0	93	Cote d'Ivoire	51.2	142	Belarus	11.1
43	Israel	62.9	93	Pakistan	51.1	143	Uruquay	10.9
44	Mexico	62.9	94 95	Chile	51.0	144	Uruguay Ukraine	9.7
44	Ethiopia	62.7	95 96	Nepal	50.9	145	South Africa	9.7 3.5
46 47		62.6	96 97			140		3.5 0.0
	Malawi			Cameroon	50.8		Korea, Rep.	0.0
48 49	Lao PDR	62.5	98	Georgia	50.3	147	Lithuania	0.0
49 50	Madagascar	62.4	99 100	North Macedonia	49.6	147	Russian Federation	
	Rwanda	62.0		Mauritius	49.3	1 <i>47</i> 1 <i>47</i>	Lesotho	0.0 0.0
	lity Report 2024 (EQx2024) p. for Value Creation 2024	rovides Country Scores and	∍Iobal Ranking	s tor 151 countries		14/	Eswatini	0.0



The Rail Revolution: Solving the Climate Crisis or Taking the Wrong Track?

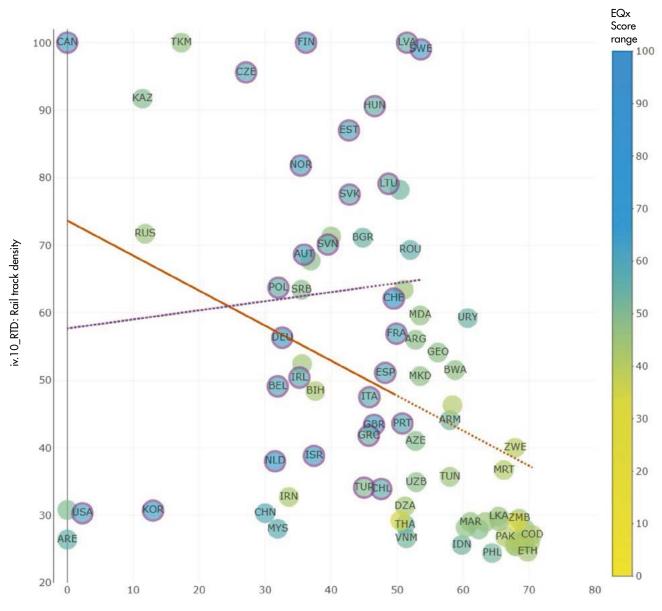
The EQx2024 introduces a new indicator to the Index Area of Economic Value in the Producer Value Pillar on *Rail track density* (RTD, iv.10). This indicator demonstrates how well a country is connected in terms of rail transportation in relation to its population. The reason for including this indicator is straightforward: rail transport (especially electric rail) is one of the most environmentally friendly options for both passenger and freight transport.

Even if regional rail services that rely on diesel fuel are considered, it is important to note that a two-person car emits more than twice the amount of CO2 per kilometer. When comparing regional rail options that rely on electric power, the CO2 emissions of a two-person car are almost six times higher. The disparity is even more marked for freight systems, where the CO2 emissions from a medium-sized truck are almost five times higher than those from diesel-based rail, and almost six times higher than those from electric-based rail. (Lawrence & Bullock, 2022).

However, Visual 4.3 shows an unexpected trend: a negative correlation between CO2 emissions (metric tons per capita) (CDO, iii.9) and Rail track density (RTD). Moreover, when narrowing the focus to the OECD countries (excluding Australia, Colombia, Costa Rica, Denmark, Iceland, Japan, and Mexico) only a small positive correlation can be observed, which still deviates from the emission disparities presented above. This divergence from the expected strong positive correlation suggests that other underlying factors may influence the relationship between CO2 emissions and rail usage. What might these be?

In primis, Stripple and Uppenberg (2010) suggest how the direct and indirect environmental costs of railways, including the construction of infrastructure, may affect the Life-Cycle-Assessment (LCA) of rail, while economic results will vary based on the scope of rail usage and the region. In secundis, according to Lawrence and Bullock (2022), "the lowest emissions per traffic unit are in China [rank #58 in the RTD indicator and #135 in the CDO indicator], Commonwealth of Independent States (CIS), and India [rank #69 in the RTD indicator and #61 in the CDO indicator]. [...] These railways all have a high level of electrification, substantial freight traffic, and [are] heavily loaded. [...] In contrast, North American railways [the US ranks #57 in the RTD indicator and #143 in the CDO indicator], which carry mostly freight and are primarily diesel operated, have per traffic unit emissions almost double those in China, CIS, and India". This illustrates that the magnitude of the railway network means little if it is not supported by well-structured logistics, and is exploited to its full potential. In tertiis, the positive correlation between the CDO and RTD indicators, which was expected based on prior data but not seen in Visual 4.3 can be explained by the environmental benefits of high-speed railways, as is highlighted in the case study by Shen et al. (2023) on the effects of high-speed railways in China. Most countries, regardless of their stage of development, still use low-speed infrastructure, which not only makes rail transport less appealing from a customer point of view but also less ecologically efficient.

Visual 4.3: CO2 emissions and rail track density



iii.9_CDO: CO2 emissions (metric tons per capita)

Note: Vertical axis plots indicator iii.9_CDO: CO2 emissions (metric tons per capita). Horizontal axis plots indicator iv.10_RTD: Rail track density. OECD countries are highlighted with a violet circle. Violet dashed line indicates a fitted regression line based on available OECD countries. Orange dashed line indicates a fitted regression line based on all available countries. Random selection of country codes are printed in case of country overlaps.

This all helps to clarify why a more extensive railway network does not always correlate with lower CO2 emissions. Thus, Visual 4.3 illustrates how countries are still not exploiting the complete benefits of the railway sector. Therefore, policymakers should pay closer attention to the development and expansion of their railway networks, enhancing both the quality and efficiency of rail systems. Investment in rail infrastructure must be strategic and significant emphasis should be placed on the LCA to develop and implement more efficient and less polluting techniques.

In conclusion, while the introduction of *Rail track density* to the EQx2024 showcases the Value Creation of the railway industry, it also underscores the significant challenges that lie ahead in maximizing the potential. The path to achieving lower CO2 emissions through increased rail connectivity is complex and requires a multifaceted approach that goes beyond mere infrastructure development. It necessitates a holistic view that encompasses technological innovation, policy reform, and international cooperation to foster a more sustainable, efficient, and appealing global rail network.

Alex Sebastiani, Bachelor Student, University of St.Gallen, Switzerland



Conceptual optimum

EQx2024 Indicator Scorecard

CO Rail track density

Sub-Index (Level 2) Value Index Area (Level 2) Economic Value Pillar (Level 3) Producer Value Indicator ref. (Level 4) iv.10_RTD Indicator wgt. (in EQx) 0.3% Indicator wgt. (in Pillar) 2.5% Countries covered 83 Inclusion year 2024

The World Development Data Source Indicators, World Bank

Nο

Description

The Rail track density Indicator is calculated via the formula: total rail track per country (km) divided by population. The RTD Indicator does not account for different types of rail transportation, private vs. commercial, or the type of energy/commodity that is used as fuel.

Rationale

The higher the rail track density in a country, the better, as this suggests an energy efficient, affordable, economically sustainable, and future-oriented transportation system.

ank /83	Country	Score	Rank /83	Country	Score	Rank /83	Country	Score
1	Canada	100.0	51	Turkey	34.1			
1	Finland	100.0	52	Chile	33.9			
1	Latvia	100.0	53	Iran, Islamic Rep.	32.7			
1	Turkmenistan	100.0	54	Algeria	31.3			
5	Sweden	99.0	55	Saudi Arabia	30.8			
6	Czech Republic	95.6	56	Korea, Rep.	30.7			
7	Kazakhstan	91.7	57	United States	30.3			
8	Hungary	90.6	57	China	30.3			
9	Estonia	87.0	59	Sri Lanka	29.8			
10	Norway	81.8	60	Zambia	29.5			
11	Lithuania	79.1	61	Iraq	29.2			
12	Croatia	78.2	62	Tajikistan	29.1			
13	Slovak Republic	77.5	63	Morocco	29.0			
14	Russian Federation	71.7	63	Kyrgyz Republic	29.0			
15	Belarus	71.3	63	Sudan	29.0			
16	Bulgaria	71.1	66	Thailand	28.6			
17	Slovenia	70.1	67	Egypt, Arab Rep.	28.2			
18	Romania	69.3	68	Malaysia	28.0			
19	Austria	68.6	69	India	27.9			
20	Mongolia	67.7	69	Tanzania	27.9			
21	Poland	63.7	71	Congo, Dem. Rep.	27.1			
22	Serbia	63.4	72	Pakistan	26.8			
22	Ukraine	63.4	73	Vietnam	26.6			
24	Switzerland	62.1	73	Cameroon	26.6			
25	Moldova	59.6	75	United Arab Emirates	26.4			
26	Uruguay	59.2	76	Cote d'Ivoire	25.9			
27	France	56.9	76	Madagascar	25.9			
28	Germany	56.3	76	Burkina Faso	25.9			
29	Argentina	56.0	79	Indonesia	25.6			
30	Georgia	54.1	79	Nigeria	25.6			
31	South Africa	52.4	81	Bangladesh	25.4			
32	Botswana	51.5	82	Ethiopia	24.6			
33	Spain	51.1	83	Philippines	24.4			
34	North Macedonia	50.6			=			
35	Ireland	50.4						
36	Belgium	49.1						
37	Bosnia and Herzegovina	48.4						
38	Italy	47.5						
39	Gabon	46.3						
40	Armenia	44.1						
41	Portugal	43.6						
42	United Kingdom	43.4						
43	Greece	41.8						
44	Azerbaijan	41.0						
45	Zimbabwe	40.0						
46	Israel	38.8						
47	Netherlands	38.0						
48	Mauritania	36.7						
49	Tunisia	35.7						
47	Uzbekistan	34.9						

@Foundation for Value Creation 2024

Unicorns: The Engine of Creative Destruction and Elite Circulation

The last five years have been a golden era for entrepreneurship. We have seen the biggest explosion of new technologies coming to market that the world has ever known. Since 2019, the number of unicorns has tripled from 494 to 1453.

Global Unicorn Index 2024, press release, 9 April, 2024

The dream of becoming a unicorn is treasured by both company founders and policymakers. The disruption that companies valued at US\$1 billion bring about enables a type of structural reform that increases the income levels of all social classes. Unicorns reflect one of the most consequential forms of Value Creation that an elite system can produce, while also representing a mode of elite circulation consistent with the notions of Pareto. Along with the new ideas that they bring, vital energy flows to the top of the elite system and enriches it. This virtuous cycle of Schumpeterian creative destruction, critical for this research project, improves the overall quality of elites. Unicorns a priori cannot extract rents, which is the prerogative of powerful and established elite business models.

Yet unicorns can be a very cyclical phenomenon. In 2023, only 10 new ones were minted each month compared to an average of 50 in 2021. However, by the end of the year, Hurun Report's Global Unicorn Index 2024 had identified 171 "new faces". Ahead of what seems to be a recovery, it is of interest to see which countries are best positioned to increase their numbers on the basis of the two comparative indicators that cover this phenomena in the EQx2024: *Unicorns* (iv.11_UNN) and *Unicorns* as % of GDP (iv.11_UNC).

The normalized scores of the UNN suggest that the US (#1) and China (#2) rank well ahead of India (#3) which again, by a distance, is followed by the UK and Germany. Japan (#18) is a laggard, pointing to its major structural weakness, the lack of creative destruction. In considering the big picture, the world can be split into three groups in terms of their propensity to produce unicorns: the US, China, and the 'Rest of the World'. The US has half of the world's known unicorns, while China and the Rest of the World have a quarter each. In 2023, despite a marked economic slowdown, China still managed to produce more than one new unicorn a week, more than the 'Rest of the World' combined. In terms of unicorns that went public, China had 18 of the 29 global IPOs. The reasons for this strong performance include a concentration of effort by the Chinese government in providing supportive policies and incentives, with a particular focus on industries that are considered to be significant and strategic for the future and are aligned with technological developments. For instance, more than half the world's known unicorns in the energy, semiconductor and AI sectors are based in China.

The second EQx indicator divides the number of unicorns by GDP, giving a fairer idea of the relative pervasiveness of the phenomena in an economy. Here, smaller countries can excel, as is borne out by this year's results that see Israel (#1), Estonia (#2), and Lithuania (#3) lead the field. Israel, the 'start-up nation', and the US (#4), thrive on the back of the efficiency of their capital markets, and a culture that is supportive of entrepreneurship and new Value Creation. Evidently, advanced countries usually possess the legal, financial, and knowledge infrastructure to produce unicorns. Therefore, India's performance (#5), placing right behind the US, is all the more remarkable given that the GDP per capita of the US is about 32 times higher than India's in nominal terms.

Yet while the Indian stock market may be at a record high, it is not fully realizing its potential in terms of new unicorns. One of the biggest challenges facing the founders of Indian unicorns is the lack of exit opportunities. India's capital markets do not offer a strong Nasdaq alternative, which, in turn, reduces the amount of venture capital that investors are willing to deploy. Another factor is that Indian founders produced more offshore unicorns than any other country, co-founding over 100 unicorns outside of India compared with just 67 at home. Of the unicorns founded outside of India, the vast majority (95) were established in the US (led by the Bay Area), with 4 in the UK, 3 in Singapore, and 2 in Germany.

The mythical unicorn metaphor has today become very real and inspires many constituencies with an entrepreneurial mindset—including students—to undertake uncertainty. At business schools, unicorns help to catalyze interest in entrepreneurship programs, incubators, and start-up contests, all of which helps to foster the next generation of innovative value creators. Moreover, at some business schools, research meets practice and institutions such as the Cheung Kong Graduate School of Business (CKGSB) have established unicorn research centers to support the design of state-of-art curricula that motivate EMBA students to envision novel career paths and scale new ventures for massive Value Creation.

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EQx2024 Indicator Scorecard

OO Unicorns as % of GDP

Sub-Index (Level 2) Index Area (Level 2)

Value Economic Value Capital Value

Pillar (Level 3) Indicator ref. (Level 4) iv.11_UNC Indicator wgt. (in EQx) 1.4% Indicator wgt. (in Pillar) 9.1%

Countries covered 32 Inclusion year 2024 Conceptual optimum Nο

Data Source

The Hurun Research Institute, Hurun Global Unicorn List

Description

The Unicorns as % of GDP Indicator measures the number of unicorns, i.e. companies worth at least a billion dollars that are not yet listed on public stock exchanges, per million inhabitants divided by a country's

Rationale

Unicorns are start-ups that have achieved private valuations of more than USD one billion. Consequently, their products and services reflect Value Creation for both customers and society. We assume that the higher the value for the Unicorns as a % of GDP Indicator, the greater the value that will be created in a country. This also means that incumbent elites have not erected barriers to market entry for emerging business models and have instead created a business environment that supports Value Creation and innovation.

nk /32	Country	Score	Rank /32 Cour	ntry	Score	Rank /32	Country	Score
1	Israel	100.0						
1	Estonia	100.0						
3	Lithuania	84.2						
4	United States	83.7						
5	India	74.0						
6	Singapore	73.8						
7	China	73.4						
8	United Kingdom	67.3						
9	Finland	63.6						
10	Sweden	60.1						
11	Canada	57.7						
12	Korea, Rep.	56.8						
13	Vietnam	52.6						
14 15	Colombia	49.0 48.6						
16	Germany Brazil	48.1						
17	France	47.6						
18	Switzerland	47.0						
19	Norway	45.3						
20	Philippines	43.4						
21	Ireland	42.9						
22	Netherlands	41.1						
23	Chile	38.0						
24	Austria	37.4						
25	Denmark	31.7						
26	Australia	31.6						
27	Mexico	29.4						
28	Indonesia	22.3						
29	Belgium	19.1						
30	Turkey	12.6						
31	Spain	11.8						
32	Japan	0.0						
	ality Report 2024 (EQx2024							

@Foundation for Value Creation 2024

China's Innovation-Oriented Policies: Nurturing Self-made Billionaires

China demonstrates commendable performance in fostering self-made billionaires in the EQx2024, evidenced by consistently maintaining a comparatively high global ranking in terms of both *Billionaires self-made per capita* (BSG, iv.11, rank #24) and the *Billionaires self-made as a % of total billionaires* (BSM, iv.11, rank #16). Moreover, the EQx rankings also reflect strong dynamism in the turnover of China's billionaire class (BCD, ii.6, rank #10). Notably, China stands out for having a high percentage of *Women self-made billionaires* (WSB, i.3, rank #4), this year consolidating its place in the top five countries in the world for the fourth consecutive year, a testament to the country's substantial progress in cultivating and promoting female entrepreneurship. Detailed discussion about the supportive policies targeting Chinese female founders was covered in the EQx2021.

China, now in its late stage of market transition, increasingly recognizes that entrereneurship and innovation drives long-term competitive advantage, and thus actively pursues the development of new products, services, and technologies (He et al., 2019). There is a surge in the emergence of new entrepreneurs, particularly in the realm of Information and Communication Technologies (ICT). China boasts several of the world's most innovative ICT companies, including ByteDance (TikTok's parent company), Alibaba, and Tencent. The maturation of the start-up ecosystem has also positioned China as the second-largest global hub for unicorns (Hurun, 2023).

China's high ranking for self-made billionaires reflect its concerted efforts in nurturing home-grown tycoons. Entrepreneurship and innovation are viewed as being key to China's future growth (Ahlstrom, 2010), especially considering that the two traditional economic growth engines—low-cost labor and heavy capital investment—are perhaps now not as effective as they once were (Ahlstrom et al., 2018). In 2014, China launched the 'Mass Entrepreneurship and Innovation' (MEI) strategy, followed by a raft of supportive policies (english.gov.

cn, 2015), emphasizing the mounting relevance of entrepreneurship. These initiatives encompass aspects such as ensuring that education systems emphasize entrepreneurial skills, nurturing a business environment that is conducive to startups, and innovative entrepreneurship policies.

According to the 'Report on the Development of Innovation and Entrepreneurship in China' (Li and Xu, 2017), 428 policy documents on entrepreneurship and innovation were issued by the State Council and national ministries and departments between 2012 and 2016. The report categorized the policies into five groups (Fu et al., 2021). First, policies pertaining to the entrepreneurship and employment framework address public services, entrepreneurial education (EE) and training, talent mobility, and platform establishment. Second, the financial environment category emphasizes fiscal support, tax reductions, and financial backing. Third, policies targeting Small and Medium-sized Enterprises (SMEs) concentrate on optimizing the institutional context, intensifying support for technology-driven SMEs, fostering collaborative innovation, and refining financial resources for these enterprises. Fourth, the section devoted to mechanisms in science, education, and innovation seeks to expedite the commercialization of scientific achievements and evaluates the extent and impact of innovations. Finally, the fifth category deals with policy coordination, aiming to establish an integrated system that mutually benefits and facilitates all stakeholders, including the government, universities, research institutions, and corporations.



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Within the context of policies geared towards student entrepreneurship, the emphasis on EE in Chinese universities merits the attention of higher education practitioners. The MEI strategy concurrently stimulates the broad application of EE across universities nationwide, fostering students' entrepreneurial capabilities and developing an entrepreneurial mindset (Cui et al., 2021). For example, Zhejiang University has founded an Academy for Innovation and Entrepreneurship, harmoniously blending EE into its mainstream professional curriculum, integrating entrepreneurship courses into the syllabus, and initiating a diverse array of interdisciplinary programs. As a result, by mid-2023, over three hundred alumni entrepreneurs held positions as founders, chairpersons, or general managers at start-ups that scaled to become listed companies. The aggregate market capitalization of these listed companies exceeds the GDP of various Chinese provinces with over 50 million inhabitants.

Despite its noteworthy achievements across several relevant EQx indicators, China's moderate-to-low ranking in the Billionaires' Wealth as a % of GDP (BIW, ii.5, rank #126) suggests that there is a need to scrutinize the concentration of wealth among its billionaire class, as there is potentially a more pronounced pattern of Value Extraction by this group. The elevated proportion of national wealth held by its richest individuals raises questions concerning the dynamics of wealth accumulation and distribution, where a higher reliance on capturing existing value rather than generating new value may contribute to economic inequality and potentially undermine inclusive growth strategies. Meanwhile, despite China's middle-income population now exceeding 500 million (Mandy, 2024), the number of individuals stuck at the base of the social structure is still considerable. In other words, China has not yet developed into an "olive-shaped" society, which is one reason why there have been discussions regarding the possibility of China falling into the middle-income trap in recent times. As such, attention must be paid to the mechanisms driving this concentration of wealth, including potential imbalances in market access, policy biases, and resource control, to ensure a healthier balance between Value Creation and value appropriation within the context of a socially just and economically sustainable framework.

China is currently undergoing reforms to promote the development of new productive business models, with a focus on improvements to the system underpinning the socialist market economy, such as property rights protection, market access, fair competition, and social credit. The reforms entail a comprehensive consideration of factors such as the ownership of the means of production, distribution systems, and the status of the citizenry in the production process. The annual sessions of China's top legislature and top political advisory body (the 'two sessions') sent the signal that China plans to establish "pilot reform zones for building a high-standard socialist market economy". The goal is to foster "a world-class business environment that is market-oriented, law-based, and internationalized", where state-owned enterprises, private businesses, and foreign-funded companies all play an important role in China's modernization drive (Xinhua, 2024). This development instills optimism as new platforms and opportunities for Value Creation emerge so that Chinese and foreign entrepreneurs are able to scale and become ultra-high-net-worth individuals that contribute to the nation's socioeconomic fabric.

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Countries	covered: 151		
Indicators	included:	Weight within Family	Weight within EQx
CRO	Crony capitalism	10.3%	0.9%
WSB	Women self made billionaires	7.5%	0.3%
BIW	Billionaires' wealth as % of GDP	12.8%	0.4%
BCD	Billionaire's creative destruction	31.3%	3.3%
BSG	Billionaires self-made per capita	15.2%	0.9%
BSM	Billionaires self-made as % of total billiona	22.8%	1.4%

Rationale

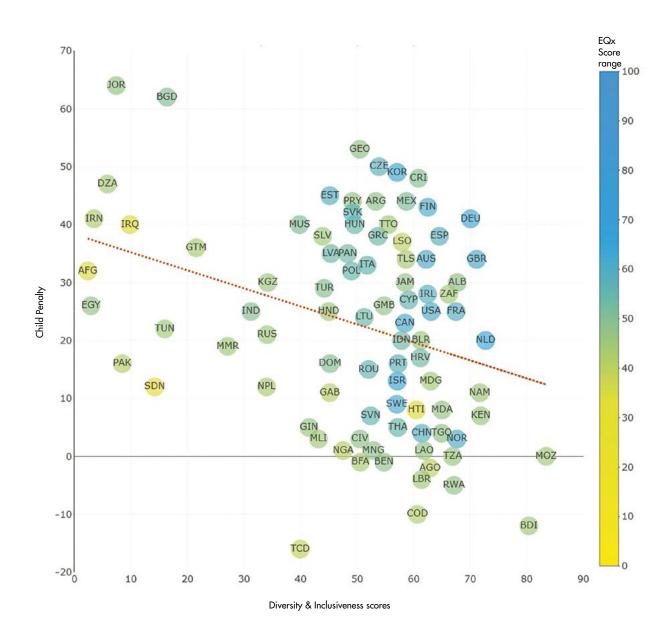
The Billionaires EQx-Indicator Family is a construct formed by 6 Indicators. The weighting of each Indicator is conceptual and is expected to evolve in future iterations of the EQx. The rationale of the Billionaires EQx-Indicator Family is simple. Billionaires, both individually and as a group, are central actors within the political economy and their business models greatly impact overall Value Creation/Extraction. The selected Indicators each reflect specific aspects of the nature and business models of billionaires and measure how these elites are contributing to long-term Value Creation (by their mere presence; e.g., in WSB, BSM or BCD) as well as Value Extraction (by their rent-seeking activities; e.g., CRO). As such, billionaires can either be drivers of change by participating in creative destruction and entrepreneurial activities (especially if they are self-made) or, on the contrary, use their over-sized influence to maintain the status quo and participate in extractive activities.

Billionaires EQx Indicator Family, total weight

7.1%

/151	Country	Score	Rank /151	Country	Score	Rank /151	Country	Score
1	Uruguay	88.5	51	Egypt, Arab Rep.	47.0	61	Liberia	41.6
2	Estonia	73.3	52	Nigeria	46.0	61	Trinidad and Tobago	41.6
3	Slovak Republic	70.6	53	Thailand	45.9	61	Honduras	41.6
4	Bulgaria	69.5	54	Italy	45.9	61	Papua New Guinea	41.6
5	Armenia	69.4	55	Greece	45.2	61	Tunisia	41.6
6	Romania	68.6	56	South Africa	44.7	61	Guinea-Bissau	41.6
7	Bangladesh	68.6	57	Belgium	44.5	61	Myanmar	41.6
8	China	67.7	58	Spain	43.6	61	Burundi	41.6
9	Hungary	64.7	59	India	43.2	61	Mali	41.6
10	United Kingdom	64.6	60	Philippines	42.4	61	Zambia	41.6
11	Israel	64.4	61	Slovenia	41.6	61	Madagascar	41.6
12	Vietnam	64.4	61	Latvia	41.6	61	El Salvador	41.6
13	Canada	63.9	61	Lithuania	41.6	61	Malawi	41.6
14	Ireland	63.6	61	Croatia	41.6	61	Ethiopia	41.6
15	Austria	63.3	61	Mauritius	41.6	61	Timor-Leste	41.6
16	Singapore	63.1	61	Costa Rica	41.6	61	Nicaragua	41.6
17	Russian Federation	62.7	61	Dominican Republic	41.6	61	Guatemala	41.6
18	Ukraine	62.4	61	Senegal	41.6	61	Uganda	41.6
19	United States	62.2	61	Serbia	41.6	61	Sierra Leone	41.6
20	Eswatini	60.8	61	Azerbaijan	41.6	61	Cameroon	41.6
21	Bahrain	60.6	61	Cambodia	41.6	61	Burkina Faso	41.6
21	Saudi Arabia	60.6	61	Ecuador	41.6	61	Bosnia and Herzegovina	41.6
23	Cyprus	60.3	61	Ghana	41.6	61	Iran, Islamic Rep.	41.6
24	Japan	59.9	61	Uzbekistan	41.6	61	Equatorial Guinea	41.6
25	Australia	59.5	61	Mongolia	41.6	61	Pakistan	41.6
26	Venezuela, RB	58.3	61	Côte d'Ivoire	41.6	61	Congo, Dem. Rep.	41.6
27	Algeria	58.0	61	Albania	41.6	61	Gabon	41.6
28	Argentina	57.8	61	North Macedonia	41.6	61	Mauritania	41.6
29	Qatar	57.7	61	Togo	41.6	61	Congo, Rep.	41.6
30	Netherlands	57.5	61	Gambia, The	41.6	61	Central African Republic	41.6
31	Czech Republic	57.0	61	Jamaica	41.6	61	Lesotho	41.6
32	Switzerland	56.5	61	Rwanda	41.6	61	Chad	41.6
33	Zimbabwe	56.3	61	Botswana	41.6	61	Libya	41.6
34	Kazakhstan	54.3	61	Benin	41.6	61	Syrian Arab Republic	41.6
35	New Zealand	54.1	61	Cuba	41.6	61	Afghanistan	41.6
36	Sweden	53.3	61	Bolivia	41.6	61	Yemen, Rep.	41.6
37	Indonesia	52.5	61	Tajikistan	41.6	61	Iraq	41.6
38	Oman	52.2	61	Lao PDR	41.6	61	Haiti	41.6
39	Korea, Rep.	52.2	61	Jordan	41.6	61	Sudan	41.6
40	Poland	51.9	61	Paraguay	41.6	140	Germany	40.7
41	Georgia	51.8	61	Moldova	41.6	141	Finland	37.6
42	United Arab Emirates	51.2	61	Turkmenistan	41.6	142	Panama	37.5
43	Colombia	50.9	61	Belarus	41.6	143	Portugal	37.3
44	Chile	49.8	61	Kenya	41.6	144	Peru	37.2
45	Norway	49.8	61	Guinea	41.6	145	Denmark	33.6
46	Brazil	48.9	61	Niger	41.6	146	Lebanon	33.3
47	Malaysia	47.7	61	Namibia	41.6	147	Angola	27.1
48	Turkey	47.6	61	Kyrgyz Republic	41.6	148	Tanzania	26.9
40 49	Mexico	47.3	61	Sri Lanka	41.6	149	Morocco	26.8
49 50	France	47.3 47.0	61	Mozambique	41.6	150	Morocco Nepal	26.8
50	rrunce	47.0	01	Mozampique	41.0	150	Nepal Kuwait	20.3

Visual 4.4: Child Penalty and D&I Indicator Family



Note: Vertical axis plots the Child Penalty (Child Penalty Atlas, 2024).

Horizontal axis plots scores of the Index Family "Diversity & Inclusiveness".

Orange dashed line indicates a fitted regression line. Adjusted R-squared: 0.094.

Random selection of country codes are printed in case of country overlaps, colour code illustrates overall EQx score.

Are Inclusive Elites Experiencing Lower Child Penalties in Employment?

Many gender gaps in the labor market are closing, but child-bearing remains one of the main reasons for its continuation. According to the child penalty research, some countries seem to provide good examples for recovering from the effects of women's employment after the birth of their first child. Others are not such good examples. How does this correlate with our measure of inclusive elites? What can we learn from it? This commentary discusses the potential parallels between the inclusivity of elites (i.e., their ranking in the Diversity & Inclusion (D&I) EQx-Indicator Family of the EQx) and the child penalty in employment.

The "child penalty in employment" refers to the effect of parent-hood on the employment rate of women relative to men. Recent research by Kleven et al. (2023) shows how women face a drop in employment after the birth of their first child, which is never recovered in most countries, while men's employment is not negatively affected after the birth of their first child.

How does the child penalty in employment correlate with the Diversity & Inclusion EQx-Indicator Family of the EQx? The two measures are negatively correlated (see visual 4.4), so that a country with value-creating business models from a D&I-perspective is associated with a lower child penalty.

However, a closer look reveals that the three top performers in the D&I indicator Family—Mozambique, Burundi, and the Netherlands—do not necessarily manage to keep women in employment after the birth of their first child, as the example of the Netherlands shows.

In many African countries, such as Mozambique, there is little or no negative impact of parenthood on employment. This does not mean that there is no gender employment gap—it is just not reflected in the child penalty. Another reason for this gap is the marriage penalty, which is more important in lowand middle-income countries (Kleven et al., 2023).

Some countries do experience the negative impact of motherhood on employment, but women "recover". What are China (D&I, rank #35), Estonia (D&I, rank #109), whose D&I ranking is affected by a low score for the Gender education gap (iii.8, GEG), or Finland (D&I, rank #31) doing to help women recover from the drop in employment after bearing their first child? There is certainly no single recipe. In China, contextual factors may explain the quick recovery from the child penalty: A significant proportion of the workforce is employed in the informal sector, which is more vulnerable to poverty and insecurity. In addition, the relatively high prevalence of three-generation households and the associated care responsibilities may increase a mothers need for financial income, leading to a faster return to work (Manwei, 2023). Other countries stand out for their low barriers to women's economic participation, such as Estonia (WBL, i.3, rank #13) and Finland (WBL, i.3, rank #13). Furthermore, the examples of Finland (LFR, rank #15; WMA, rank #30) or Estonia (LFR, rank #48; WMA, rank #44) illustrate that a high labor force participation rate and increased opportunities to reach senior and middle management positions—both indicators for greater acceptance and support for women in the workforce—can help to offset the negative impact of motherhood on employment by increasing the incentives for women to return to paid work. Therefore, the reduction of barriers to women's economic participation and a positive synergy between the legal framework and social norms can potentially serve as a solution to mitigate the effects of childcare responsibilities.

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EQx2024 Indicator Family Diversity & Inclusion

Countries	covered: 151		
Indicators		Weight within Family	Weight within EQx
WPI	Women's Power Index	9.1%	0.3%
GRI	Religion - Government Restriction Index	0.9%	0.1%
LIN	LGBT+ inclusiveness	0.9%	0.1%
WSB	Women self made billionaires	1.7%	0.3%
WBL	Women, business and the law	1.7%	0.3%
WMA	Proportion of women in senior and middle	1.7%	0.3%
IWE	Index of Women Entrepreneurs	28.3%	1.3%
GEG	Gender education gap (dev. fm optimum)	18.4%	0.6%
LFR	Labor force participation ratio - male vs fer	37.4%	0.8%

Rationale

The Diversity & Inclusion (D&I) EQx-Indicator Family is a construct formed by 9 Indicators. The weighting of each Indicator is conceptual and is expected to evolve in future iterations of the EQx. The rationale for the D&I EQx-Indicator Family is simple. Any type of discrimination, from gender to religion, has a business model logic, constitutes a form of rent seeking, and compromises Value Creation. Those discriminated against face barriers that hinder or prevent them from realizing their potential for Value Creation. Moreover, society at large suffers a serious loss, while the overall Value Creation potential of the economy is compromised.

Diversity & Inclusion EQx Indicator Family, total weight

4.2%

nk /151	Country	Score	Rank /151	Country	Score	Rank /151	Country	Score
1	Mozambique	83.4	51	Armenia	59.4	101	Panama	48.3
2	Burundi	80.4	52	Papua New Guinea	59.2	102	Philippines	47.7
3	Netherlands	72.7	53	Cyprus	59.1	103	Nigeria	47.5
4	Kenya	71.9	54	Kazakhstan	58.7	104	Guinea-Bissau	46.7
5	Namibia	71.7	55	Mexico	58.7	105	Niger	46.4
6	United Kingdom	71.1	56	Timor-Leste	58.6	106	Senegal	45.6
7	New Zealand	70.6	57	Jamaica	58.5	107	Latvia	45.4
8	Turkmenistan	70.3	58	Canada	58.4	108	Dominican Republic	45.2
9	Germany	70.1	59	Zimbabwe	58.0	109	Estonia	45.2
10	Austria	69.6	60	Lesotho	57.9	110	Gabon	45.1
11	Switzerland	68.7	61	Indonesia	57.8	111	Honduras	45.0
12	Albania	67.7	62	Equatorial Guinea	57.3	112	Malaysia	44.7
13	Norway	67.6	63	Portugal	57.2	113	Turkey	44.2
14	France	67.5	64	Colombia	57.2	114	El Salvador	43.9
15	Rwanda	67.1	65	Thailand	57.2	115	Mali	43.2
16	Tanzania	66.9	66	Israel	57.1	116	Venezuela, RB	42.2
17	Chile	66.5	67	Korea, Rep.	57.1	117	Guinea	41.5
18	South Africa	66.2	68	Ethiopia	57.0	118	Chad	39.9
19	Congo, Rep.	65.2	69	Sweden	57.0	119	Mauritius	39.8
20	Moldova	65.0	70	Japan	56.1	120	Bosnia and Herzegovina	38.9
21	Togo	64.9	71	Brazil	55.6	121	United Arab Emirates	38.7
22	Spain	64.5	72	Trinidad and Tobago	55.5	122	Qatar	36.8
23	Vietnam	63.5	73	Denmark	55.3	123	Saudi Arabia	36.1
24	Peru	63.5	74	Cambodia	55.1	124	Tajikistan	35.0
25	Belgium	63.3	75	Gambia, The	54.7	125	Kyrgyz Republic	34.2
26	United States	63.1	76	Benin	54.7	126	Russian Federation	34.1
27	Madagascar	63.0	77	Czech Republic	53.9	127	Nepal	34.0
28	Azerbaijan	62.9	78	Greece	53.7	128	Uzbekistan	32.8
29	Angola	62.9	79	Argentina	53.3	129	India	31.2
30	Uganda	62.5	80	Mongolia	52.8	130	Libya	27.9
31	Finland	62.5	81	Central African Republic	52.6	131	Myanmar	27.1
32	Ireland	62.4	82	Nicaragua	52.4	132	Bahrain	26.1
33	Australia	62.2	83	Slovenia	52.4	133	Kuwait	24.7
34	Lao PDR	61.8	84	Romania	52.0	134	Mauritania	22.0
35	China	61.4	85	Italy	51.8	135	Guatemala	21.5
36	Liberia	61.4	86	Ukraine	51.6	136	Sri Lanka	21.3
37	Singapore	61.3	87	Lithuania	51.2	137	Bangladesh	16.4
38	Belarus	61.3	88	Malawi	51.0	138	Tunisia	16.0
39	Croatia	61.2	89	Burkina Faso	50.6	139	Sudan	14.2
40	Uruguay	60.9	90	Côte d'Ivoire	50.5	140	Lebanon	12.9
41	Costa Rica	60.8	91	Georgia	50.4	141	Iraq	9.8
42	Ghana	60.8	92	Zambia	50.1	142	Oman	9.0
43	Congo, Dem. Rep.	60.7	93	Cuba	49.8	143	Pakistan	8.4
44	Bolivia	60.6	94	North Macedonia	49.7	144	Jordan	7.4
45	Haiti	60.5	95	Bulgaria	49.6	145	Morocco	6.6
46	Serbia	60.4	96	Hungary	49.6	146	Algeria	5.8
47	Cameroon	60.1	97	Ecuador	49.2	147	Syrian Arab Republic	5.1
48	Botswana	59.9	98	Slovak Republic	49.2	148	Iran, Islamic Rep.	3.5
49	Eswatini	59.7	99	Paraguay	49.2	149	Egypt, Arab Rep.	2.9
50	Sierra Leone	59.6	100	Poland	49.0	150	Yemen, Rep.	2.4
		07.0			· · · · ·	151	Afghanistan	2.3

Ecology's Integral Role in Elite Quality: Comprehensively Benchmarking the Sustainable Value Creation of Nations

Ecology plays a pivotal role in the Elite Quality Index (EQx). The 15 indicators that comprise the *Ecology EQx-Indicator Family* serve as a critical gauge for the sustainable practices of elite systems across the globe and the long-term viability of a particular country's economy. In the context of the EQx, ecological considerations are not merely ancillary but fundamental in assessing the quality of a nation's elite. This is because elite-led initiatives and business models have significant environmental footprints, which either contribute to or detract from sustainable development goals. The integration of ecological criteria into the EQx reflects a comprehensive understanding that true Elite Quality transcends short-term economic gains and encompasses environmental stewardship and sustainability.

The role of ecology in the EQx emphasizes the responsibility of the elite to adopt business models that are not only economically viable but also environmentally sustainable. This involves prioritizing the development of green technologies (e.g., *Green patents per capita* (GPA), iii.9), sustainable resource management (e.g., *Municipal waste recycling rate* (MWR), iii.9), and practices that minimize ecological degradation (e.g., *Terrestrial land protected* (TLP), iii.9). By highlighting the importance of ecology, the EQx encourages elites to lead by example, demonstrating that economic prosperity and environmental sustainability are not mutually exclusive but can be pursued in tandem. This approach aligns with a broader global movement towards sustainability, underscoring the role of the elite in spearheading positive ecological change.

Furthermore, the ecological aspects of the EQx serve as a benchmark for evaluating the long-term impact of elite actions on a country's environmental health. It incentivizes elites to consider the ecological consequences of their decisions, promoting a shift towards more sustainable and eco-friendly business practices. This shift is crucial for ensuring the resilience and sustainability of both the economy and the natural environment, which are inextricably linked. Sustainable practices endorsed by the elite can lead to significant improvements in ecological preservation, thereby enhancing the quality of life for current and future generations.

Japan's position as a leader in the EQx2024 (rank #4), is particularly due to its ecological performance (rank #1), underscoring its commitment to innovative environmental practices. As the highest-ranked country in terms of ecological performance, Japan exemplifies how technological advancement and environmental sustainability can be intertwined. A notable example of Japan's ecological stewardship is its commitment to innovative green technology initiatives (e.g., GPA, iii.9, rank #1). The country has made significant strides in reducing its energy consumption and carbon footprint through the widespread invention and adoption of energy-saving technologies and practices. These efforts are a testament to Japan's elite prioritizing sustainable growth and environmental preservation, setting a global benchmark for ecological performance within the EQx framework.

Portugal, ranked #4 in ecological performance, showcases the impact of policy and community engagement on environmental sustainability. Portugal's investment in renewable energy sources, particularly wind and solar power, exemplifies its commitment to reducing reliance on fossil fuels and minimizing environmental impact, leading, for example, to a high score in the Air Quality Index (AIR, iii.9, rank #9). This shift towards green energy not only reflects the country's dedication to sustainable development but also illustrates the influential role of its elites in championing ecological initiatives. Through strategic investments and policies, Portugal's elites are helping to forge a path toward a more sustainable and environmentally-friendly future, further solidifying its commendable position in the EQx ecology rankings.

Costa Rica, at #9 in ecological performance, is often celebrated for its pioneering efforts in conservation and sustainable development. This Central American nation is a shining example of how dedication to ecological preservation can shape a country's development trajectory. One of Costa Rica's most innovative initiatives is its payment for ecosystem services program, which compensates landowners for the conservation of forests. This business model not only contributes to the reduction of carbon emissions but also promotes biodiversity conservation, illustrating how Costa Rica's elites are effectively leveraging natural capital to support sustainable development. Their efforts underscore the vital role of ecological stewardship in enhancing a nation's overall Elite Quality.

Singapore's ecological performance (#18 rank) is significantly below its #1 overall EQx ranking, but still showcases its innovative approach to sustainable urban planning, remarkable Municipal waste recycling rate (MWR, iii.9, rank #3), and exemplary management of Natural resources rents (NRR, iii.9, rank #1). Beyond the 'City in a Garden' initiative, Singapore excels in waste management and recycling, adopting a comprehensive approach that includes state-of-the-art waste-to-energy plants and aggressive recycling programs. This high level of efficiency in managing waste underscores the country's commitment to a circular economy, minimizing landfill use and reducing environmental pollution. Furthermore, Singapore's strategy regarding natural resources rents provides lessons on how a country with limited natural resources and very high population density can still maximize economic benefits while ensuring sustainability. The city-state has leveraged its strategic location and human capital to develop a high-value-added economy, focusing on sectors like finance, technology, and services, rather than relying on natural resource exploitation. This shift away from natural resource dependency towards a knowledge-based economy highlights the foresight and commitment to sustainable development exhibited by Singapore's elites. By effectively managing its natural resources rents and excelling in recycling efforts, Singapore sets a global standard for ecological performance in urban environments.

At the other end of the spectrum, Thailand, another Southeast Asian nation, is positioned poorly at rank #125 and faces challenges with regard to its ecological performance, with many areas for improvement. Despite its rich biodiversity and natural resources, poor scores for the *Deforestation rate* (DER, iii.9, rank #107), *Air Quality Index* (AIR, iii.9, rank #53), and extensive *Fish consumption per capita* (FIS, iii.9, rank #129) have marred its ecological record. These challenges are indicative of the need for a stronger commitment from Thailand's elites toward environmental conservation and sustainable practices. Enhancing ecological performance requires not only policy reforms but also a shift in the business models and practices of the country's elites to embrace more sustainable and environmentally conscious approaches, underscoring the critical role of Elite Quality in achieving ecological sustainability.

Turning to countries like Senegal (rank #116) and Bangladesh (rank #103), we observe the complexities of ecological challenges in developing contexts. In Senegal, issues such as coastal erosion, overfishing (FIS, iii.9, rank #74), and desertification pose significant threats to its ecological sustainability. These challenges highlight the need for concerted efforts from the country's elites to invest in sustainable practices and envi-

ronmental preservation. Similarly, Bangladesh faces critical environmental pressures from climate change, including rising sea levels and increased salinity, impacting both agriculture and livelihoods. The country's low position in the ranking emphasizes the urgent need for its elites to prioritize ecological resilience and sustainable development strategies, illustrating the intricate relationship between Elite Quality and ecological performance on a global scale.

In conclusion, the role of the *Ecology EQx-Indicator Family* in the EQx underscores the importance of integrating environmental considerations into the core of elite-led economic activities. Such an approach would not only help in safeguarding the planet but also ensure that Value Extraction, in whatever domain, is identified, weighted, and mitigated. The EQx advocates a holistic and balanced view of sustainability and economic development, placing elite agency at the center of inclusive outcomes and growth. As such, the 15 ecology indicators within the EQx framework act as a crucial measure of elite commitment to fostering a sustainable future, making ecology essential in comparatively assessing Elite Quality on a global scale.

Professor Martin Nerlinger, Professor of Finance, University of St. Gallen and Swiss Finance Institute.



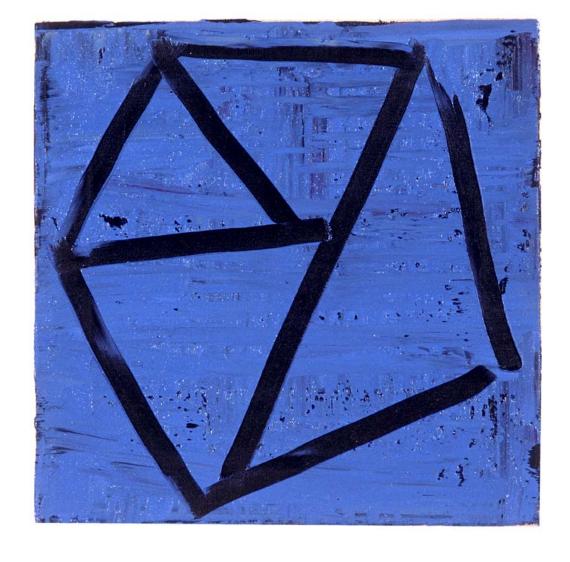


Countries	s covered: 151						
Indicator	s included:	Weight within Family	Weight within EQx				
FSQ	Global Food Security Index - availability, q	57.2%	0.4%				
NRR	Natural resources rents as % of GDP	5.9%	0.5%				
GPA	Green patents per capita	4.4%	0.4%				
EPI	Environmental Performance Index	2.9%	0.3%				
DER	Deforestation rate	2.9%	0.3%				
FUS	Fertilizer usage kg per hectar	1.5%	0.1%				
TLP	Terrestrial land protected	2.9%	0.3%				
CDD	CO2 emissions embodied in domestic final	4.4%	0.4%				
CDO	CO2 emissions (metric tons per capita)	4.4%	0.4%				
AIR	Air Quality Index	4.4%	0.4%				
HAZ	Hazardous waste per capita	1.5%	0.1%				
WPC	Waste collected per capita	1.5%	0.1%				
MWR	Municipal waste recycling rate	1.5%	0.1%				
FIS	Fish consumption per capita	1.5%	0.1%				
MET	Red meat consumption kilograms per capite	2.9%	0.3%				
Ecology EQx Indicator Family, total weight							

Rationale

The Ecology EQx-Indicator Family is a construct formed by 15 Indicators. The weighting of each Indicator is conceptual and is expected to evolve in future iterations of the EQx. The rationale of the Ecology EQx-Indicator Family is simple. Any type of environmental damage is unsustainable and results in a long-term burden for society. As such, it represents Value Extraction and rent-seeking behavior by one subset of society (those who exploit the environment) to the detriment of society at large. In contrast, any type of investment into or improvement to the state of the environment is sustainable and represents a form of Value Creation that is available to all.

ınk /151	Country	Score	Rank /151		Score	Rank /151		Score
1	Japan	76.1	51	Peru	56.5	101	Liberia	44.7
2	France	75.8	52	Guinea-Bissau	56.4	102	Nicaragua	44.0
3	Finland	74.0	53	Kazakhstan	56.3	103	Bangladesh	43.7
4	Portugal	72.6	54	Jamaica	56.3	104	Uzbekistan	43.3
5	Netherlands	72.4	55	Lithuania	56.0	105	Myanmar	43.1
6	Ireland	72.0	56	Estonia	55.3	106	Mauritania	43.1
7	Denmark	71.9	57	Lebanon	55.0	107	Tanzania	41.5
8	Sweden	71.6	58	Dominican Republic	55.0	108	Papua New Guinea	41.4
9	Switzerland	71.4	59	Malaysia	54.9	109	Kyrgyz Republic	41.4
10	Costa Rica	71.4	60	Honduras	54.7	110	Malawi	41.2
11	Belgium	71.3	61	Qatar	54.6	111	Tajikistan	41.1
12	Israel	71.1	62	Georgia	54.2	112	Azerbaijan	40.3
13	Canada	70.2	63	Russian Federation	54.0	113	Iran, Islamic Rep.	40.2
14	United Kingdom	70.1	64	Moldova	53.9	114	Benin	40.0
15	Austria	69.6	65	Cuba	53.6	115	Algeria	39.9
16	Germany	69.3	66	Belarus	53.2	116	Senegal	38.1
17	Bulgaria	67.7	67	Nepal	53.1	117	Botswana	37.9
18	Singapore	67.4	68	Ecuador	53.1	118	Turkmenistan	37.4
19	Italy	66.6	69	Eswatini	52.5	119	Lao PDR	37.3
20	Spain	66.1	70	Trinidad and Tobago	52.0	120	Indonesia	37.2
21	Czech Republic	65.5	71	Gambia, The	51.4	121	Libya	37.0
22	Poland	65.2	72	Bosnia and Herzegovina	51.4	121	Mongolia	36.9
23	El Salvador	64.7	73	Saudi Arabia	51.3	123	Ethiopia	36.8
24			73		51.0		Zambia	
24 25	Argentina	64.4		Central African Republic	50.9	124	Thailand	36.5
	Slovenia	64.4	75	Vietnam		125		36.3
26	Norway	64.2	76	Afghanistan	50.8	126	Rwanda	36.3
27	United Arab Emirates	64.0	77	Gabon	50.5	127	Mali	36.3
28	Greece	63.9	78	Paraguay	50.2	128	Pakistan	36.2
29	United States	63.9	79	Armenia	49.9	129	Ghana	34.7
30	China	63.8	80	South Africa	49.8	130	Burkina Faso	34.1
31	Korea, Rep.	63.2	81	Kenya	49.7	131	Togo	33.6
32	Turkey	63.1	82	Jordan	49.4	132	Egypt, Arab Rep.	32.9
33	Cyprus	62.7	83	India	49.3	133	Sudan	32.7
34	Chile	62.6	84	Congo, Rep.	49.2	134	Burundi	32.2
35	Hungary	62.1	85	Zimbabwe	49.2	135	Iraq	31.7
36	Romania	62.0	86	Philippines	49.2	136	Mozambique	31.6
37	New Zealand	61.9	87	Lesotho	48.9	137	Haiti	31.5
38	Brazil	61.4	88	Timor-Leste	48.4	138	Guinea	30.6
39	Mauritius	61.1	89	Sri Lanka	48.1	139	Nigeria	29.0
40	Slovak Republic	60.9	90	Ukraine	47.9	140	Venezuela, RB	29.0
41	North Macedonia	59.9	91	Bahrain	47.5	141	Niger	28.9
42	Australia	59.7	92	Colombia	47.5	142	Angola	27.2
43	Mexico	59.6	93	Morocco	47.2	143	Côte d'Ivoire	26.8
44	Uruguay	59.2	94	Serbia	47.2	144	Cameroon	26.7
45	Latvia	58.6	95	Guatemala	47.2	145	Uganda	25.2
46	Croatia	58.5	96	Oman	47.1	146	Congo, Dem. Rep.	22.4
47	Panama	58.4	97	Equatorial Guinea	46.8	147	Chad	21.4
48	Namibia	58.1	98	Kuwait	45.4	148	Sierra Leone	21.2
49	Bolivia	57.4	99	Cambodia	45.0	149	Madagascar	21.2
50	Albania	56.6	100	Tunisia	44.9	150	Yemen, Rep.	21.1
50	Aibailla	30.0	100	Tolliaid	44.7	151	Syrian Arab Republic	21.1



How Does Elite Quality Influence Progress Towards the SDGs?

The elite theory of economic development seeks to contribute to sustainable development, which it defines as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987). This notion is operationalized and popularly embodied by the United Nations' Sustainable Development Goals (SDGs), a framework comprised of 17 goals, 169 targets, and 232 unique indicators. This framework gives many tangible ways for both countries and corporations to track their involvement in contributing towards sustainable development.

Given the signalling effect and legitimacy of the SDGs in global policy decision-making, it is essential to think about the role that elite business models play in their achievement. A preliminary analysis comparing the SDG Index (Sachs et al., 2023) with the EQx Index, showed that there was a significant positive correlation between countries' EQx scores and their progress towards achieving the SDGs. The most significant finding was that the Political Power Index Area showed the highest positive correlation (p=0.809) with progress made towards achieving the SDGs, while intriguingly the Economic Value Index Area had the lowest correlation (p=0.537).

In order to examine this relationship between the EQx and the SDGs in more detail, the decision was made to launch the SDG EQx-Indicator Family that seeks to answer the question of the extent to which Elite Quality contributes to progressing the attainment of the SDGs. After a thorough analysis of both the existing EQx indicators and the SDG indicator framework, the SDG EQx-Indicator Family was designed to utilize 33 EQx indicators that capture and fit a particular category for all 17 SDGs. As part of the annual updating of the EQx, new indicators were added to the EQx2024 that were not present in last year's data set to match some of the SDGs. Thus, this EQx Family is comprised of a diverse set of indicators ranging from Financial burden of healthcare (FBH, iv.10), reflecting SDG 3, to R&D as a % of GDP (RND, ii.6) reflecting SDG 9, to CO2 emissions (metric tons per capita) (CDO, iii.9), reflecting SDG 13.

The leading nations in the SDG EQx-Indicator Family rankings can therefore be interpreted as the national elite systems that are most successfully realizing the SDGs. Denmark, a country that performs particularly well in terms of Political Power (i, rank #6) and which already has the top spot in the NextGen Value Creation Barometer, also clinches the leading position in this year's SDG EQx-Indicator Family. Moreover, many smaller European

countries find themselves near the top of the ranking. Countries such as Switzerland and the Netherlands reaffirm their overall strong performance in the top 5 of the EQx2024 by ranking #2 and #4 respectively. The top 5 is completed by two other European nations that interestingly see a significant gain respective to their overall EQx2024 rankings, with Finland moving up from #14 to #2 and Austria from #15 to #5. All of these countries also find themselves highly ranked in the SDG Index (Sachs et al., 2023) underlying the strong correlation between the SDG EQx-Indicator Family and the SDGs (p=0.843). Since the EQx also measures the dimensions of power it provides additional novel insights, finding that countries that perform well in terms of realizing the SDGs also perform especially well in the Political Power Index Area. That is, when elites are not overly powerful, Political Power remains independent and uncaptured, institutions function well, and progress towards realizing the SDGs is more likely.

A further area of interest relates to countries that perform relatively poorly in indicators included in the SDG Family compared to their overall Elite Quality. Large drops in rankings relative to the EQx2024 are evident for fossil fuel producing countries such as Bahrain (falling from #29 to #81) and Oman (falling from #43 to #92). Evidently, this is not particularly surprising and reflects the failure of elites in these countries in making progress towards the environmental sustainability components of the SDGs. More surprisingly, Singapore falls from being the overall champion of the EQx2024 to being ranked #41 in the SDG indicator Family, failing to contribute elite value that is pertinent across the comprehensive dimensions of the SDGs. Moreover, Singapore follows the pattern associated with comparatively low SDG performance combined with with strong Economic Value (iv, rank #2) and less strong Political Power (i, rank #24).

These results are reflective of the prevalent literature, that suggests on the one hand that it is at the institutional level where the transformative potential of the SDGs lies (Biermann et al., 2022), and on the other hand posits that the private sector faces obstacles in appropriately addressing the full scope of the SDGs (McCalla-Leacy et al., 2022; Rashed & Shah, 2020; van Tulder et al., 2021). Could there be a trade-off between realizing the SDGs and Value Creation in the economy? Deeper analysis of these obstacles could explain why economic Value Creation by elites across the three markets (i.e., the products and services markets, the capital markets, and the labor markets) does not translate into as much concrete progress towards achieving the SDGs as one might expect. As such, the key focus areas for policymakers should be to continue to make efforts to effectively improve institutional quality by limiting the power accumulation of elites. More critically, the above putative trade-off ought to be further elucidated, and if it is real, serious reflection will be needed, along with proposals to resolve the contradiction.

Student at the University of **SDG**EQx-Indicator Family

Sebastian Boeck, Student at the University of St.Gallen, Switzerland

EQx2024 Indicator Family SDG

SPO

FBH

	covered:	151	
PGL	SFA	FSA	
GIL	ELA	EGL	
REQ	FOS	LPG	
PRI	BRD		
HRI	NRR		
WMA	EPI		
ННІ	RES		
ENT	OLI		
RND	DER		
IWE	TLP		
SCI	CDO		
EDU	AIR		
PIS	WPC		
FSQ	FIS		

Rationale

The SDG EQx-Indicator Family is a construct formed by 33 Indicators. The weighting of each Indicator is conceptual and is expected to evolve in future iterations of the EQx. The rationale for the SDG EQx-Indicator Family is simple. The Sustainable Development Goals (SDGs) are one of the most prominent attempts to realize sustainable development. Given their legal status at the United Nations, the SDGs play a crucial role in the public policy space, while influencing and being influenced by elite business models. As such, this Indicator Family measures the contribution of a country's elites to the fulfillment of the SDGs. The selected component Indicators are each assigned to one of the 17 SDGs, specifically measuring how elites bring about long-term Value Creation or, on the contrary, engage in Value Extraction.

k /151	1 Country	Score	Rank /151	·	Score	Rank /151	Country	Score
1	Denmark	72.7	51	Albania	54.2	101	Myanmar	43.0
2	Switzerland	70.3	52	Latvia	54.0	102	Guatemala	42.9
3	Finland	69.9	53	Senegal	53.8	103	Jamaica	42.3
4	Netherlands	68.8	54	Colombia	53.1	104	Mozambique	42.3
5	Austria	68.2	55	Turkey	52.9	105	Ethiopia	41.5
6	New Zealand	68.1	56	Morocco	52.7	106	Mongolia	41.4
7	Norway	67.7	57	Malaysia	52.6	107	Eswatini	41.2
8	Sweden	67.5	58	Peru	52.5	108	Algeria	41.2
9	France	67.4	59	Jordan	51.7	109	Congo, Rep.	40.9
10	Germany	67.3	60	Vietnam	51.7	110	Moldova	40.6
11	United Kingdom	66.9	61	Dominican Republic	51.7	111	Cameroon	40.4
12	Australia	66.0	62	Botswana	51.0	112	Mali	40.2
13	Israel	65.4	63	Argentina	50.7	113	Pakistan	40.1
14	Korea, Rep.	65.2	64	Mauritius	50.6	114	Zambia	40.0
15	Belgium	64.8	65	Azerbaijan	50.3	115	Guinea-Bissau	39.9
16	Canada	64.1	66	Tajikistan	50.1	116	Bangladesh	39.9
17	Japan	64.0	67	Paraguay	50.0	117	Nigeria	39.7
18	United Arab Emirates	63.9	68	Brazil	49.6	118	Côte d'Ivoire	39.5
19	Slovenia	63.6	69	Ghana	49.5	119	Iran, Islamic Rep.	39.4
20	Spain	62.6	70	Namibia	49.2	120	Burkina Faso	39.0
21	Czech Republic	62.5	71	Tunisia	49.0	121	Lesotho	38.8
22	Slovak Republic	62.5	72	Bosnia and Herzegovina	48.9	122	Togo	38.8
23	Ireland	62.3	73	Rwanda	48.8	123	Turkmenistan	38.7
24	United States	62.1	74	Kazakhstan	48.3	124	Nepal	38.5
25	Hungary	62.0	75	Kenya	48.3	125	Madagascar	38.3
26	Cyprus	62.0	76	Kenya Kyrgyz Republic	48.2	125	Guinea	36.3 37.6
27	Greece	61.9	77	India	48.1	127	Sri Lanka	37.8
28	Estonia	61.7	78		48.1	127		37.3 37.2
				Egypt, Arab Rep.			Equatorial Guinea	
29	Lithuania	61.5	79	Belarus	47.8	129	Malawi	36.9
30	Croatia	61.4	80	El Salvador	47.8	130	Liberia	36.8
31	Portugal	61.4	81	Bahrain	47.6	131	Nicaragua	36.4
32	Serbia	60.6	82	Uzbekistan	47.5	132	Lao PDR	35.5
33	Italy	60.3	83	Cambodia	47.5	133	Chad	35.5
34	China	60.3	84	Libya	47.4	134	Niger	35.0
35	Romania	59.7	85	Mexico	47.3	135	Cuba	34.9
36	Poland	59.6	86	Ecuador	47.2	136	Uganda	34.9
37	Timor-Leste	59.0	87	Lebanon	47.1	137	Zimbabwe	34.4
38	Thailand	58.5	88	Gabon	47.1	138	Venezuela, RB	34.2
39	Bulgaria	58.4	89	Bolivia	47.0	139	Benin	34.2
40	Qatar	57.7	90	South Africa	45.9	140	Sudan	33.3
41	Singapore	57.5	91	Tanzania	45.8	141	Burundi	33.3
42	Chile	56.7	92	Oman	45.2	142	Papua New Guinea	32.7
43	Georgia	56.5	93	Ukraine	44.3	143	Mauritania	31.7
44	North Macedonia	55.9	94	Trinidad and Tobago	44.2	144	Sierra Leone	30.5
45	Costa Rica	55.6	95	Honduras	44.1	145	Iraq	30.1
46	Indonesia	55.6	96	Saudi Arabia	44.0	146	Central African Republic	29.2
47	Uruguay	55.5	97	Congo, Dem. Rep.	43.9	147	Syrian Arab Republic	26.5
48	Panama	55.3	98	Russian Federation	43.6	148	Haiti	26.4
49	Armenia	54.8	99	Kuwait	43.1	149	Yemen, Rep.	25.3
50	Philippines	54.5	100	Gambia, The	43.1	150	Angola	24.9
	ppou	30				151	Afghanistan	19.6

5. Indicators

This Chapter explains and discusses the sources for all data used to create the indicators for the EQx Rankings. First, in Section 5.1, we offer an overview of all individual indicators and the respective weight they are given at both the Pillar and

aggregate EQx level. Second, in Section 5.2, we provide descriptions of all 146 indicators used (what we measure), as well as the rationale that underpins their inclusion in the EQx (why we measure).

5.1 Indicator Weighting Table Overview

Visual 5.1: EQx indicator weighting table

TLA	Indicator Name	Witin Pillar weight (BAP)	Within EQx weight
Sub-Ind	ex I: Power Index Area (i): Political Power		
Pillar (i.1)	State Capture		
COR	Political corruption	5,0%	0,2%
COC	Control of corruption	10,0%	0,4%
OPG	Open government	5,0%	0,2%
RTC	Government's responsiveness to change	10,0%	0,4%
EPR	E-Participation Index	7,5%	0,3%
PFD	Press freedom	7,5%	0,3%
NJK	Nr. of journalists killed per 1 million people (2 years avg.)	7,5%	0,3%
PDE	Political decentralization	2,5%	0,1%
ADE	Administrative decentralization	2,5%	0,1%
PGL	Political globalization	7,5%	0,3%
WPI	Women's Power Index	7,5%	0,3%
МОВ	Social mobility (upward) (dev. fm optimum)	2,5%	0,1%
INE	Top 10% share of pre-tax national income	5,0%	0,2%
GWL	Gini coefficient on net national wealth dist level	5,0%	0,2%
GWC	Gini coefficient on net national wealth dist 3-year growth rate	5,0%	0,2%
GIL	Gini coefficient on income dist level	5,0%	0,2%
GIC	Gini coefficient on income dist 1-year growth rate	5,0%	0,2%
Pillar (i.2)	Regulatory Capture		
ECR	Ease of challenging regulations	4,3%	0,2%
CGP	Constraints on government power	8,7%	0,4%
REQ	Regulatory quality	17,4%	0,7%
REN	Regulatory enforcement	8,7%	0,4%
PRI	Property rights	21,7%	0,9%
CRO	Crony capitalism	21,7%	0,9%
INO	Informal output as a % of GDP	17,4%	0,7%
Pillar (i.3)	Human Capture		
GSI	Global Slavery Index	23,8%	0,7%
FDP	Forcibly displaced people as % of population	14,3%	0,4%
HRI	Human Rights Index	14,3%	0,4%
AFI	Academic Freedom Index	9,5%	0,3%
GRI	Religion - Government Restriction Index	4,8%	0,1%
LIN	LGBT + inclusiveness	4,8%	0,1%
WSB	Women self made billionaires	9,5%	0,3%
WBL	Women, business and the law	9,5%	0,3%
WMA	Proportion of women in senior and middle mgmt positions (dev. fm optimum)	9,5%	0,3%

TLA	Indicator Name	Witin Pillar weight (BAP)	Within EQx weight
Sub-Inde	x I: Power Index Area (ii): Economic Powe	er	
Pillar (ii.4)	Coalition Dominance		
IEE	Top 3 industries exports as % of exports	10,0%	0,5%
IEO	Top 1 industry exports as % of exports	3,3%	0,2%
IVA	Top 3 industries as % of value added	10,0%	0,5%
HHI	Domestic market diversification	13,3%	0,6%
ECI	Economic Complexity Index	16,7%	0,8%
PUE	Public employees as a % of total employment	10,0%	0,5%
MIL	Military expenses as % of GDP (dev. fm optimum)	10,0%	0,5%
UNI	Unionization rate (dev. fm optimum)	6,7%	0,3%
BSN	Barriers in service & network sectors	3,3%	0,2%
CRA	Criminal actors	16,7%	0,8%
Pillar (ii.5)	Firm Dominance		
SME	SMEs per 1,000 people	14,3%	0,7%
FAM	Family business revenues as % of GDP	21,4%	1,1%
BIW	Billionaires' wealth as % of GDP	7,1%	0,4%
FKG	Top 10 firms market cap as % of GDP	21,4%	1,1%
FRG	Top 3 firms revenues as % of GDP	14,3%	0,7%
FRR	Top 30 firms revenues as % of GDP	21,4%	1,1%
Pillar (ii.6)	Creative Destruction		
ENT	Entrepreneurship	10,5%	1,3%
GSE	Governmental support to entrepreneurship	5,3%	0,7%
VCK	Venture capital finance	21,1%	2,6%
VCA	Venture capital availability	10,5%	1,3%
RND	R&D as a % of GDP	10,5%	1,3%
EXR	Firm exit ratio	5,3%	0,7%
BCD	Billionaire's creative destruction	26,3%	3,3%
IWE	Index of Women Entrepreneurs	10,5%	1,3%

TLA	Indicator Name	Within Pillar weight (BAP)	Within EQx weight
Sub-Inde	x II: Value Index Area (iii): Political Value		
Pillar (iii.7)	Giving Income		
LEW	Life expectancy women	2,7%	0,2%
LEM	Life expectancy men	2,7%	0,2%
COM	COVID-19 mortality rate, age-adjusted	1,4%	0,1%
COF	COVID-19 fatality rate, age-adjusted	1,4%	0,1%
SCI	UHC Service Coverage Index	5,4%	0,4%
PTR	Pupil-teacher ratio	4,1%	0,3%
EDU	School life expectancy	5,4%	0,4%
PIS	PISA mean scores	4,1%	0,3%
UNV	Top universities	4,1%	0,3%
GEE	Government education expenditure	5,4%	0,4%
GAR	Government AI Readiness Index	4,1%	0,3%
OSI	Online Service Index	2,7%	0,2%
NRI	Network Readiness Index	2,7%	0,2%
INT	Internet access	2,7%	0,2%
GHI	Global Hunger Index	6,8%	0,5%
FSQ	Global Food Security Index - availability, quality & safety	5,4%	0,4%
GPS	Expenditure on general public services as % of GDP (dev. fm optimum)	4,1%	0,3%
GEX	General government expenditure as % of GDP (dev. fm optimum)	4,1%	0,3%
SNT	Subsidies and transfers as % of expenses	5,4%	0,4%
REG	Regional redistribution as % of government budget	4,1%	0,3%
CSG	Construction supply gap	4,1%	0,3%
SPO	Social protection	5,4%	0,4%
SFA	Sanitation facilities	2,7%	0,2%
ELA	Electricity access	4,1%	0,3%
FOS	Fossil fuel subsidies	5,4%	0,4%
Pillar (iii.8)	Taking Income	3.5.404	1.00/
SUB	Death rate from substance use disorders	15,4%	1,2%
BRD	Battle-related deaths per capita	15,4%	1,2%
HOM	Homicide rate	15,4%	1,2%
SUI	Suicide rate	11,5%	0,9%
DTR	Tax revenue as % of GDP (dev. fm optimum)	7,7%	0,6%
DCT	Corporate tax rate (dev. fm optimum)	15,4%	1,2%
DPS	Delta public vs private sector salaries	3,8%	0,3%
FDE	Fiscal decentralization	3,8%	0,3%
GCI	Global Cybersecurity Index	3,8%	0,3%
GEG	Gender education gap (dev. fm optimum)	7,7%	0,6%
Pillar (iii.9)	Unearned Income	12.42	0 ==:
CRM	Criminal markets	11,4%	0,7%
DBT	Government debt as % of GDP	11,4%	0,7%
NRR	Natural resources rents as % of GDP	9,1%	0,5%
GPA	Green patents per capita	6,8%	0,4%
EPI	Environmental Performance Index	4,5%	0,3%
RES	Renewable energy share	6,8%	0,4%
OLI	Ocean litter	4,5%	0,3%
DER	Deforestation rate	4,5%	0,3%
FUS	Fertilizer usage kg per hectar	2,3%	0,1%
CDD	Terrestrial land protected CO2 emissions embodied in domestic final	4,5% 6,8%	0,3%
656	demand per capita	4.004	0.404
CDO	CO2 emissions (metric tons per capita)	6,8%	0,4%
AIR	Air Quality Index	6,8%	0,4%
HAZ	Hazardous waste per capita	2,3%	0,1%
WPC	Waste collected per capita	2,3%	0,1%
MWR	Municipal waste recycling rate	2,3%	0,1%
FIS	Fish consumption per capita	2,3%	0,1%
MET	Red meat consumption kilograms per capita	4,5%	0,3%

TLA	Indicator Name	Within Pillar weight (BAP)	Within EQx weight
Sub-Inde	x II: Value Index Area (iv): Economic Valu	е	
Pillar (iv.10)	Producer Value		
PAT	Nr. of patent applications per capita	2,5%	0,3%
FBH	Financial burden of healthcare	7,5%	1,0%
HEI	Health Efficiency Index	2,5%	0,3%
DMS	Density of medical staff	5,0%	0,6%
FSA	Global Food Security Index - affordability	10,0%	1,3%
HAI	Housing Affordability Index	5,0%	0,6%
RTD	Rail track density	2,5%	0,3%
GAI	Global AI Index	7,5%	1,0%
FDS	Inward FDI as a % of GDP (stock)	5,0%	0,6%
FDF	Inward FDI as a % of GDP (flow, 3yrs avg.)	7,5%	1,0%
BTF	Barriers to FDI	7,5%	1,0%
OFB	Open for business	5,0%	0,6%
EGL	Economic globalization	7,5%	1,0%
TRF	Trade freedom	10,0%	1,3%
IPM	Share of imports targeted by protectionist measures (flow)	2,5%	0,3%
IPS	Share of imports targeted by protectionist measures (stock)	5,0%	0,6%
DGI	Share of discrimn. govt. intervent. as % of total intervent. (flow)	2,5%	0,3%
DGS	Share of discrimn. govt. intervent. as % of total intervent. (stock)	5,0%	0,6%
Pillar (iv.11)	Capital Value		
DOI	Inflation (dev. fm optimum)	15,2%	2,3%
DEF	GDP deflator index growth rate (dev. fm optimum)	9,1%	1,4%
DNI	Neutral interest rate (dev. fm optimum)	12,1%	1,8%
FMI	Financial Markets Index	15,2%	2,3%
GCF	Gross capital formation	12,1%	1,8%
GOL	Gold demand as % of GDP	3,0%	0,5%
CRY	Crypto ownership	6,1%	0,9%
UNN	Unicorns	3,0%	0,5%
UNC	Unicorns as % of GDP	9,1%	1,4%
BSG	Billionaires self-made per capita	6,1%	0,9%
BSM	Billionaires self-made as % of total billionaires	9,1%	1,4%
Pillar (iv.12)	Labor Value		
LPG	Labor productivity growth	20,0%	3,3%
WLP	Delta real wage vs labor productivity increases	15,0%	2,5%
LFP	Labor force participation rate	10,0%	1,6%
LFR	Labor force participation ratio - male vs female	5,0%	0,8%
UEM	Unemployment rate	15,0%	2,5%
YUN	Youth unemployment rate	20,0%	3,3%
BRN	Human flight and brain drain	15,0%	2,5%

5.2 Indicator Table: Definitions and Rationale

Visual 5.2: EQx indicator table

	Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
Sub-In	idex I: Power / In	Sub-Index I: Power / Index Area (i): Political Power			
Pillar (i.	Pillar (i. 1): State Capture				
SO	Political corruption	The chosen indicator dataset "includes measures of six distinct types of corruption that cover both different areas and levels of the polity realm, distinguishing between executive, legislative and judicial corruption. () The measures thus tap into several distinguished types of corruption: both ,petty' and ,grand'; both bribery and theft; both corruption aimed at influencing law making and that affecting implementation" (V-DEM, website).	Political corruption (COR) uses data from: Varieties of Democracies (V-DEM) Dataset, sub-set on Political Corruption	Political corruption is a direct measure of Value Extraction facilitated by State Capture, which is anchored in Political Power. It is one of the most blatant and direct forms of rent seeking, as corruption is a form of theff and plunder. Political corruption also erects barriers to the emergence of Value Creation business models, thus distorting the market.	Value Extraction
99	Control of corruption	The Control of corruption indicator is derived from the World Bank's Worldwide Governance indicators (WGI) project that: "captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests" (World Bank, website).	Control of corruption (COC) uses data from: The World Bank, Worldwide Governance indicators (WGI)	Control of corruption analyzes the effects of corruption on the public and complements the Political corruption indicator (COR). Perceptions of the existence of corruption are critical because they influence the level of trust in the political system, with two implications for Value Creation. First, corrupt elites have engaged in successful State Capture through extractive business models at the cost of non-elites. Second, non-elites face barriers, distractions and costs if they wish to invest and engage in Value Creation models that would benefit society at large.	Value Creation
OPG	Open government	Open government, a factor in the World Justice Project's Rule of Law Index, measures "the openness of government defined by the extent to which a government shares information, empowers people with tools to hold the government accountable, and fosters citizen participation in public policy deliberations. This factor measures whether basic laws and information on legal rights are publicized and evaluates the quality of information published by the government" (World Justice Project, n.d).	Open government (OPG) uses data from: The World Justice Project, Rule of Law Index	Open government is associated with transparency, accessibility, and citizen participation, enabling a more equitable distribution of power amongst a country's population. Thus, non-elites are empowered to challenge and check elite power, reducing the permissibility of value extracting business models such as rent seeking. Moreover, transparency and accessibility also enable and boost the participation of non-elites in decision-making and increase trust in institutions, thereby fostering a culture of innovation and enhancing the willingness to invest.	Value Creation
RTC	Government's responsiveness to change	Government's responsiveness to change is measured through an indicator included in the World Economic Forum's Global Competitiveness Index, which is based on the survey question: "In your country, to what extent does the government respond effectively to change (e.g. technological changes, societal and demographic trends, security and economic challenges)?" (WEF, website). The WEF Executive Opinion Survey captures the views of more than 16,000 business executives in 140 countries.	Government's responsiveness to change (RTC) uses data from: The World Economic Forum (WEF), The Global Competitiveness Index	Government's responsiveness to change is a determining factor in incentivizing Value Creation business models. A state free from change-resistant vested interests is open to new possibilities, business models, and emerging interest groups inspired and enabled by technological, economic, geopolitical, etc., trends and disruptions. Value Creation opportunities are recognized and enabled from a regulatory perspective in such an environment.	Value Creation

Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
E-Participation Index	The E-Participation Index aims to measure the possibilities offered by governments to its to citizens to participate online; ranging from simply accessing information to engaging with and co-designing policies (UN, website).	The E-Participation Index (EPR) uses data from: The UN's E-Government Development Knowledge Base	The E-Participation Index highlights the involvement of citizens in the policy-making process as well as how effectively they are enabled to be involved in developing forward-looking Value Creation. E-Governments are on the rise as elites leverage increasingly available digital tools for technological transitions. More transparent and participative institutions empower non-elites to check elite Political Power and therefore better challenge rent-seeking business models. Greater participation in the political process also creates more trust in institutions and can foster a culture of innovation; an important factor in Value Creation.	Value Creation
Press freedom	Press freedom is measured by referencing the World Press Freedom Index and reflects the degree of freedom afforded to journalists in 180 countries. It is determined by pooling the responses of experts to a questionnaire devised by Reporters Without Borders (RSF). The questionnaire covers "pluralism, media independence, media environment and self-censorship, legislative framework, transparency, and the quality of the infrastructure that supports the production of news and information" (RSF, website).	Press freedom (PFD) uses data from: Reporters Without Borders, World Press Freedom Index	The greater the degree of Press freedom within a country, the greater the Value Creation in its political economy. It contributes to the creation of a vibrant market for ideas and enhances competition in the political and economic arenas. The provision of authentic information is critical. A high level of Press freedom puts pressure on rentier elites and shines a light on Value Extraction and rent-seeking activities that disadvantage society.	Value Creation
Nr. of journalists killed per 1 million people (2yrs avg.)	NJK uses data from the Committee to Protect Journalists. It measures the number of a country's journalists killed, adjusted per million inhabitants. This metric includes all instances where journalists lose their lives, whether the death is connected to their professional life or not. This indicator uses a two-year average.	Number of journalists killed per 1 million people (2 years average) (NJK) uses data from: The Committee to Protect Journalists	Journalists are a knowledge elite that provide checks and balances on political and business elites. When political elites kill journalists, either directly, through surrogates, or by failing to protect them against business elites, this reflects capture of the state apparatus by elites prepared to use the most horrifying of methods to suppress a narrative or information that challenges Value Extraction elite business models.	Value Extraction
Political decentralization	Political decentralization examines the self-governance powers afforded to local governments and assesses the degree of decentralization at the legislative and executive levels, as well as the provisions for direct democracy (Ivanyna & Shah, 2014).	Political decentralization (PDE) uses data from: Ivanyna & Shah (2014)	Political decentralization spreads Political Power by providing higher levels of autonomy for subnational governments. Local government is likely to be "more accountable to local citizens and more appropriate to local needs and preferences" (Johnson, 2003, p. vi) than a distant, centralized government. A direct local voice in executive and legislative institutions better supports local Value Creation models. On the other hand, Value Extraction is more likely if centralized legislative executive functions control relatively large budgets. As a counter argument, high levels of Political decentralization can be inefficient, eroding state capacity to provide public goods and leading to redundancy. *An optimal level for this indicator might be established in the future.	Value Extraction

Value Creation/ Extraction	Creation	Value Creation	Creation Creation
B. Indicator Rationale – Why we measure	Administrative decentralization spreads out administrative power as local governments employ local people more sensitive to implementing rules that are consistent with local needs. This produces an additional layer of checks and balances to avoid the occurrence of State Capture and Value Extraction business models. More distributed power impedes rent-seeking activities by geographically removed officials and administrative elites. As a Weberian counter argument, local administrations might be captured by local elites who may then compromise the implementation of inclusive rules and regulations. *An optimal level for this indicator, moderated by institutional quality, might be established in the future.	The higher the level of Political globalization, the more constrained the Political Power of national elites becomes in the context of the sovereign state. International norms and accountability to supranational institutions such as the WTO limit elite power. International institutions are assumed to be inclusive.	The higher the levels of gender equality in the leading positions of Political Power, the higher the diversity of interests, business models and consitiuencies that will a priori be represented and considered for institutional legitimacy in the political economy. The Women's Power Index is an effective indicator when considered in combination with other measures, such as Social mobility or Government responsiveness to change, that jointly constrain the potential for State Capture by narrow elite groups. As a counter argument, a high Women's Power Index score might signify the hold on power of family-based elites.
Dataset reference	Administrative decentralization (ADE) uses data from: Ivanyna & Shah (2014)	Political globalization (PGL) uses data from: ETHZ, The KOF Globalization Index	The Women's Power Index (WPI) uses data from: The Council on Foreign Relations (CFR)
A. Indicator Description – What we measure (short)	Administrative decentralization measures "the ability of local governments to hire and fire and set terms of employment of local employees as well as having regulatory control over own functions" (Ivanyna & Shah, 2014, p.17).	Political globalization is measured by using the political dimension of the KOF Globalization Index. It encompasses factors such as the number of embassies and international NGOs located in a particular country, as well as participation in UN peacekeeping missions. Moreover, it is comprised of variables relating to the membership of international/multilateral organizations and international/multilateral treaties.	The Women's Power Index measures the access of women to Political Power at the top echelons of the state. "It analyzes the proportion of women who serve as heads of state or government, in cabinets, in national legislatures, as candidates for national legislatures, and in local government bodies" (CFR, website).
Indicator Name	Administrative decentralization	Political globalization	Women's Power Index
	ADE	PGL	WP

_	Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
S 호 8	Social mobility (upward) (dev. fm optimum)	Social mobility (upward) references the Global Database on Intergenerational Mobility (GDIM) to measure the differences in economic mobility across generations. The main current focus of the EQx is on the social mobility of education. At present, MOB measures the proportion of individuals from the 1980s cohort, born into the bottom half that have now reached the top quartile in terms of educational achievement (World Bank, website).	Social mobility (upward) (MOB) uses data from: The World Bank (Development Research Group), Global Database on Intergenerational Mobility (GDIM) database, 2020	A population's social and economic mobility reflects the use of Political Power by elites. Across countries, the possibility of climbing the economic ladder varies significantly. Low levels of social mobility point to State Capture and a lack of political will to invest in measures that enable the less privileged within society to advance. The provision of education is one such measure. If access to education is restricted, incumbent elite status is less challenged, thereby impeding elite circulation and preventing the emergence of new Value Creation agents. Existing elites deter competition to retain the benefits of holding leading political and economic positions. Moreover, higher levels of incumbent elites reduce the competitive pressures for elite Value Creation, thus facilitating rent-seeking behavior and Value Extraction business models. MOB acts as a complement to MOD.	Achievement of the optimum represents maximum Value Creation
<u> </u>	Top 10% share of pre-tax national income	Top 10% share of pre-tax national income measures the share of pre-tax national income accruing to the 90-100 percentile of adult individuals (over 20 years old). Pre-tax national income is the sum of pre-tax labor income and pre-tax capital income.	Top 10% share of pre-tax national income (INE) uses data from: The World Inequality Lab, World Inequality database (WID)	Top 10% share of pre-tax national income is a measure of inequality. Excessive or structural inequality might reflect the fact that the rules of the game are rigged, acting as a disincentive to invest in Value Creation activities, including investments in new businesses or human capital. Excessive equality creates a different set of problems such as free riding which also disincentivizes Value Creation. Further research will determine other measures of inequality that reflect Value Extraction to enrich and increase the precision of this indicator in the Taking Income Pillar. *The measures of inequality might require an optimum value to be established and further research may be needed to reflect both sides of the argument in a balanced fashion.	Value Extraction
ලි _{සි} සි	Gini coefficient on net national wealth dist level	The Gini coefficient on the distribution of net national wealth (level) references the World Inequality Database. It is a measure of the inequality of wealth distribution in a population. In particular, it is related to net national wealth, which is the total value of non-financial and financial assets (housing, land, deposits, bonds, equities, etc.) held by households, minus their debts. This indicator considers the most recent wealth Gini coefficient.	The Gini coefficient on net national wealth dist level (GWL) uses data from: The World Inequality Lab, World Inequality database (WID)	For all Gini coefficient indicators, the assumption is that wealth inequality is the result of Political Power. Elite business models that capture the state will impede wealth accumulation by non-elites and engage in disproportional value transfers favorable to their models. Thus, the EQx views and assesses greater wealth equality as a positive.	Value Extraction
Q <u>a</u> . <u>a</u> p	Gini coefficient on net national wealth dist 3-year growth rate	The Gini coefficient on the distribution of net national wealth (3-year growth rate) references the World Inequality Database. It is a measure of the inequality of wealth distribution in a population. In particular, it is related to net national wealth, which is the total value of non-financial and financial assets (housing, land, deposits, bonds, equities, etc.) held by households, minus their debts. This indicator considers the 3-year growth rate.	The Gini coefficient on net national wealth dist 3-year growth rate (GWC) uses data from: The World Inequality Lab, World Inequality database (WID)	For all Gini coefficient indicators, the assumption is that wealth inequality is the result of Political Power. This WID indicator measures changes in wealth inequality and hence assesses the dynamics of elite business models' state capture to impede value appropriation by non-elites and make disproportional value transfers favorable to their models. Thus, the EQx views and assesses moves towards greater wealth equality as a positive.	Value Extraction

	Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
GIL	Gini coefficient on income dist level	The Gini coefficient on the distribution of income (level) references the World Bank's Poverty and Inequality Platform. The distribution of income Gini coefficient is a measure of the inequality of income in a population and is constructed using primary household survey data. This indicator considers the most recent income Gini coefficient.	The Gini coefficient on income dist level (GIL) uses data from: The World Bank, Poverty and Inequality Platform	For all Gini coefficient indicators, the assumption is that income inequality is the result of Political Power. Elite business models that capture the state will supress non-elite incomes and engage in disproportional value transfers favorable to their models. Thus, the EQx views and assesses greater income equality as a positive.	Value Extraction
GIC	Gini coefficient on income dist 1-year growth rate	The Gini coefficient on the distribution of income (1-year growth rate) references the World Bank's Poverty and Inequality Platform. The income Gini coefficient is a measure of the inequality of income in a population and is constructed using primary household survey data. This indicator considers the 1-year growth rate.	The Gini coefficient on income dist 1-year growth rate (GIC) uses data from: The World Bank, Poverty and Inequality Platform	For all Gini coefficient indicators, the assumption is that income inequality is the result of Political Power. This WID indicator measures changes in income inequality and hence assesses the dynamics of elite business models' state capture to supress value appropriation by non-elite labor and make disproportional value transfers favorable to their models. Thus, the EQx views and assesses moves towards greater income equality as a positive.	Value Extraction
Pillar (i.	Pillar (i.2): Regulatory Capture				
ECR	Ease of challenging regulations	The Ease of challenging regulations indicator is derived from the World Economic Forum's "Global Competitiveness Index" and based on the survey question posed to more than 16,000 business executives in 140 countries: "In your country, how easy is it for private businesses to challenge government actions and/or regulations through the legal system" (World Economic Forum, website).	Ease of challenging regulations (ECR) uses data from: The World Economic Forum (WEF), The Global Competitiveness Index	Ease of challenging regulations by private businesses implies Regulatory Capture through legal avenues. Businesses can successfully defeat in courts regulations previously enacted to limit their rent-seeking activities; that is, rules that foster competition or otherwise keep Value Extraction activities in check. A counter argument is that a flexible legal system could serve as a contest arena to act as a check and balance on the Power of political elites. *An optimal level might be established for this indicator in the future.	Value Creation
GP	Constraints on government power	"Constraints on government power measures the extent to which those who govern are bound by law. It comprises the means, both constitutional and institutional, by which the powers of the government and its officials and agents are limited and held accountable under the law. It also includes non-governmental checks on the government's power, such as a free and independent press. Governmental checks take many forms; they do not operate solely in systems marked by a formal separation of powers, nor are they necessarily codified in law. What is essential, however, is that authority is distributed, whether by formal rules or by convention, in a manner that ensures that no single organ of government has the practical ability to exercise unchecked power" (World Justice Project, n.d).	Constraints on government power (CGP) uses data from: The World Justice Project, Rule of Law Index	In the absence of constraints on government power, there is a higher risk that elites use their power to benefit themselves at the expense of non-elites, leading to Value Extraction. A high level of constraints on government power indicates that there is a robust set of checks and balances to preserve the integrity of institutions and reduce the opportunities for Value Extraction, thus enhancing Value Creation.	Value Creation

ue ion/ rtion				-
Value Creation/ Extraction	Value Creation	Value Creation	Value Creation	Value
B. Indicator Rationale – Why we measure	Sound regulations enable Value Creation and reduce the possibility of Value Extraction by business elites. The perception that effective policies are in place to support private sector development is a reflection of the existence of a robust set of checks and balances and that regulators have not been captured by special interest lobbies.	The fair and effective implementation and enforcement of regulations is crucial to control ellie power and prevent regulatory capture and value extracting behavior such as rent seeking, the establishment of monopolies, or corruption. Moreover, by reducing the Political Power of elites, effective and fair regulatory enforcement creates a trustworthy environment that spurs business innovation and incentivizes Value Creation agency.	Property rights are a core incentive to encourage activities and behavior that are conducive to Value Creation. Businesses, wage earners or artists retain the products of their Value Creation when their property rights are secure. If property can be expropriated by rapacious elite business models through Institutional Capture and unsecured property rights, society will be bereft of individuals willing to undertake risks and engage in productive Value Creation activities, with dire outcomes for economic development.	Crony capitalists are defined as "individuals who earn their riches thanks to their chumminess with government", where "activities are often legal but always unfair" (The Economist, 2016). Thus, the Crony capitalism indicator serves as a measure of the number of economic rent seekers. The assumption behind this is that because of favorable political policies set by government officials, tycoons are increasing their wealth and interests. As a result, they receive a larger part of people's fruits of labor, instead of generating more wealth for society as a whole. Large rent producing industries are usually heavily regulated. When financial elites (billionaires) in a country derive a comparatively large part of their wealth from such industries it signals successful Regulatory Capture on the back of having access to Political Power. Otherwise, institutions and their regulators would limit the financial returns of these activities, pre-empting the large rents that convert Political Power into Economic Power.
Dataset reference	Regulatory Quality (REQ) uses data from: The World Bank, Worldwide Governance indicators (WGI)	Regulatory enforcement (REN) uses data from: The World Justice Project, Rule of Law Index	Property rights (PRI) uses data from: The Heritage Foundation, Index of Economic Freedom	Crony capitalism (CRO) uses data from: Forbes, World's Billionaires List and The World Bank (GDP data)
A. Indicator Description – What we measure (short)	This indicator measures the quality of national regulations as perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. (The World Bank). It is based on the "Regulatory Quality" category of the Worldwide Governance indicators (WG)).	Regulatory enforcement, the 6th factor of the World Justice Project's Rule of Law Index, examines and measures "the extent to which regulations are fairly and effectively implemented and enforced. Regulations, both legal and administrative, structure behaviors within and outside of the government. This factor does not assess which activities a government chooses to regulate, nor does it consider how much regulation of a particular activity is appropriate. Rather, it examines how regulations are implemented and enforced". (World Justice Project, n.d).	The Property rights indicator is based on the property rights sub-indicator of the Index of Economic Freedom' compiled by the Heritage Foundation. This assesses the "the ability of individuals to accumulate private property, secured by clear laws that are fully enforced by the state" and subsequently measures the protection of property by governments and the risk of expropriation (The Heritage Foundation, website).	The Crony capitalism indicator measures the wealth accumulated by a nation's billionaires from activities in industries classified as 'crony' by The Economist, whereby "Industries that have a lot of interaction with the state are vulnerable to crony capitalism" (The Economist, 2016). *Gulf states have been manually excluded from the calculation due to data quality concerns.
Indicator Name	Regulatory quality	Regulatory enforcement	Property rights	Crony capitalism
	REQ	Z.	P.R.	CRO

Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
Informal output as a % of GDP	Informal output as a % of GDP reflects the estimated size of the informal sector as a percentage of official Gross Domestic Product (GDP) using the model of Schneider, Buehn, and Montenegro (2010). This approach enables international and intertemporal comparisons by removing units of currency.	Informal output as a % of GDP (INO) uses data from: The World Bank	Informal economic activity is often associated with Value Extraction by elites from value creators (through corruption, excessive taxation, unfair regulation, etc.). Economic agents become informal because their Value Creation business models are not protected and value is transferred away from them. On average, economies with larger informal sectors have tended to have less access to finance for the private sector, lower levels of productivity, slower accumulation of physical and human capital, less educated workforces, and scant financial resources. It is important for policymakers to focus on implementing policies that help to reduce informality, not by banning it outright, but by gradually tackling the institutional failures that drive informality in each country.	Value Extraction
Pillar (i.3): Human Capture				
Global Slavery Index	The Global Slavery Index is "an independent assessment of government progress towards achieving UN Sustainable Development Goal 8.7 (eradication of modern slavery)" (GSI website). The estimated prevalence of modern slavery per 1,000 people is measured, whereby modern slavery mefers to situations of exploitation that a person cannot refuse or leave because of threats, violence, coercion, abuse of power or deception" (GSI, 2018, p. 7). It is an umbrella term that encompasses phenomena such as forced labor, human trafficking and other practices that are akin to slavery (e.g. forced marriage).	The Global Slavery Index (GSI) uses data from: The Minderoo Foundation's Walk Free Initiative, The Global Slavery Index	Modern slavery is an intolerable form of rent extraction where wealth is transferred from those that are exploited to those whose Value Extraction business models benefit from free labor or wages below the market equilibrium. Moreover, the Global Slavery Index goes beyond forced labor and also measures Human Capture in family settings (forced marriage) and a despicable form of trade (human trafficking).	Value Extraction
Forcibly displaced population as % of population	The Forcibly displaced population as % of population indicator is informed by the UNHCR's Refugee Population Statistics Database that provides information on the proportion of people that have been forced to leave their country of origin (UNHCR, website). The indicator is adjusted for the country's population.	Forcibly displaced population as % of population as % of population (FDP) uses data from: UNHCR, Refugee Population Statistics Database (for forcibly displaced populations) & The World Bank (Population data)	The Human Capture Pillar of Political Power provides data on people that that have been forced to leave their country. Forcibly displaced people have lost all power, including even the right to remain in their homeland. The political and business elites that permit this state of affairs often benefit from such tragedies. Value is transferred from those who leave to those who remain, who then dominate domestic affairs and often enrich themselves as they take over the land and assets of the displaced.	Value Extraction
Human Rights Index	The Human Rights Index is based on data from the ,Fragile States Index' created by the Fund for Peace, that looks at widespread abuses of legal, political and social rights, including those of individuals, groups and institutions (e.g. harassment of the press, politicization of the judiciary, internal use of the military for political ends, repression of political opponents). The indicator also considers outbreaks of politically inspired (as opposed to criminal) violence perpetrated against civilians (FSI, website).	The Human Rights Index (HRI) uses data from: The Fund for Peace, Fragile States Index	Human Rights are a universal right. Low levels of human rights compliance in a country results in Value Extraction from its own citizenry. The abuse of fundamental human rights strengthens the power of political elites at the cost of incumbents and is a device used to prevent elite circulation. Large parts of society are powerless and excluded from full participation in the political economy.	Value Creation

Indicator Name A		A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
Academic Freedom The Academi Index Policy Institut that captures including the autonomous.	The Acad Policy Inst that captu including autonomo	The Academic Freedom Index, produced by the Global Public Policy Institute, is designed to provide an aggregated measure that captures the de facto realization of academic freedom, including the degree to which higher education institutions are autonomous.	The Academic Freedom Index (AFI) uses data from: The Global Public Policy institute (GPPI), Academic Freedom Index	The power and freedom of knowledge elites in the political economy is reflected in the Academic Freedom Index. Academic freedom contributes to a robust market for ideas, which enables knowledge elites to balance the power of political and business elites within a country.	Value Creation
Religion - Government Government Restriction Index restriction figures of treatment freatment (2020).	The Governme governme beliefs ar restriction faiths, protectment 2020).	The Government Restriction Index (GRI) "measures government laws, policies and actions that restrict religious beliefs and practices. The GRI comprises 20 measures of restrictions, including efforts by governments to ban particular faiths, prohibit conversion, limit preaching or give preferential treatment to one or more religious groups" (Pew, Report, 2020).	The Government Restriction Index (GRI) uses data from: Pew Research Center, Government Restriction Index (GRI)	Institutionally sanctioned discrimination, in this case taking a religious form, is a form of Human Capture. Those discriminated against face barriers to realize Value Creation. Moreover, they might face specific taxes and other costs that are directly extracted from them. Society suffers a serious loss, while the overall Value Creation potential of the economy is compromised.	Value Extraction
LGBT+ inclusiveness The LGBT Marshall countries they offer	The LGBT Marshall countries they offer	The LGBT+ Inclusiveness indicator is based on the ,Franklin & Marshall Global Barometer of Gay Rights' which classifies countries into five groups depending on the level of protection they offer to LGBT+ rights.	LGBT+ Inclusiveness (LIN) uses data from: The Franklin & Marshall Global Barometer of Gay Rights	The LGBT+ community represents a sizable proportion of available human capital. In the US, people self-identifying as LGBT+ has increased from 1.4% for people born before 1945 to 8.2% for those born between 1980 and 1999 (OECD, 2019). Offering equal rights to the LGBT+ community as part of society as a whole allows for general Value Creation, from better overall company performance (Hunt et al., 2018) to greater creativity and innovation (WEF, 2019).	Value Creation
Women self-made billionaires female sel number o	Women se female sel number o	Women self-made billionaires reflects the percentage of female self-made billionaires as a percentage of the total number of self-made billionaires.	Women self-made billionaires (WSB) uses data from: Forbes, World's Billionaires List	As is the case for another indicator: Billionaires self-made number per million people (BSG), the business models of Women self-made billionaires are likely to involve Value Creation and be based on innovation and the incorporation of emerging technologies. The indicator is also a reflection of power and therefore part of the Human Capture Pillar. Since billionaires are evidently powerful individuals, the existence of a large percentage of women self-made billionaires provides evidence of gender advancement at the elite level.	Value Creation
Women, business The Worn and the law inequality The Worl economic affecting	The Wom inequality The Worl economic affecting	The Women, business and the law indicator measures "gender inequality in the law" as outlined in a series of publications by The World Bank. The dataset identifies "barriers to women's economic participation" by analyzing "laws and regulations affecting women's economic inclusion" (World Bank, website).	Women, business and the law (WBL) uses data from: The World Bank, Women, Business and the Law	Laws and regulations affecting the inclusion of women are a blatant form of Value Extraction, limiting competition in the labor market. These barriers to Value Creation, potentially capturing up to half of the available human capital in an economy, are all the more detrimental because they are institutionally explicit and formalized.	Value Creation

Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
Proportion of women in senior and middle mgmt positions (dev. fm optimum)	"The female share of employment in managerial positions conveys the number of women in management as a percentage of employment in management. Employment in management. Employment in management is defined based on the International Standard Classification of Occupations. This series refers to senior and middle management only, thus excluding junior management (category 1 in both ISCO-08 and ISCO-88 minus category 14 in ISCO-08 and minus category 13 in ISCO-88). This indicator is calculated based on data on employment by sex and occupation." (ILO, website).	Proportion of women in senior and middle management (dev. fm optimum) (WMA) uses data from: International Labour Organization, ILOSTAT Database	Management talent is a driver of Value Creation. Nations that cannot access the full potential management talent pool because of the imposition of gender glass ceilings are both extracting from the discriminated gender while not fulfilling the Value Creation potential of the economy, which hurts all of its participants. The conceptual optimum for this indicator is 50%, and the closer that there is a zero deviation from 50%, the better the score.	Achievement of the optimum represents maximum Value Creation
Power / Inc	Sub-Index I: Power / Index Area (ii): Economic Power			
Pillar (ii.4): Industry Dominance	Ψ			
Top 3 industries exports as % of exports	Top 3 industries exports as % of exports reflects the sum of the exports of a nation's 3 top exporting industries adjusted by the country's overall exports.	Top 3 industries exports as % of exports (IEE) uses data from: United Nations, Comtrade Database	The influence of an industry, as measured by the Top 3 industries exports as % of exports, depends on its level of industrial power (Coalition Dominance) in a national economy. This power can be derived from a high-level of competitiveness, historical origins, or geography (e.g., access to natural resources, maritime access). Excessive economic concentration can be a warning of potential future Value Extraction. A diversified range of exports indicate low industry dominance and broad Value Creation across an economy. A counter argument posits that specialization in the context of international markets is beneficial, especially for smaller countries, even if it ensures that ultra-dominant exporting elites develop an extractive domestic model that complements their Value Creation activities. *An optimal level might be established for this indicator in the future.	Value
Top 1 industry exports as % of exports	Top 1 industry exports as % of exports reflects the sum of the exports of a nation's top exporting industry adjusted by the country's overall exports.	Top 1 industry exports as % of exports (IEO) uses data from: United Nations, Comtrade Database	The influence of an industry, as measured by the Top 1 industry exports as % of exports, is assumed to depend on its level of industrial power (Coalition Dominance) in the economy. This power can be derived from high levels of competitiveness, historical origins, or geography (e.g., access to natural resources, maritime connectivity). Excessive economic concentration is a warning sign of potential future Value Extraction. A diversified range of exports indicates low industry dominance and broad Value Creation across an economy. A counter argument posits that specialization in the context of international markets is beneficial, especially for smaller countries, even when it results in highly dominant export elite business models with privileges including extractive value transfers that complement their Value Creation activities. *An optimal level might be established for this indicator in the future.	Value

	Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
₹	Top 3 industries as % of value added	Top 3 industries as % of value added (value added) is the sum of the revenues of a nation's 3 biggest industries divided by the country's total value added, i.e., the net output of a sector after adding together all outputs and subtracting intermediate inputs.	Top 3 industries as % of value added (IVA) uses data from: United Nations Statistics Division (Economic Statistics Branch), National Accounts Estimates of Main Aggregates	Top 3 industries as % of value added reflects the Economic Power of leading industries without providing any indication of their competitiveness (as does, for example, Top 3 industries exports as % of exports, IEE, ii.4). This measure of Coalition Dominance is an indicator of industry concentration that is based on the relative size of an activity. Such power affords increased leverage over the national political economy to leading industries and thus implies that there is the potential for future Value Extraction.	Value Extraction
王	Domestic market diversification	The Herfindahl-Hirschman Index (HHI) for domestic industry is defined as the sum of the squared shares of sub-sectors in total manufacturing output. It indicates the diversification of a nation's economy across different economic sectors.	Domestic Market Diversification (HHI) uses data from: The World Bank's World Integrated Trade Solutions	A diversified economy reduces its vulnerability in volatile market conditions and can thus safeguard a country against externally induced economic shocks (OECD & WTO, 2019). Poorer countries often suffer from a lack of market diversification by being over-reliant on the extraction of natural resources and agriculture. Thus, according to the OECD and WTO (2019) diversification is an important step for sustainable economic development. Lastly, diversified economies tend to boost innovation by spreading ideas and technologies between companies and industries.	Value Creation
ECI	Economic Complexity Index	The Economic Complexity Index, developed by Cesar A. Hidalgo from MIT Media Lab and Ricardo Hausmann from Harvard, analyses and ranks countries on the amount of productive knowledge implied in their export structures, i.e. "the relative knowledge intensity of an economy" (OEC, website).	The Economic Complexity Index (ECI) uses data from: The Observatory of Economic Complexity (OEC), Economic Complexity Index	The Economic Complexity Index is a measure of inclusive Value Creation as it measures the diversity of specialized knowledge and organizations throughout an economy, reflecting distributed Economic Power. Elites in countries with high economic complexity are Value Creators and their cashflows do not depend on Economic Power but rather on the rich, diverse, and broad economic ecosystems to which they contribute.	Value Creation
PUE	Public employees as a % of total employment	"The employed comprise all persons of working age" while, "Public sector employment covers employment in the government sector plus employment in publicly-owned resident enterprises and companies, operating at central, state (or regional) and local levels of government. It covers all persons employed directly by those institutions, regardless of the particular type of employment contract". For more information, refer to the concepts and definitions page (ILO, website).	Public employees as a % of total employment (PUE) uses data from: International Labour Organization, ILOSTAT Database	Public employees are necessary to provide state capacity but in excessive numbers become an elite coalition that extracts salaries and privileges from the state at the cost of taxpayers, with limited Value Creation quid pro quo. This indicator measures the power of public sector employees and signifies their potential Value Extraction as a result of such Coalition Dominance.	Value Extraction

	Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
	Military expenses as % of GDP (dev. fm optimum)	Military expenses as % of GDP (dev. fm optimum) measures a country's total military expenditure (on the armed forces, defense ministries, paramilitary forces and military space activities) divided by the country's GDP.	Military expenses as % of GDP (MIL) uses data from: Stockholm International Peace Research Institute (SIPRI), Military Expenditure Database	Security is a necessary public good that some countries overinvest in, while others underinvest. Overinvestment in military expenditure could be an indication of a powerful military-industrial complex. Underinvestment is equally problematic as it may endanger national security and the basis of socioeconomic life and indicate sub-optimal evels of the power of military elites to the detriment of other elites. *The optimal MIL is linked to levels of income and conflict. For low and lower-middle-income countries, it has been set at 1% of GDP; for upper-, middle- and high-income countries it has been set at 2%; for 'greaf' powers and superpowers (CHN, GBR, RUS, USA, DEU, FRA) it has been set at 3%; for Israel and the countries of the Middle East it has been set at 5%.	Achievement of the optimum represents maximum Value Creation
Z	Unionization rate (dev. fm optimum)	Unionization rate (dev. fm. optimum), i.e., the trade union density rate (%), represents the total membership of trade unions in a nation as a percentage of all employees.	Unionization rate (UNI) uses data from: International Labour Organization, ILOSTAT Database	The Unionization rate relates to Political Power and the bargaining power or lack thereof of trade unions. High unionization rates result in a higher likelihood that unionizated employees, civil servants etc., engage in Value Extraction. On the other hand, low unionization rates enable the exploitation of labor surpluses by business elites, especially under certain socio-economic situations where workers rights are unprotected, and they are disallowed from engaging in collective action. *The optimal UNI level has been set at 10%.	Achievement of the optimum represents maximum Value Greation
BSN	Barriers in service & network sectors	Barriers in service & network sectors measures the qualitative and quantitative barriers firms face when entering and operating in specific key economic sectors.	Barriers in service & network sectors (BSN) uses data from: OECD Product Market Regulation Statistics	Closely linked to administrative burdens on start-ups, the existence of Barriers in services and network sectors enables rent seeking by established market players. New incumbents are prohibited from actively challenging these sectors through Value Creation based on new ideas or technologies. While these barriers may be reasonable (i.e. consumer protection), they reflect the Political Power of an industry coalition whose dominance makes it more challenging (i.e., expensive or difficult) for new players to enter and participate in key economic sectors.	Value Extraction
CRA	Criminal actors	"This indicator assesses the structure and influence of four types of criminal actors: mafia style groups, criminal networks, state embedded actors and foreign criminals" (Global Organized Crime Index, 2021). The EQx considers the Criminal actors (average) score.	Criminal actors (CRA) uses data from: The Global Initiative against Transnational Organized Crime, Global Organized Crime Index	Criminal coalitions can amass considerable power and constitute elites that run business models exclusively based on extractive Value transfers.	Value Extraction

Value Creation/ Extraction		Value Creation	Value Creation	Value Extraction
B. Indicator Rationale – Why we measure		SMEs per 1,000 people is a measure of how distributed an economy is in terms of whether it has a diversity of Value Creation models, enabled by limiting the levels of Economic Power enjoyed by large organizations. SME business models must rely on Value Creation as their low levels of Economic Power don't allow them many possibilities for Value Extraction. As a counter argument, SMEs have been found to be less efficient than large firms and their survival may be indicative of collective power levels. *An optimal level might be established for this indicator in the future.	Family businesses represent a distinct form of ownership and governance that points to diversified Economic Power in the political economy. When family firms scale they can create substantial value as is attested from the fact that they "are growing faster than the global economy - at nearly twice the rate of advanced economies and around 1.5 times the rate of emerging market and developing economies" (see Family Business Index Website https://familybusinessindex.com). The EQx assumption is that the higher the weight of leading family businesses in the economy, the stronger the voice of family business ownership structures in the political economy and hence the diversity of its coalitions.	Billionaires' wealth as % of GDP shows Firm Dominance by depicting the weight of elite firm and asset owners' wealth relative to total national income. A billionaire is the narrowest type of coalition in terms of how Firm Dominance is conceived, traceable to a single individual. Such powerful individuals and the descendants of founder families might switch their business models over time from Value Creation to Value Extraction if they don't innovate and incorporate the possibilities afforded by emerging technologies into their business empires.
Dataset reference		SMEs per 1,000 people (SME) uses data from: SME Finance Forum, MSME Economic indicators	Family business revenues as percentage of GDP uses data from: The Global Family Business Index which comprises the largest 500 family firms around the globe. It provides unique evidence of the economic clout and relevance of family firms in the world. The index is compiled by the Center for Family Business at the University of St. Gallen, Switzerland, in cooperation with EY's Global Family Business Center of Excellence (Zellweger, Klein, Robertsson, & Weber, 2023).	Billionaires' wealth as % of GDP (BIW) uses data from: Forbes, World's Billionaires List & The World Bank (GDP data)
A. Indicator Description – What we measure (short)		The SMEs per 1,000 people indicator is based on a subset of the SME Finance Forum's MSME Database recording the number of formally registered small and medium-sized enterprises (SMEs) per 1000 people in an economy.	The revenue of family business for the largest 500 family firms in the world from the Global Family Business Index is aggregated for countries and then divided by GDP to establish the weight of leading family businesses in the overall economy.	Billionaires' wealth as % of GDP measures the sum of a nation's billionaires' total accumulated wealth (as of the last day of the calendar year) as a percentage of GDP.
Indicator Name	Pillar (ii.5): Firm Dominance	SMEs per 1,000 people	Family business revenues as % of GDP	Billionaires' wealth as % of GDP
	Pillar (ii.	SME	FAM	BIW

	Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
FKG	Top 10 firms market cap as % of GDP	Top 10 firms market cap as % of GDP reflects the sum of the market capitalization of a country's 10 largest firms—defined by market capitalization (as of the last day of the calendar year)—divided by the country's GDP.	Top 10 firms market cap as % of GDP (FKG) uses data from: Refinitiv Eikon	The relative size of leading firms measured by Top 10 firms market cap as % of GDP is a proxy measurement of the level of Economic Power enjoyed by the 10 largest firms in a country. The indicator belongs to the Firm Dominance Pillar and identifies relative concentrations of power that might be potentially converted into future Value Extraction.	Value Extraction
FRG .	Top 3 firms revenues as % of GDP	Top 3 firms revenues as % of GDP measures the sum of the revenues of a country's 3 largest firms relative to its GDP.	Top 3 firms revenues as % of GDP (FRG) uses data from: Refinitiv Eikon	The relative size of leading firms measured by Top 3 firms revenues as % of GDP is a proxy measurement of the level of Economic Power for the largest three firms within a country. The indicator belongs to the Firm Dominance Pillar and identifies relative concentrations of power that might potentially be converted into future Value Extraction. The three leading firms may have high systemic relevance. As a counter argument, such giant organizations may benefit from economies of scale and be national champions in delivering public goods such as innovation, highly paid jobs and knowledge spillovers. *An optimal level might be established for this indicator in the future.	Value Extraction
FRR	Top 30 firms revenues as % of GDP	Top 30 firms revenues as % of GDP measures the sum of the revenues of a country's 30 largest firms relative to its GDP	Top 30 firms revenues as % of GDP (FRR) uses data from: Refinitiv Eikon	The relative size of leading firms measured by Top 30 firms revenues as % of GDP is a proxy measurement of the level of Economic Power for a broad definition of a country's leading 30 firms. The indicator belongs to the Firm Dominance Pillar and identifies relative concentrations of power that might potentially be converted into future Value Extraction. As a counter argument, leading firms may benefit from economies of scale and be national champions delivering public goods such as innovation, highly paid jobs and knowledge spillovers. *An optimal level might be established for this indicator in the future.	Value Extraction

Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
Pillar (ii.6): Creative Destruction	uc			
Entrepreneurship	The indicator for Entrepreneurship is captured through the Global Entrepreneurship and Development Index (GEDI), which measures "the entrepreneurial attitudes, abilities and aspirations of the local population (weighted) against the prevailing social and economic infrastructure" (GEDI, website).	Entrepreneurship (ENT) uses data from: The Global Entrepreneurship and Development Institute (GEDI), Global Entrepreneurship & Development Index	This indicator evidences institutional and social support for new ventures with the potential for Creative Destruction and disruption. High levels of Entrepreneurship indicate that incumbents have low levels of Economic Power and cannot prevent being disrupted. This indicator is the measure of Schumpeterian Creative Destruction par excellence in economic terms. A counter argument takes issue with the broad definition of Entrepreneurship as it includes starting an enterprise not only from aspiration or opportunity, but also as a last resort, which is often an indication not of Creative Destruction but of an underdeveloped economy. *An optimal level might be established for this indicator in the future.	Value Creation
Governmental support to entrepreneurship	The Governmental support to entrepreneurship indicator is based on the ,Government Support and Policies' sub-indicator of the Entrepreneurial Framework Conditions, the methodological foundation developed by the Global Entrepreneurship Monitor (GEM). It measures "the extent to which public policies support entrepreneurship" (GEM Website).	Governmental support to entrepreneurship (GSE) uses data from: Global Entrepreneurship Monitor (GEM), , Government Support and Policies' sub-indicator of the Entrepreneurial Framework Conditions	Entrepreneurial activities are essential for the process of Creative Destruction, which ultimately creates value for all. Governments support Creative Destruction on the basis that a healthy entrepreneurial ecosystem enlarges the pie for all. At the same time, such policies create competition for existing elite business models. Thus, the higher the degree of government support for entrepreneurs and the Value Creation that they bring to an economy, the lower the level of power enjoyed by incumbent elites.	Value Creation
Venture capital finance	Venture capital finance measures venture capital (VC) investment in high-growth companies in relation to the total investment in an economy.	Venture capital finance (VCK) uses data from: Refinitiv Eikon	Venture capital finance funds entrepreneurial and disruptive Value Creation business models which foster Creative Destruction and the emergence of new elites (and the renewal of incumbent elites). This is the principal (and leading) indicator of Schumpeterian Creative Destruction in an advanced economy. There is a counter argument that sees Venture capital finance as being agnostic in terms of Value Creation/Extraction; that is, VCs will fund any business models (e.g., ,dominance plays') as long as they generate wealth. *A future EQx research project might consist of assessing VC activity on the basis of the Value Creation of investees.	Value Creation
 Venture capital availability	The Venture capital availability indicator is derived from a survey question in the World Economic Forum's (WEF) ,Global Competitiveness Index': "In your country, how easy is it for entrepreneurs with innovative but risky projects to find venture capital?" (WEF, website). The WEF Executive Opinion Survey captures the views of more than 16,000 business executives in 140 countries.	Venture capital availability (VCA) uses data from: World Economic Forum (WEF), The Global Competitiveness Index	The Venture capital availability (VCA) indicator measures the perceived ease of access to venture capital and therefore captures a different aspect to the related VCK indicator that measures the actual amount of venture capital invested in an economy. Both relate to the existence or not of Creative Destruction within an economy, with VCA possibly reflecting forward sentiment and having a leading indicator quality.	Value Creation

B. Indicator Rationale – Why we measure
order, less valuable alternatives that are likely to be creatively destroyed (along with the organizations that own or run them).
A high Firm exit ratio releases resources, which are potentially used by new entrants more effectively than by organizations that have been discontinued. Moreover, firm exits are a stimulus for firm entries. A counter argument states that firm exits do not stimulate firm entry as much as they enable dominant players to achieve greater Economic Power (similar to Mergers & Acquisitions). Consolidation processes might also be accelerated by economic downturns with Value Creation non-elites exiting as a result of being comparatively disadvantaged (e.g., in not being able to access financial resources to mitigate the effects of COVID-19). *An optimal level might be established for this indicator in the future.
This indicator measures Creative Destruction at the individual level. The emergence of new billionaires in a political economy are a challenge to the Economic Power of incumbents and indicate an absence of barriers within a political economy and possibilities for the circulation of elites.
This indicator combines the Creative Destruction of Entrepreneurship with the Creative Destruction associated with breaking gender-based existing Economic Power structures.
Life expectancy is a key measure of human development and one of the most important indicators of inclusive Value Creation provided by governments for non-elites.

Value Creation/ Extraction	Value Creation	Value Extraction	Value Extraction	Value Creation	Value Creation
B. Indicator Rationale – Why we measure	Life expectancy is a key measure of human development and one of the most important indicators of inclusive Value Creation provided by governments for non-elites.	COVID-19 has been both a tragedy and a severe shock for most countries worldwide. At the same time, the management of the pandemic and the number of deaths that have resulted from it vastly differ from country to country. It is self-evident that the lower the level of ageadjusted mortality due to COVID-19, the higher the Political Value provided by political elites during the pandemic. Hence, this indicator is part of the Giving Income Pillar.	COVID-19 has been both a tragedy and a severe shock for most countries worldwide. At the same time, the management of the pandemic and the number of deaths that have resulted from it vasily differ from country to country. It is self-evident that the lower the level of ageadjusted fatalities due to COVID-19, the higher the Political Value provided by political elites during the pandemic. Hence, this indicator is part of the Giving Income Pillar.	Essential health services make up the bulk of any national healthcare system. Many diseases that may lead to cuffering or even death can be cured relatively easily if the proper staff, facilities, and resources are available. The UHC Service coverage index is an expression of Political Value since it assesses and rates national healthcare systems on their capability to deal with standard health issues.	Class size reduction has a significant and positive impact on student achievement (Ehrenberg et al., 2001). Furthermore, smaller class sizes disproportionally benefit children from disadvantaged backgrounds as teaching practices change when their are fewer students (Mathis, 2017). Thus, an important form of Political Value is a lower pupil-teacher ratio. This is mostly the responsibility of the state, which should consider the far-reaching beneficial impacts that it has on educational quality, the accumulation of human capital and ensuring Value Creation.
Dataset reference	Life expectancy men (LEM) uses data from: United Nations, Department of Economic and Social Affairs	COVID-19 mortality rate, age-adjusted (COF) uses data from: Johns Hopkins University, Coronavirus Resource Center (COVID-19 deaths)	COVID-19 fatality rate, age-adjusted (COF) uses data from: Johns Hopkins University, Coronavirus Resource Center (COVID-19 deaths and cases)	The UHC Service coverage index (SCI) uses data from: The World Bank and the World Health Organization's Global Health Observatory Data Repository	Pupil-teacher ratio (PTR) uses data from: The World Bank
A. Indicator Description – What we measure (short)	This indicator measures the life expectancy of men from birth.	COVID-19 mortality rate, age-adjusted measures worldwide deaths per one million inhabitants in relation to domestic age distribution (the number of deaths are divided by the proportion of the population above 65). The mortality rate is calculated as the total number of deaths divided by the total population	COVID-19 fatality rate, age-adjusted measures the COVID-19 fatality rate worldwide per one million inhabitants in relation to domestic age distribution (the number of deaths are divided by the proportion of the population above 65). The fatality rate is calculated as total number of deaths divided by the total number of cases.	An index (0-100) which represents the geometric mean of 14 indicators regarding coverage of essential health services. The sub-indicators cover the following four areas: 1. Reproductive, maternal, newborn and child health, 2. Infectious diseases, 3. Chronic diseases, and 4. Service capacity and access.	This indicator measures the average number of students per teacher at the primary school level.
Indicator Name	Life expectancy men	COVID-19 mortality rate, age-adjusted	COVID-19 fatality rate, age-adjusted	UHC Service coverage index	Pupil-teacher ratio
	IEM	COM	COF	SCI	PTR

	Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
EDU	School life expectancy	School life expectancy reflects the "total number of years of schooling (primary through tertiary) that a child of school entrance age can expect to receive" (UNESCO, website).	School life expectancy (EDU) uses data from: UNESCO Institute for Statistics	The more developed and effective a government's education system is in the framework of Giving Income, the more competitive the labor markets, providing wider opportunities to develop Value Creation business models on the basis of human capital. This indicator therefore accounts for future Value Creation. In addition, the existence of a highly educated public with greater understanding of Value Extraction models may deter future rent-seeking behavior.	Value Creation
PIS	PISA mean scores	PISA mean scores reflect the PISA survey data. "PISA is the OECD's Programme for International Student Assessment. PISA measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges." (OECD, website).	PISA mean scores (PIS), uses data from: OECD, 2018 PISA results	Basic educational literacy and numeracy skills are the cornerstone of Value Creation for a broad section of the population. Government programs and state institutions directly or indirectly provide such basic education and are therefore Giving Value.	Value Creation
NN	Top universities	Top universities considers the number of universities in each country that are included in the top 500 universities worldwide per 1 million people.	Top universities (UNV) uses data from: QS World University Ranking	Universities are where knowledge, a key source of value, is both created and disseminated. The knowledge of leading universities allows Value Creation by both individuals and organizations. Top universities depend on sophisticated political institutions, which are thus Giving Value.	Value Creation
GEE	Government education expenditure	General government expenditure on education is expressed as a percentage of GDP.	Government education expenditure (GEE) uses data from: The World Bank	Increasing education expenditure has a positive impact on improving both the access to and the level of attainment achieved in school (Gupta et al., 2002). Investing in education improves a nation's human capital which is one of the most important determinants of economic growth. Thus, this indicator serves as a proxy for measuring the quality of human capital of the next generation and a country's willingness to invest in the present and future Value Creation of its citizens.	Value Creation
GAR	Government Al Readiness Index	Government AI readiness measures how prepared a country's national government is for implementing Artificial Intelligence in the delivery of public services.	Government Al Readiness (GAR) uses data from: Oxford Insights, the Government Al Readiness Index	Al will transform and supercharge Value Creation as well as patterns of investment, R&D, and business models. Cutting-edge Al technologies and Al firms are thus critical determinants in international competition. A government's capacity for utilizing Al reflects its performance in creating Economic Value.	Value Creation
OSI	Online Service Index	The Online Service Index assesses the "scope and quality of online services" offered by states. It measures "their use of information and communications technologies to deliver public services" (UN, website).	The Online Service Index (OSI) uses data from: The UN, Department of Economic and Social Affairs, E-Government Development Knowledge Base	If the quality and scope of online services offered by a government is high this leads to Value Creation. The working assumption is that governments are responsible, through their political elites and institutional processes, for providing incentives that lead to the development of a nation's online infrastructure and business models.	Value Creation

Indicator Name A. Indicator D.		A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
Network Readiness Index	The Network Readiness Index meast stakeholders (governments, business stakeholders (governments, business "cooperate (and/or compete) to full offered by technological innovation upcoming challenges" (NRI, website fundamental dimensions: Technological Impact.	ures how various es and citizens) y leverage the possibilities to tackle current and 1). It is based on four y, People, Governance	The Network Readiness Index (NRI) uses data from: Portulans Institute, Network Readiness Index (NRI)	The higher the Network Readiness Index score for a given country is, the greater the likelihood of higher Value Creation. The working assumption is that the government is responsible through its political elites and institutional processes for network readiness.	Value Creation
Internet access measures the "percentage of Individuals using the Internet" (as a percentage of the total population) (ITU, website).	Internet access measures the "percente the Internet" (as a percentage of the to website).	ige of Individuals using tal population) (ITU,	Internet access (INT) uses data from: International Telecommunication Union (ITU)	Access to information and communication can be considered a basic human right, and one that leads to Value Creation. Information availability also leads to increased competition. The working assumption is that the government is responsible for delivering Internet access through its political elites and institutional processes. This indicator, included in the Giving Income Pillar, asserts that the higher the access to information the greater the potential for citizens to contribute to a knowledge economy.	Value Creation
Global Hunger The Global Hunger Index, as used in the EQx, measures Index Index indicators that address undernourishment, child stunting, child wasting and child mortality.	The Global Hunger Index, as used in the hunger at the national level. It is calcule indicators that address undernourishme wasting and child mortality.	ie EQx, measures ated based on ant, child stunting, child	Global Hunger Index (GHI) uses data from: The Global Hunger Index	Hunger is an unacceptable form of Value Extraction. Governments are responsible if there is insufficient food to satisfy the needs of their citizens. This may be a sign of rent seeking in land management and the allocation of agricultural resources and, ultimately, a lack of state capacity.	Value Extraction
Global Food Global Food Security Index - availability, quality & safety is based on the average of the ,availability, quality and safety availability, quality audity sub-rankings of the Global Food Security Index (GFSI). The GFSI measures the drivers of food security across both developing and developed countries.	Global Food Security Index - availability based on the average of the 'availability sub-rankings of the Global Food Securit GFSI measures the drivers of food securideveloping and developed countries.	, quality & safety is , quality and safety' y Index (GFSI). The ity across both	Global Food Security Index - availability, quality & safety (FSQ) uses data from: The Economist Intelligence Unit, Global Food Security Index (GFSI)	Food security is essential for life. This Political Value indicator is part of the Giving Income Pillar. The working assumption is that the government is responsible through institutional processes for food availability, as well as its quality and safety.	Value Creation
Expenditure on general public services as % of GDP (dev. fm optimum) considers the general public services subset of the services as % of GDED's Classification of the Functions of Government (COFOG) and reflects governmental expenditure on general public services divided by the respective country's GDP. It encompasses public expenses for the legislative and executive branches, financial, fiscal and external affairs, public debt transactions, transfers between different levels of government, foreign economic aid, etc. Excluded are expenses for defense and public order, economic affairs, environmental protection.	Expenditure on general public services a optimum) considers the general public se OECD's Classification of the Functions of (COFOG) and reflects governmental exp public services divided by the respective encompasses public expenses for the leg branches, financial, fiscal and external a transactions, transfers between different foreign economic aid, etc. Excluded are and public order, economic affairs, envir health, culture, education and social prol profits.	is % of GDP (dev. fm prvices subset of the f Government enditure on general country's GDP. It islative and executive iffairs, public debt levels of government, expenses for defense ronmental protection, tection.	Expenditure on general public services as % of GDP (GPS) uses data from: OECD, The Classification of the Functions of government (COFOG)	A government must provide certain public services that are crucial for its citizens. If, however, it offers too extensive a range of services, these might not be delivered efficiently, providing opportunities for rent seeking and competition to the private sector and encumbering economic growth. Political Value ceases to be a factor when Expenditure on general public services as % of GDP goes beyond (or stays below) a certain threshold. *An optimal level is suggested at 4% and results in a v-shaped function for this indicator.	Achievement of the optimum represents maximum Value Creation

itor Name		A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
General General government expenditure as % of GDP refers to the government total expenditure and net acquisition of nonfinancial assets by expenditure as % of the state at the local, regional, and central level. GDP (dev. fm optimum)		DP refers to the financial assets by evel.	General government expenditure as % of GDP (GEX) uses data from: The International Monetary Fund (IMF)	Government expenditure allows the state to provide public services. When that level is too high it is "likely to lead to some questionable spending that may be associated with inefficiencies" (Tanzi, 2017, p. 122). When the level is too low, there might be a lack of "administrative capacity to raise taxes and to spend the money raised efficiently" (Tanzi, 2017, p. 122), i.e., Value Extraction occurs. Tanzi (2017, p. 121-122; 2005, p. 637) suspects a "plausible, realistic range for the level of public spending" to be around 30-35% of GDP for advanced economies. While an optimum may differ for less developed countries, the EQx uses an optimal value range of 30-35% of GDP.	Achievement of the optimum represents maximum Value Creation
Subsidies and ransfers as % of expenses indicator transfers as % of establishes the amount of subsidies and transfers that expenses encompass: "subsidies, grants, and other social benefits to private and public enterprises; grants to foreign governments and similar; social security and benefits in cash and in kind", divided by (government) expenses: "cash payments for operating activities of the government in providing goods and services" (World Bank, website).	The Subsidies and transfers as % of expenses establishes the amount of subsidies and transfencompass: "subsidies, grants, and other soci private and public enterprises; grants to foreig and similar; social security and benefits in cas divided by (government) expenses: "cash pay operating activities of the government in proviservices" (World Bank, website).	nses indicator ransfers that r social benefits to foreign governments in cash and in kind", n payments for providing goods and	Subsidies and transfers as % of expenses (SNT) uses data from: International Monetary Fund, ,Government Finance Statistics Yearbook'	Subsidies and other forms of government mandated financial redistributions represent direct wealth transfers and are a form of Giving Income. Subsidies and transfers as % of expenses measures the degree of Political Value taken away from Value Creators. The uses of these extracted resources might be legitimate and necessary (e.g., healthcare or education), that is, Value Creation measured elsewhere in the EQx. Transfers and subsidies, while extractive, are often investments by governments into future Value Creation that enable agents who do not have access to financial resources through market processes. *An optimal level that reflects best level practice might be established for this indicator in the future.	Value Extraction
Regional This indicator is measured as general government transfers and subsidies as a share of GDP. The rating for this of government component is equal to: (Vmax – Vi) / (V max – Vmin) multiplied by 10. The Vi is the country's ratio of transfers and subsidies to GDP, while the Vmax and Vmin values are set at 37.2 and 0.5, respectively. The 1990 data were used to derive the maximum and minimum values for this component.		ent transfers r this - Vmin) f transfers and lues are set at e used to his component.	Regional redistribution as % of government budget (REG) uses data from: The Fraser Institute (Transfers and Subsidies dataset from the Economic Freedom Database)	Regional redistribution as % of government budget represents direct wealth transfers and is a form of Giving Income. Such transfers are liable to rent-seeking behavior, as Political Power is leveraged to redistribute income across geographies and to their elites. When Political Value is shifted from high Value Creation regions and elites to less efficient ones, overall allocative efficiency is compromised. However, regional redistribution, while extractive, is often also an investment by governments into inclusive future Value Creation for underperforming regions. *An optimal level that reflects best level practices might be established for this indicator in the future.	Value Extraction

Value Creation/ Extraction	Achievement of the optimum represents maximum Value Creation	Value Creation	Value Creation	Value Creation
B. Indicator Rationale – Why we measure	Housing is an important public good and its adequate supply affects a nation's economic growth. It plays a key role in wealth creation and preservation and is an important factor in financial crises. The construction industry is a major employer and contributor to GDP. It is crucial to stabilize house prices as on the one hand undersupply leads to price appreciation, reduced affordability, inequality, speculation, and the formation of price bubbles, as well as impaired economic growth. On the other hand, housing oversupply leads to the miscallocation of resources, falling prices, and a drop in investment levels, causing a downturn in construction output. When housing supply is in line with demand, it promotes the sustainable development of real estate value, encourages further investment, and ensures affordability. Due to the time lags associated with construction, a slight undersupply of housing in relation to demand is the optimal scenario.	Access to at least a basic level of social protection enables non-elire Value Creation. If a high proportion of people are covered by at least one social benefit, this demonstrates the effectiveness of government in providing support to disadvantaged people in society. As such, this is a good measure of political Value Creation.	Unsafely managed sanitation facilities are closely associated with a wide range of diseases that can lead to increased malnutrition and that are also considered to be one of the leading causes of child mortality (UN, 2021). By providing access to safely managed sanitation facilities, governments (or other elites) are engaging in Value Creation by ensuring a healthier population and enhancing both general welfare and productivity.	Having access to electricity is a key accelerator of Sustainable economic development. On the one hand it directly facilitates people's ability to participate in income generating activities, whilst on the other hand it also reduces the strain on undertaking household activities (UN, 2021). This permits greater productivity by the workforce and allows wider participation in Value Creation activities.
Dataset reference	The Construction supply gap (CSG) uses data from: Swiss Forecast (proprietary indicator)	Social protection (SPO) uses data from: The International Labour Organisation, ILOSTAT Database	Sanitation facilities (SFA) uses data from: WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene	Electricity access (ELA) uses data from: World Bank Global Electrification Database
A. Indicator Description – What we measure (short)	The Construction supply gap indicator measures the health of a national real estate sector by comparing demand for dwellings in relation to available dwellings. This indicator therefore measures supply as a percentage of demand. A positive value indicates an oversupply of housing while a negative value indicates an undersupply.	The Social protection indicator is designed to measure the coverage of a country's social protection system by examining what proportion of the population receives at least one cash benefit through a social protection system.	This indicator measures the proportion of the population with access to safely managed sanitation facilities (not including shared facilities).	Electricity access measures the proportion of the population with access to electricity.
Indicator Name	Construction supply	Social protection	Sanitation facilities	Electricity access
	CSG	SPO	SFA	ELA

Value Creation/ Extraction	tion		tion	tion	tion
~ £ \bar{\bar{\bar{\bar{\bar{\bar{\bar{	Value Extraction		Value Extraction	Value Extraction	Value Extraction
B. Indicator Rationale – Why we measure	Although fossil fuel subsidies are designed to help consumers by lowering costs, they typically also have some damaging consequences. They can lead to fiscal imbalances, steer the economy away from a socially optimal allocation of resources, be harmful to the environment, and exacerbate existing inequalities (Parry, Black & Vernon, 2021). Hence, in the grand picture of promoting sustainable development, fossil fuel subsidies constitute a significant form of Value Extraction.		Substance abuse deaths are an intrinsic part of extractive elite business models. They reflect the Taking of the ultimate form of Value: life itself, and evidence the absence of Political Value.	Battle-related deaths is a proxy for external peace (as a counterpart, the Homicide rate indicator measures internal peace). The lack of external peace compromises the ability of the political economy's agents to develop Value Creation business madels. The absence of external security as Political Value is, in effect, a tax on citizens, hence this indicator is part of the Taking Income Pillar. War has also been a rent-seeking mechanism for elites throughout history. Finally, if battle-related deaths, like homicides and any other unnatural loss of human life, is a tolerated business model, it results in a measurable economic loss that accrues in the context of immense suffering.	The Homicide rate is a proxy indicator for internal peace (as a counterpart, the Battle-related deaths indicator measures external peace). The lack of internal peace compromises the ability of the agents of the political economy to develop Value Creation business models. Furthermore, the absence of domestic security signifies a failure to deliver inclusive Political Value. High crime rates, the effects of which fall disproportionally on non-elites, are effectively a tax on citizens. Hence, this indicator is part of the Taking Income Pillar. Finally, homicide is an ultimate form of Value Extraction; if crime is tolerated as a business model it results in a measurable economic loss which accrues in the context of immense suffering and social breakdown.
Dataset reference	Fossil fuel subsidies (FOS) uses data from: Parry, Black, & Vernon, (2021) and the International Monetary Fund		Death rate from substance use disorders (SUB) uses data from: Institute for Health Metrics and Evaluation (IHME), Global Burden of Disease Collaborative Network	Battle-related deaths per capita (BRD) uses data from: Uppsala Conflict Data Program (Retrieved from the World Bank)	Homicide rate (HOM) uses data from: The United Nations Office on Drugs and Crime (UNODC)
A. Indicator Description – What we measure (short)	Fossil fuels subsidies refer to the deviation of the actual price paid by consumers from the socially efficient price expressed in terms of a percentage of GDP. This indicator accounts for deviations from the socially optimum price due to underpricing that arises from consumers paying less than the supply cost, as well as the costs of negative externalities and the opportunity costs from consumption tax revenue which is being foregone.		Death rate from substance use disorders measures direct deaths from alcohol or illicit drug abuse. Death rates are measured as the number of deaths per 100,000 people. Illicit drugs include opioids, cocaine and amphetamines.	Battle-related deaths per capita are "deaths in battle-related conflicts between warring parties in the conflict dyad (two conflict units that are parties to a conflict). All deaths—military as well as civilian—incurred in such situations, are counted as battle-related deaths" (World Bank, website). The measure is adjusted to account for the size of a country's population. *For the EQx2024, we manually added 100,000 deaths to Russia to account for the value extracting nature of the Russia-Ukraine war.	A country's Homicide rate measures the number of homicides per 100,000 people per year.
Indicator Name	Fossil fuel subsidies	Pillar (iii.8): Taking Income	Death rate from substance use disorders	Battle-related deaths	Homicide rate
	SO	Pillar (iii	SUB	BRD	НОМ

Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
Suic	Suicide rate refers to the number of lives taken on a voluntary and intentional basis.	Suicide rate (SUI) uses data from: The World Health Organization (retrieved from The Global Economy)	Suicides represent a form of exit from the political economy. While a proportion of suicides are inevitable, significant differences exist in the rates across countries. Exits a suicide might be the result of mental health issues, despondent life circumstances or as the result of being at the receiving end of Value Extraction business models. Institutions that address the various causes of suicide effectively create Political Value.	Value Extraction
suc division	Tax revenues are "compulsory transfers to the central government for public purposes. Certain compulsory transfers such as fines, penalties, and most social security contributions are excluded" (World Bank, website). Tax revenues are divided by the respective country's GDP.	Tax revenue as % of GDP (DTR) uses data from: The International Monetary Fund (IMF)	A deeply studied and debated issue in society—and for the EQx's Taking Income Pillar—is to settle on the appropriate Tax revenue as % of GDP. Tax revenue that is too high can foster a variety of rent-seeking behaviors by the beneficiaries of those unearned income flows while penalizing the Value Creation potential of taxpayers. Tax revenue that is too low in relation to national income may compromise a governments' ability to perform their duties in areas such as education, health or security. *A tentative optimum rate of 11% is suggested (pending further research), resulting in a v-shaped function for this indicator.	Achievement of the optimum represents maximum Value Creation
축 홍 <i>호</i>	The Corporate tax rate (dev. fm optimum) reflects "the highest statutory corporate tax rate at central government level" (KPMG, website).	Corporate tax rate (DCT) uses data from: KPMG (Corporate tax rates table)	A deeply studied and debated issue is operationalized in the EQx's Taking Income Pillar: the optimal Corporate tax rate. Corporate tax rates that are too low can foster a variety of rent-seeking behaviors, including companies free riding on public goods (such as infrastructure) paid for by other sources of government revenue like income tax or debt. On the other hand, corporate tax rates that are too high discourage productive investments. Deviation from an optimal tax rate on either side of the equation sees the emergence of Value Extraction processes that hinder Value Creation maximization. *A tentative optimum (pending further research) of 24% is suggested for this indicator, resulting in a non-linear function.	Achievement of the optimum represents maximum Value Creation
(Sem 소구)	This indicator measures the public sector salaries' premium when compared to the average salary of all private employees. Data is based on "Public sector wage premium (compared to all private employees)" (World Bank, website).	Delta public vs private sector salaries (DPS) uses data from: Worldwide Bureaucracy indicators, The World Bank	When public sector salaries are higher than those in the private sector for the same work, coalitions of state employees have gained political privileges and are Taking Income and Value they have not created. If their salaries are lower than those in the private sector, Taking Income goes in the opposite direction, probably as a result of rent seeking in private labor markets or by state exploitation of employees who have few alternatives. The optimum for this indicator is simple: private and public sector salaries must be the same for equivalent work, meaning that there should be no delta between public sector salaries. That is, the closer to zero the better.	Achievement of the optimum represents maximum Value Creation

	Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
FDE	Fiscal decentralization	The degree of Fiscal decentralization is measured by averaging the 36 indicators of the IMF's Fiscal Decentralization dataset, which assesses "the degree to which revenue and expenditure functions of the general government are carried out by subnational governments" (IMF, website).	Fiscal decentralization (FDE) uses data from: The International Monetary Fund (IMF)	Fiscal decentralization means Taking Income from where value is generated, thereby forestalling value transfer arrangements across regions from centralized systems. The more traceable the Taking Income processes and the greater the proximity to citizens, the stronger the social impediments to Value Extraction. High fiscal decentralization leads to heterogeneity in the measures or policies implemented by local governments that could lead to either competitive Value Creation or excessive competition and a race to the bottom resulting in rent seeking. The EQx takes the former position.	Value Creation
GCI	Global Cybersecurity Index	The Global Cybersecurity Index measures the efforts and progress made in cyber defense. The index is comprised of 25 comprehensive sub-indicators that range from legal aspects to public awareness campaigns.	The Global Cybersecurity Index (GCI) uses data from: International Telecommunication Union (ITU), The Global Cybersecurity Index (GCI)	High levels of cybersecurity lead to Value Creation. This is especially true in the context of digital transformation. The working assumption is that the government is responsible, through its political elites and institutional processes, for providing the necessary institutions for cybersecurity. Cyber criminality is a Value Extraction business model that results in Taking Income and is an issue that a competent political elite or government should address, either directly or indirectly.	Value Creation
GEG	Gender education gap (dev. fm optimum)	The proportion of a population with tertiary education is defined as those that have completed the highest level of education by age group. This includes both theoretical programs leading to advanced research, high skill professions such as medicine, and more vocational programs with clear routes to the labor market. The measure is the percentage of same age population that are able to attain these levels, also available by gender. As globalization and technology continue to re-shape the needs of labor markets worldwide, the demand for individuals with a broader knowledge base and more specialized skills continues to rise.	Gender education gap (GEG), uses data from: OECD	The lower the difference the more equal. As globalization and technology continue to re-shape the needs of labor markets worldwide, the demand for individuals with a broader knowledge base and more specialized skills continues to rise.	Achievement of the optimum represents maximum Value Creation
Pillar (i	Pillar (iii.9): Unearned Income				
CRM	Criminal markets	This indicator measures Criminal markets, which can be defined as "the political, social and economic systems surrounding all stages of the illicit trade and/or exploitation of commodities or people" (Global Organized Crime Index, 2021). Such systems include human and arms trafficking, flora and fauna crimes and the drug trade. The EQx uses the overall average score from the data source.	Criminal markets (CRM) uses data from: The Global Initiative against Transnational Organized Crime, Global Organized Crime Index	Criminal markets generate Unearned Income because the financial residuals earned by criminal actors are exclusively based on extractive Value transfers. The creation of Political Value includes the elimination or minimization of criminal markets.	Value Extraction

⊢	A. Indicator	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
Government debt as Government debt as % of GDP entire stock of direct gove obligations to others outst (measured on the last day Economy, website). The le respective country's GDP.	Government debt as % entire stock of direct go obligations to others our (measured on the last de Economy, website). The respective country's GD	Government debt as % of GDP is based on debt which is "the entire stock of direct government fixed-term contractual obligations to others outstanding on a particular date (measured on the last day of fiscal year)" (The Global Economy, website). The level of debt is then divided by the respective country's GDP.	Government debt as % of GDP (DBT) uses data from: The Global Economy (Government debt as percentage of GDP data)	Government debt as % of GDP is an elite business model based on transferring value from the future to the present. Debt is Unearned Income for the state that will have to be repaid by future generations of taxpayers (or offset by indirect means such as inflation) that often have no voice when such obligations are made. Debt allows government spending to be higher than it would otherwise be with consequent and additional rent-seeking opportunities. There are numerous and robust counter arguments (e.g., against austerity) in the policy and academic domains, as taking on additional debt can be appropriate in emergencies and helps to smoothen out economic cycles, providing Keynesian stimuli for the economy. *An optimal level might be established for this indicator in the future.	Value Extraction
Natural resources rents a derived from natural reso These rents, which are co the price of a commodity it", are calculated as the coal rents (hard and soft) (World Bank, website).	Natural resources rents a derived from natural reso These rents, which are co the price of a commodity ir", are calculated as the coal rents (hard and soft) (World Bank, website).	Natural resources rents as % of GDP measures the rents derived from natural resources divided by a country's GDP. These rents, which are computed as "the difference between the price of a commodity and the average cost of producing it", are calculated as the "sum of oil rents, natural gas rents, coal rents (hard and soft), mineral rents, and forest rents" (World Bank, website).	Natural resources rents as % of GDP (NRR) uses data from: The World Bank (Total natural resources rents (% of GDP) data)	A country that benefits from natural resources rents will see substantial rent seeking by aspiring elites for the rights that afford Unearned Income possibilities. These rights will be distributed throughout the political process and are likely to be unrelated to Value Creation. Moreover, natural resources will be exported and distort the rest of economy (e.g., via higher exchange rates hurting the exports of other industries as is the case with Dutch Disease). These distortions are to the detriment of alternative Value Creation activity.	Value Extraction
Green patents per This indicator measures the number of patents for capita environmentally-related technologies within a give	This indicator measures the environmentally-related tea	This indicator measures the number of patents for environmentally-related technologies within a given year.	Green patents per capita (GPA) uses data from: OECD	"The development and global diffusion of environment-related technologies is key for cost-efficient achievement of environmental policy objectives" (OECD, website). The more environmentally-related patents a country produces the closer it will get to achieving environmental policy goals and thus enabling Sustainable Value Creation in the long-run.	Value Creation
Environmental The Environmental Perform Performance Index performance indicators acremvironmental health and e provide a gauge at a natio to established environment	The Environmental Perform performance indicators acrenvironmental health and e provide a gauge at a natio to established environment to	The Environmental Performance Index "ranks countries on 32 performance indicators across 11 issue categories (covering) environmental health and ecosystem vitality. These indicators provide a gauge at a national scale of how close countries are to established environmental policy targets." (EPI, website).	The Environmental Performance Index (EPI) uses data from: Yale Center for Environmental Law & Policy, Environmental Performance index	The Environmental Performance Index provides a comprehensive set of measures to account for the depletion and spoiling of natural resources such as forests, fisheries, biodiversity, and air and water quality. Such activities signify an intergenerational wealth transfer and a failure to deliver Political Value. Through these Value Extraction processes, older generations and extractive elites benefit from Unearned Income business models based on exploiting the environment. Future Value Creation is also impeded by forestalling the ability of younger generations to benefit from these fundamental resources.	Value Creation

ا و ا	A. Indicator Description – What	(short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
Renewable energy This indicator measures the share of renewable energy as a proportion of overall energy consumption. "Renewable energy consumption includes consumption of energy derived from: hydro, wind, solar, solid biofuels, liquid biofuels, biogas, geothermal, marine and renewable waste." (UN, website)	This indicator measures the share of renewable energy a proportion of overall energy consumption "Renewable en consumption includes consumption of energy derived from hydro, wind, solar, solid biofuels, liquid biofuels, biogas, geothermal, marine and renewable waste." (UN, website	n ergy n: n:	Renewable energy share (RES) uses data from: the International Energy Agency and the United Nations Statistical Division	Switching to renewable energies has become a focal point of many countries' strategies to decarbonize and to move away from using non-renewable energy sources such as fossil fuels, the consumption of which has caused a wide range of negative environmental consequences. By increasing the share of renewable energy consumption, elites can counteract the exploitation of the earth's natural resources and thus contribute to Value Creation.	Value Creation
Ocean litter of various types of marine litter across the world's oceans. In particular, it tracks how many tonnes of domestic beach litter per 1 million inhabitants ultimately end up in the ocean. It serves as a means to measure the extent to which certain countries contribute to the pollution of the world's oceans.	Ocean litter is based on a computer model that tracks the for various types of marine litter across the world's oceans. particular, it tracks how many tonnes of domestic beach litt per 1 million inhabitants ultimately end up in the ocean. It serves as a means to measure the extent to which certain countries contribute to the pollution of the world's oceans.	er er	Ocean litter (OLI) uses data from: UNEP and University of Florida, Global Model for Monitoring Marine Litter	The pollution of the world's oceans is a severe issue that has a wide range of value extracting consequences, adversely affecting marine life, the environment, and human wellbeing. It is a fundamental element in the United Nations' SDG Agenda (SDG 14) and there are ongoing efforts to better track and regulate marine pollution in order to protect the world's oceans. Elites that take action to prevent litter from reaching the ocean showcases how well they are performing in terms of achieving SDG 14 and practicing effective waste management.	Value Extraction
Deforestation rate The deforestation rate is the number of hectares of tree cover loss at a national level, categorized by the percentage of canopy cover in 2000. We only consider countries for assessment if they have a minimum threshold of 5% of total land under forest cover.	The deforestation rate is the number of hectares of tree cover loss at a national level, categorized by the percentage of canopy cover in 2000. We only consider countries for assessment if they have a minimum threshold of 5% of total land under forest cover.	_	Deforestation rate (DER) uses data from: Global Forest Watch	As threats to biodiversity mount, the international community is increasingly focusing on conserving biodiversity. Deforestation is a major cause of the loss of biodiversity, and habitat conservation is vital for stemming this loss. Furthermore, forests are vital to life on Earth. They purify the air, filter water, prevent erosion, and act as an important buffer against climate change. Forests offer a home to much of the world's diverse array of plants and animals and provide essential natural resources such as timber, food, and medicinal plants. Forests also support the lives of local communities and help them to thrive. Forests are therefore a key element in a country's natural capital and highly important for future generations, due to the sustainable value that they create.	Value Extraction
Fertilizer usage kg (nitrogenous, potash, and phosphate fertilizers) used per unit of arable land. Traditional nutrients (animal and plant manures) are not included.	Fertilizer consumption measures the quantity of plant nutrient (nitrogenous, potash, and phosphate fertilizers) used per unit of arable land. Traditional nutrients (animal and plant manures) are not included.	<u>د</u> ب	Fertilizer usage kg per hectar (FUS) uses data from: The World Bank	Fertilizer consumption constitutes Value Extraction. Heavy fertilizer usage has many adverse effects on the environment such asi threatening long-term food security through soil degradation. This destruction of topsoil also releases massive amounts of CO2 and inhibits carbon sequestration measures. Over-fertilization can further lead to groundwater pollution and thus, threaten human health. Lastly, the fertilizer industry itself is a major GHG producer.	Value Extraction

	Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
1 1	Terrestrial land protected	This indicator measures the percentage of a country's territorial land and marine areas that are protected. Terrestrial protected areas are defined as totally or partially protected areas of at least 1,000 hectares that are designated by national authorities as scientific reserves with limited public access, national parks, natural monuments, nature reserves or wildlife sanctuaries, protected landscapes, and areas managed mainly for sustainable use.	Terrestrial land protected (TLP) uses data from: The United Nations, Statistics Division	Protected areas ensure the preservation of precious natural landscapes for generations to come. They conserve biodiversity and benefit human communities more sustainably when managed correctly (Watson et al., 2014). According to the UN, the amount of a nation's protected terrestrial land is the indicator with the strongest links to a country achieving the UN's Sustainable Development Goals and thus supporting Value Creation.	Value Creation
000	CO2 emissions embodied in domestic final demand per capita	This indicator measures CO2 emissions embodied in domestic final demand per capita. It uses data from the OECD Carbon dioxide emissions embodied in international trade (2021 ed.) dataset.	CO2 emissions embodied in domestic final demand per capita (CDD) uses data from: OECD	CO2 emissions represent Value Extraction from future generations. As such, the lower the CO2 emissions embodied in final domestic demand per capita, the better.	Value Extraction
СВО	CO2 emissions (metric tons per capita)	This indicator measures CO2 emissions as metric tons per capita. It uses data from the World Bank's World Development indicators.	CO2 emissions (metric tons per capita) (CDO) uses data from: The World Bank	CO2 emissions are a negative externality, a form of Unearned Income generated by business models based on exploiting the environment. Such activities signify intergenerational Value transfers from the next generation to the present and a failure to deliver Political Value today. Future Value Creation is also impeded by the burden of climate change and the costs of related alleviation policies.	Value Extraction
AIR	Air Quality Index	This indicator measures a country's air quality based on their respective annual average PM2.5 concentration (µg/m³). It uses data from the iQAir.	Air Quality Index (AIR) uses data from: iQAir	Poor air quality is a negative externality and a form of Unearned Income, as elite business models that create pollution extract value from the nature stakeholder. The AIR indicator complements the perspective provided by CO2 emissions (CDO).	Value Extraction
НАZ	Hazardous waste per capita	"Hazardous waste is waste that owing to its toxic, infectious, radioactive or flammable properties poses an actual or potential hazard to the health of humans, other living organisms, or the environment" (United Nations, website).	Hazardous waste per capita (HAZ) uses data from: United Nations Statistics Division	Hazardous waste is a negative externality, a form of Unearned Income generated by business models based on exploiting the environment. Such activities signify intergenerational Value transfers from the next generation to the present and a failure to deliver Political Value today. Future Value Creation is also impeded by the burden of climate change, pollution, and the costs of related alleviation policies.	Value Extraction

	Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
WPC	Waste collected per capita	This indicator measures the percentage of municipal waste collected per capita. "Municipal waste, collected by or on behalf of municipalities, by public or private enterprises, includes waste originating from: households, commerce and trade, small businesses, office buildings and institutions (schools, hospitals, government buildings). It also includes bulky waste (e.g., white goods, old furniture, mattresses) and waste from selected municipal services, e.g., waste from park and garden maintenance, waste from street cleaning services (street sweepings, the content of litter containers, market cleansing waste), if managed as waste. The definition excludes waste from municipal sewage network and treatment, municipal construction and demolition waste" (United Nations, website).	Waste collected per capita (WPC) uses data from: United Nations Statistics Division	Waste collected per capita represents Value Creation as countries that collect more waste better compensate for the negative externalities originating from environmental pollution. The collection of waste is a first step in the compensation chain. This indicator complements the Municipal Waste Recycling Rate.	Value Creation
MWR	Municipal waste recycling rate	This indicator measures the percentage of collected municipal waste that is subsequently recycled. Recycling is defined as any reprocessing of waste material in a production process that diverts it from the waste stream, except for reuse as fuel. Reprocessing waste as the same type of product or for different purposes are both included.	Municipal waste recycling rate (MWR) uses data from: The United Nations Statistics Division	An increasing scarcity of the resources that form the bedrock of our society threatens the long-term feasibility of linear economical thinking. Recycling is a key step towards prolonging the life of resources and thus alleviating the limited supply of raw materials. Establishing a national recycling capability is a key step in the transition towards a circular economy. This indicator complements the Waste collected per capita measure.	Value Creation
FIS	Fishing consumption per capita	This indicator measures fish and seafood consumption divided by a country's population. Data is sourced from Our World in Data and the FAO.	Fishing consumption per capita (FIS) uses data from: Our World in Data and The Food and Agricultural Organization (FAO)	Excessive fish and seafood consumption compromises the planet's ecological boundaries. The higher the per capita level of fish and seafood consumption, the higher the extraction level of ecological resources.	Value Extraction
MET	Red meat consumption kilograms per capita	This indicator measures red meat consumption in kilograms divided by a country's population. Data is sourced from Our World in Data and the FAO.	Red meat consumption kilograms per capita (MET) uses data from: Our World in Data and The Food and Agricultural Organization (FAO)	Excessive redmeat consumption compromises the planet's ecological boundaries. The higher the per capita level of red meat consumption, the higher the extraction level of ecological resources.	Value Extraction

	Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
0	lex II: Value / In	Sub-Index II: Value / Index Area (iv): Economic Value			
1	Pillar (iv.10): Producer Rent				
0 0	Nr. of patent applications per capita	Nr. of patent applications per capita is adjusted for population size (per 100,000 people).	Nr. of patent applications per capita (PAT) uses data from: The World Bank (The World Intellectual Property Organization (WIPO), WIPO Patent Report: Statistics on Worldwide Patent Activity).	Patents reflect a type of legal claim on Value Creation. The EQx assumes that these claims are a factor for sustained economic growth and innovation. The higher the number of patents filed, as measured by the Nr. of patent applications per capita, the larger the number of newly documented and protected ideas. The indicator therefore provides evidence of current and future Value Creation. A vibrant market for new ideas and innovations is complemented by the legal means to secure this knowledge.	Value Creation
	Financial burden of healthcare	This indicator measures the percentage of a nation's population whose out-of-pocket expenditure on healthcare is more than 25% of total household consumption or income.	Financial burden of healthcare (FBH) uses data from: The World Bank and the World Health Organization	A good healthcare system only benefits society if it is financially accessible for the entire population and enables the Value Creation of non-elites. The quality of a nation's healthcare system should therefore not merely be evaluated based on the range of the services provided but also on their affordability. Considering the percentage of people with high proportional healthcare expenditure is a good proxy to determine the relative affordability of healthcare in a particular country.	Value Extraction
	Health Efficiency Index	The Health Efficiency Index is based on the ,Bloomberg Health Efficiency Index' which tracks life expectancy and medical spending to determine which healthcare systems have the best outcomes. "To measure efficiency during the pandemic, the original ranking was adjusted according to two factors: the one year change in GDP based on an October 2019 forecast by the International Monetary Fund, as well as the toll of COVID-19 on each economy" (Miller & Lu, 2020).	The Health Efficiency Index (HEI) uses data from: The Bloomberg Health-Efficiency Index	Inefficient healthcare systems should be considered an example of Value Extraction as business elites in such a healthcare sector receive money and resources and deliver poor outcomes (i.e., life expectancy). Efficient systems, on the other hand, have elites that coordinate their resources diligently and provide (through quality and affordable healthcare) broad Value Creation for non-elites. Heath sector elites in some countries have been criticized for excessive Value Extraction (e.g., high medicine prices paid for by taxpayers), but at the same time may also deliver value through the use of cutting-edge technologies at reasonable costs to society.	Value Creation
— <i>v</i> ,	Density of medical staff	Average density of physicians, nurses and midwifes per 1,000 people.	Density of medical staff (DMS) uses data from: The World Bank and the World Health Organization's Global Health Workforce Statistics	Many countries' healthcare systems are threatened by a lack of medical staff. A higher density of medical staff helps to prevent underserved areas and thus improves healthcare coverage and accessibility. While there are concerns around physician surpluses and physician induced demand, excessive treatment due to higher medical staff density seems to be barely observable in practice (Bickerdyke et al., 2002). The consensus is now hat a higher density of medical staff is positively connected with better health outcomes and, as a result, Value Creation.	Value Creation

∢∣	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
ilobal Food affordability 3FSI)* prod leasures the	Global Food Security Index - affordability is based on the affordability' sub-ranking of the Global Food Security Index (GFSI) produced by the Economist Intelligence Unit. The GFSI measures the drivers of food security across both developing and developed countries.	Global Food Security Index - affordability (FSA) uses data from: The Economist Intelligence Unit, Global Food Security Index (GFSI)	When food is not affordable, non-elites are prevented from being involved in Value Creation processes. Food profiteering elite business models have developed on the basis of transferring value from the many to the few. Elite business models based on high and unaffordable food prices, natural catastrophes notwithstanding, are a reflection of poor Elite Quality and an inability to develop a competitive food industry.	Value Creation
he Housing ouse prices rdicates aff ocal income rices compa	The Housing Affordability Index measures national average house prices against local incomes. A high value in the HAI indicates affordable residential housing prices compared to local incomes. A low value indicates unaffordable house prices compared to local incomes.	The Housing Affordability Index (HAI) uses data from: Swiss Forecast (proprietary data)	To be able to afford a house is relevant in relation to the development of children, life satisfaction, and in addressing wealth inequalities. A widening gap between house prices and local incomes represents Value Extraction, as a reduction of affordability raises inequalities, and contributes to the segregation of social classes. House price growth that outpaces income growth translates into the elite business model of capital gains. Eventually, the decoupling of prices from incomes points to unsustainable development and is a predictor of financial (and social) fragility. Affordable housing is Value Creation.	Value Creation
he Rail trac stal rail trac he RTD indi ansportatio	The Rail track density indicator is calculated via the formula: total rail track per country (km) divided by population. The RTD indicator does not account for different types of rail transportation, private vs. commercial, or the type of energy/commodity that is used as fuel.	Rail track density (RTD) uses data from: The World Development indicators, World Bank	The higher the rail track density in a country, the better, as this suggests an energy efficient, affordable, economically sustainable, and future-oriented transportation system.	Value Creation
The Global Al Ir artificial intellige implementation.	The Global Al Index measures a country's capacity to utilize artificial intelligence in terms of investment, innovation, and implementation.	The Global Al Index (GAI) uses data from: Tortoise	Al increases the opportunities for investment in R&D across the value chain, and hence the international competitiveness of firms and nations. Al capacity reflects the performance of business elites in terms of economic Value Creation, alignment and safety concerns notwithstanding.	Value Creation
Inward FDI a investment (F) percent or mc an economy website). For a country's G stock.	Inward FDI as a % of GDP (stock), measures foreign direct investment (FDI) that takes "a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor" (World Bank, website). For comparison purposes, FDI inflows are divided by a country's GDP. For this indicator, the EQx considers only stock.	Inward FDI as a % of GDP (stock) (FDS) uses data from: United Nations Conference on Trade and Development (UNCTAD) Statistics	This indicator comparatively measures a country's attractiveness to investors over a long-time horizon. Foreign elite business models and foreign investors are allowed to compete against domestic interests and realize Value Creation. For FDI to succeed despite the liability of foreignness it requires Value Creation. On the other hand, the absence of accumulated FDI inflows reflects elite protectionism, as domestic investors limit foreign entrants and the accumulation of their capital stock thereby diminishing the Value Creation of the overall economic system.	Value Creation

Value Creation/ Extraction		u o	E	-
Va Crea Extro	Value Creation	Value Extraction	Value Creation	Value Creation
B. Indicator Rationale – Why we measure	A country's attractiveness to investors over a short- to medium-term time horizon is essential. Foreign elite business models and foreign investors are allowed to compete against domestic interests to realize Value Creation. For FDI to succeed despite having liability of foreignness Value Creation is required. On the other hand, the absence of accumulated FDI inflows reflects elite protectionism, as domestic incumbents limit foreign entrants, thereby improving their own potential for Value Extraction.	High Barriers to FDI enable producer rents by protecting domestic investors. The indicator measures the success of domestic business elites in forestalling foreign competition from investing in Value Creation models in their domestic market. The assumption is that foreign investors have an embeddedness disadvantage that they compensate for with higher levels of efficiency and value advantages, which might potentially disrupt the rent-seeking behavior of local elites.	Open for business is a practice-oriented indicator that reflects Producer Value rent seeking by domestic elites (or its absence). While not dissimilar to the indicator for Institutional quality, it has a stronger more direct connection to the actual activities of economic agents and is therefore included in the Economic Value index area. Low values for this indicator describe closed and protectionist Value Extraction elites, while a high level of openness depicts inclusive Value Creation.	Economic globalization reflects the degree to which domestic elites are subject to competition from their international counterparts. The higher the degree of economic globalization, the more Economic Value will exist in a domestic economy.
Dataset reference	Inward FDI as a % of GDP (flow, 3yrs avg.) (FDF) uses data from: United Nations Conference on Trade and Development (UNCTAD) Statistics	Barriers to FDI (BTF) uses data from: OECD, FDI Regulatory Restrictiveness Index	Open for business (OFB) uses data from: U.S. News & World Report, 2022 Best Countries	Economic globalization (EGL) uses data from: ETHZ, The KOF Globalization Index
A. Indicator Description – What we measure (short)	Inward FDI as a % of GDP (flow, 3yrs avg.) measures foreign direct investment that takes "a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor" (World Bank, website). For comparison purposes, FDI inflows are divided by a country's GDP. The indicator considers the average over 3 years.	Barriers to FDI (foreign direct investment) are measured by the ,FDI Regulatory Restrictiveness Index (FDI Index). "The FDI Index measures statutory restrictions on foreign direct investment across 22 economic sectors" (OECD, website) by looking at factors such as foreign equity limitations, a discriminatory screening and approval mechanisms, or restrictions on the employment of foreigners as key personnel.	The Open for business indicator is based on the ,Open for Business' sub-ranking of the ,U.S. News, 2022 Best Countries' that considers "cheap manufacturing costs, favorable tax environment, not bureaucratic, not corrupt, transparent government practices" as factors (U.S News, website).	Economic globalization is measured by the economic dimension of the ,KOF Globalization Index. The measure includes both trade and financial flows and encompasses factors such as trade in goods and services, foreign investment, customs tariffs, taxes and trade restrictions, openness of the capital account and international investment agreements.
Indicator Name	Inward FDI as a % of GDP (flow, 3yrs avg.)	Barriers to FDI	Open for business	Economic globalization
	FDF	ВТЕ	OFB	EGL

on/ tion		c	c	
Value Creation/ Extraction	Value Creation	Value Extraction	Value Extraction	Value
B. Indicator Rationale – Why we measure	Trade freedom encourages exports, one of the highest Value Creation activities in an economy (as noncompetitive firms cannot export since they lack power in foreign markets). Trade freedom also reflects global competitiveness and encourages innovation. A lack of free trade indicates local rent seeking and negatively affects Producer Value, creating gaps and distortions in the market for goods and services. Since the publication of Ricardo's theory of comparative advantage, free trade has been accepted as an undisputed mechanism for Value Creation. However, counter arguments are now on the rise and at the moment the world seems to be experiencing a worrying trend towards de-globalization and fragmentation. *An optimal level might be established for this indicator in the future.	The assumption that free trade results in Value Creation means that protectionism favors existing domestic producer elite business models by shielding them from competitive foreign trade. Counter arguments would highlight the benefits of protecting domestic infant industries that will engage in future Value Creation. Further research might be needed to establish an optimum associated with economic development levels and short-term policy needs. At present, the higher the share of imports that are targeted by protectionist measures for this flow indicator, the lower the level of Value Creation.	The assumption that free trade results in Value Creation means that protectionism favors existing domestic produce elite business models by shielding them from competitive foreign trade. Counter arguments would highlight the benefits of protecting domestic infant industries that will engage in future Value Creation. Further research might be needed to establish an optimum associated with economic development levels. At present, the higher the share of imports that are targeted by protectionist measures for this stock indicator, the lower the level of Value Creation.	The annual flow indicator Share of discrimn. govt. intervent. as % of total intervent. (flow) is an important measure of protectionism. Interventions that are discriminatory form part of the Value Extraction business models of domestic elites. Therefore, the lower the level of discriminatory interventions as a share of total interventions, the better, as there is less Value Extraction from domestic businesses and populations. This flow indicator can serve as a proxy measure of the appetite of policymakers for offering wider market access.
Dataset reference	Trade freedom (TRF) uses data from: The Heritage Foundation, Index of Economic Freedom (IEF)	Share of imports targeted by protectionist measures (flow) (IPM) uses data from: the Global Trade Alert, SIAW Institute, University of St.Gallen	Share of imports targeted by protectionist measures (stock) (IPM) uses data from: The Global Trade Alert, SIAW Institute, University of St.Gallen	Share of discrimn. govt. intervent. as % of total intervent. (flow) (DGI) uses data from: The Global Trade Alert, SIAW Institute, University of St.Gallen
A. Indicator Description – What we measure (short)	Trade freedom is assessed through the ,Index of Economic Freedom' which measures the "absence of tariff and non-tariff barriers that affect imports and exports of goods and services" (Heritage Foundation, website). The measure is based on 12 quantitative and qualitative factors, grouped into four Pillars: rule of law, government size, regulatory efficiency and open markets.	Share of imports targeted by protectionist measures (flow) represents a flow statistic and considers protectionist measures implemented during the year.	Share of imports targeted by protectionist measures (stock) considers (for the latest available year) imports targeted by protectionist measures implemented since 2009 and still in force. This indicator represents a stock statistic.	Share of discrimn. govt. intervent. as % of total intervent. (flow), measures interventions implemented over the course of the year. This indicator represents a flow statistic.
Indicator Name	Trade freedom	Share of imports targeted by protectionist measures (flow)	Share of imports targeted by protectionist measures (stock)	Share of discrimn. govt. intervent. as % of total intervent. (flow)
	TRF	MA	PS	ΘĞ

deflator measures the changes in prices for all the goods and services produced in an economy. This indicator is based on

data by the World Bank.

GDP deflation (dev. fm optimum) is a measure of the annual

percentage change of the GDP deflator index. The GDP

growth rate (dev. fm GDP deflator index

岜

optimum)

consumption. This indicator is based on inflation data by the

services which are representative of a private household's percentage change in the headline Consumer Price Index

(CPI). The CPI reflects changes in the cost of goods and Inflation (dev. fm optimum) is a measure of the annual

Inflation (dev. fm

8

optimum)

Pillar (iv.11): Capital Rent

Achievement

represents maximum

Creation

Value

optimum

of the

Achievement

represents maximum

Creation

Value

optimum

Creation/ Extraction

B. Indicator Rationale - Why we measure

Dataset reference

A. Indicator Description – What we measure (short)

Indicator Name

(stock) measures interventions implemented since 2009 and

govt. intervent. as %

Share of discrimn. of total intervent.

DGS

still in force. This indicator represents a stock statistic.

Share of discrimn. govt. intervent. as % of total intervent.

of St.Gallen

Extraction

Value

Value we measure Creation/ Extraction	the natural price of a Achievement e natural price of of the and R-star (R*) represents absorbs savings maximum (019). To value t simple fashion, the monetary base reacts to from the m in the price of the free market al rate, causing the efiting from asset apital by non-re formula [(M1) adjusted at this etary policy rule of	country's financial Value Developed Creation action based on ce of Value ncial markets fore prohibit thivities that require ncial markets also my, as they he most productive ablished or well-	at capital formation Value Cowth and Creation hence essential to ore productive d assets and higher capital an economy's	alue, as the noble Value
B. Indicator Rationale – Why we measure	An interest rate deviation below/above the natural price of money is an extractive capital rent. In the natural price of money, also referred to as the Neutral interest rate or Knut Wicksell's (1898), natural interest rate', an R-star (R*) depicts the rate at which investment fully absorbs savings at full employment (Rachel & Summer, 2019). To operationalize this disputed concept in a simple fashion, the EQx takes the increase/decrease in the monetary base effected by central banks that adds/subtracts to/from the money (interest rates lower/higher than the free market counterfactual) deviating from the natural rate, causing the aforementioned rents (i.e., for those benefiting from asset deinflation/inflation or from access to capital by nonmarket mechanisms). *The optimum in the formula [(M1 growth/GDP growth) + k%] sees an (unadjusted at this stage) alignment with Friedman's k monetary policy rule of 2% (pending further research).	The higher the level of development of a country's financial markets, the higher the Value Creation. Developed financial markets enable market participation based on 'fair' market prices and reduce the chance of Value Extraction. Un- or under-developed financial markets restrict or limit access to credit and therefore prohibit entrepreneurial or non-elite economic activities that require financing. Un- or under-developed financial markets also result in allocative problems in an economy, as they allocate financial resources away from the most productive or innovative sectors, benefiting only established or well-connected businesses.	Harrod-Domar's growth model states that capital formation is the initial step in creating economic growth and employment (Yoshino, et al. 2019) and hence essential to Value Creation in the economy. New, more productive equipment and infrastructure replaces old assets and enables an increase in production. Thus, higher capital formation allows for the faster growth of an economy's aggregate income.	Gold is a mostly unproductive store of value, as the noble
Dataset reference	The Neutral interest rate (DNI) uses data from: OECD (Money Supply Data) & World Bank, National Accounts Data (GDP growth)	The Financial Markets Index (FMI) uses data From: The International Monetary Fund, Financial Development Index	Gross Capital Formation (GCF) uses data from: The World Bank	Gold demand as % of
A. Indicator Description – What we measure (short)	A measure of the (unobservable) Neutral interest rate (dev. fm optimum) is derived from the following formula: k% + (M1 growth/ GDP growth) with ,k%' corresponding to Friedmann's ,k', set at 2%. The resulting measure yields an interest rate supply and demand for savings (which depend on the money supply from central banks (M1)).	The Financial Markets Index indicator is derived from part of the IMF's Financial Development Index and measures the development level of financial markets according to their access, depth and efficiency.	Gross capital formation refers to the net accumulation of inventory and fixed assets within an economy in one year.	Gold demand as % of GDP measures the demand (in tons) for
Indicator Name	Neutral interest rate (dev. fm optimum)	Financial Markets Index	Gross capital formation	Gold demand as %
	₫	FA	GCF	109

A. Indi	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
Crypto ownershi who owned or us	Crypto ownership measures the proportion of respondents who owned or used cryptocurrencies via a survey.	Crypto ownership (CRY) uses data from: Statista	The ownership of crypto assets is assumed to be for speculative investment purposes or as a medium for illegal activities. It also reflects a distrust of monetary institutions. Despite their putative and advertised advantages, crypto assets denote Value Extraction in society. The lower the share of crypto usage and ownership, the better.	Value Extraction
Unicoms counts to companies worth listed on public st	Unicorns counts the number of unicorns within a country, i.e., companies worth at least a billion dollars that are not yet listed on public stock exchanges, per million inhabitants.	Unicorns (UNN) uses data from: The Hurun Research Institute, Hurun Global Unicorn List	Unicorns are start-ups that have achieved private valuations of more than USD one billion. Consequently, their products and services reflect Value Creation for both customers and society. The higher the value for the Unicorns indicator, the greater the value that has and will be created in a country. Unicorns also mean that incumbent elites have not erected barriers to market entry for emerging business models and have instead created a business environment that supports Value Creation and innovation.	Value Creation
The Unicorns as Surjounicorns, i.e. com are not yet listed inhabitants divide	The Unicorns as % of GDP indicator measures the number of unicorns, i.e. companies worth at least a billion dollars that are not yet listed on public stock exchanges, per million inhabitants divided by a country's GDP.	Unicorns as % of GDP (UNC) uses data from: The Hurun Research Institute, Hurun Global Unicorn List	Unicorns are start-ups that have achieved private valuations of more than USD one billion. Consequently, their products and services reflect Value Creation for both customers and society. We assume that the higher the value for the Unicorns as a % of GDP indicator, the greater the value that will be created in a country. This also means that incumbent elites have not erected barriers to market entry for emerging business models and have instead created a business environment that supports Value Creation and innovation.	Value Creation
The Billionaires se overall number o relation to its pop billionaires whose	The Billionaires self-made per capita indicator considers the overall number of self-made billionaires in a country in relation to its population. Self-made billionaires are billionaires whose wealth is not inherited.	The Billionaires self-made per capita (BSG) uses data from: Forbes, World's Billionaires List & The World Bank	The Billionaires self-made per capita indicator measures the ongoing elite circulation process in society by examining self-made billionaires. Their business models are more likely to involve Value Creation and be based on innovation and the incorporation of emerging technologies, accelerating social and technological development. The more self-made billionaires a country has in relation to its population, the more value is deemed to have been created. The comparison with a country's overall inhabitants ensures a representative evaluation of this indicator.	Value Creation

	Indicator Name	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
BSM	Billionaires self- made as % of total billionaires	The Billionaires self-made as % of total billionaires indicator assesses the proportion of a country's overall number of billionaires that are self-made, i.e. whose wealth was not inherited.	Billionaires self-made as % of total billionaires (BSM) uses data from: Forbes, World's Billionaires List & The World Bank	The Billionaires self-made as % of total billionaires indicator measures the percentage of self-made billionaires in a country. The more self-made billionaires a country has in relation to the overall number of billionaires, the more Value Creation there should be in the economy. The assumption is that self-made billionaires, not having inherited their wealth, can only have emerged through Value Creation business models, as established elites do not cede Value Extraction models to newcomers.	Value Creation
llar (iv	Pillar (iv.12): Labor Rent				
2	Labor productivity growth	Labor productivity, also known as workforce productivity, is defined as real economic output per labor hour. Growth in labor productivity is measured by the change in economic output per labor hour over a defined period.	Labor productivity growth (LPG) uses data from: The Conference Board's Total Economy Database	The Labor productivity growth rate reflects a nation's ability at present to invest in and empower its labor force to crede more value. The indicator is determined by three main factors: investment in physical capital, new technology and human capital. It is also a measure of innovativeness as this is arguably the main driver of labor productivity. Because every society strives to increase its economic output, improving labor productivity creates value for society and future generations.	Value Creation
WLP	Delta real wage vs labor productivity increases	Delta real wage vs labor productivity increases reflects the portion of labor productivity captured by labor. The real wage is measured through labor compensation per hour worked, while GDP per hour worked is used as a proxy for labor productivity.	Delta real wage vs labor productivity increases (WLP) uses data from: OECD (labor compensation per hour worked & GDP per hour worked data)	Delta real wage vs labor productivity increases aims to describe possible Value Extraction from these two dimensions. On the one hand, increases in wages above labor productivity indicate labor rent in favor of organized labor (also referred to as ,Baumol's cost disease', Baumol & Bowen, 1966), i.e., the tendency for wages to increase despite stagnating productivity, often in labor-intensive industries. On the other hand, increases in wages below labor productivity indicate an extraction of labor by firms. *The tentative optimum (pending further EQx research), sees wage increases equal productivity increases. This assumption is made considering counter arguments that attribute labor productivity increases partly to investments in capital stock or to innovation for which labor is not directly responsible.	Achievement of the optimum represents maximum Value Creation
4	Labor force participation rate	"The labor force comprises all persons of working age who furnish the supply of labor for the production of goods and services during a specified time-reference period. It refers to the sum of all persons of working age who are employed and those who are unemployed. The series is part of the ILO modeled estimates and is harmonized to account for differences in national data and scope of coverage, collection and tabulation methodologies as well as for other country-specific factors. For more information, refer to the ILOSTAT pages on concepts and definitions and ILO modelled estimates and projections" (ILOSTAT, website).	Labor force participation rate (LFP) uses data from: The International Labour Organization, ILOSTAT database	A low Labor force participation rate indicates that there are disincentives for Value Creation by labor. There are many causes for this, including low wages and high unemployment benefits. There may also be barriers to participation in labor markets (e.g. for females) or factors that reflect direct Value Extraction (e.g. under-employment, or exploitation).	Value Creation

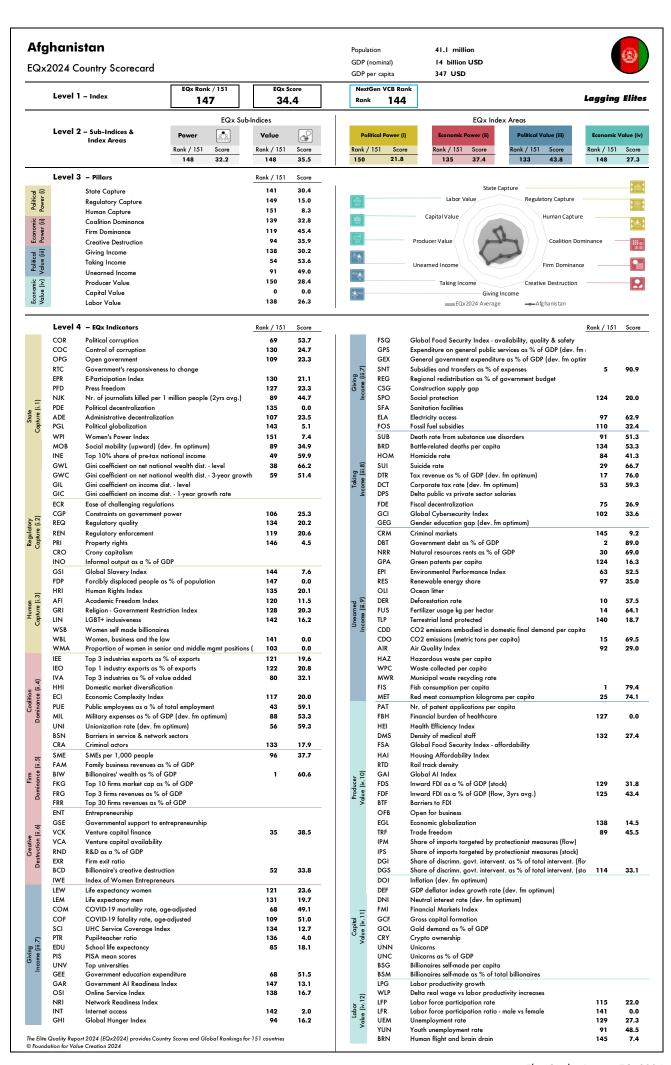
Name	⊢	A. Indicator Description – What we measure (short)	Dataset reference	B. Indicator Rationale – Why we measure	Value Creation/ Extraction
Labor force participation ratio - male vs female is participation ratio reflects the ratio of females to males within the workformale vs female labor force participation rate is the proportion of the population aged 15 and older that is economically as	The Labor force participation reflects the ratio of females to labor force participation rate population aged 15 and old	The Labor force participation ratio - male vs female indicator reflects the ratio of females to males within the workforce. The labor force participation rate is the proportion of the population aged 15 and older that is economically active.	Labor force participation ratio - male vs female (LFR) uses data from: The World Bank, World Development indicators	A higher proportion of males within the active workforce implies that males receive Unearned Income through the restrictions and barriers faced by women and their inability to fully participate and compete in the economy's labor markets. This leads to wasted capital as a large part of the population is prevented from full Value Creation. Reduced competition also limits new ideas and innovation. Unequal access to well remunerated occupations occurs in many countries around the world. Labor force statistics are key tools for monitoring gender disparities in employment and unemployment patterns. The lower the disparities, the better for all, on the self-evident assumption that men and women are equally capable of Value Creation.	Value Extraction
Unemployment rate the Unemployment rate "refers to the shat the strain that is without work but available for and employment" (World Bank, website). The modeled estimates to account for bias in I	The Unemployment rate "refer: that is without work but availal employment" (World Bank, we modeled estimates to account!	The Unemployment rate "refers to the share of the labor force that is without work but available for and seeking employment" (World Bank, website). The EQx uses the ILO modeled estimates to account for bias in national estimates.	Unemployment rate (UEM) uses data from: The International Labour Organization, ILOSTAT database (retrieved from The World Bank)	The Unemployment rate is conceptualized in a neoclassical fashion as intra-labor rent seeking by a worker elite. Value Extraction by the employed is achieved via higher than market equilibrium wages and benefits, preventing a market-clearing price for labor and thus causing unemployment for vulnerable suppliers of labor such as non-unionized workers and the young. See also the related indicator for the Youth unemployment rate (YUN).	Value Extraction
Youth The Youth unemployment rate , refers to the force aged 15-24 without work but availe employment" (KOF, website).	The Youth unemployment rate "I force aged 15-24 without work employment" (KOF, website).	efers to the share of the labor but available for and seeking	Youth unemployment rate (YUN) uses data from: The World Bank (Unemployment, youth total, % of total labor force ages 15-24 data, modeled ILO estimate)	The most vulnerable segment of any political economy are young people. Many elite business models permit the extraction of labor rents from the young. This sub-group is also subject to Value Extraction by older elite workers, such as members of labor unions. Unions increase the price of labor unions. Unions increase the price of labor and reduce overall demand with disproportional effects on the young. A high Youth unemployment rate is an extremely worrying indicator as research shows that extended periods of unemployment can have a lasting impact on an individual in terms of future employment prospects and Value Creation potential.	Value Extraction

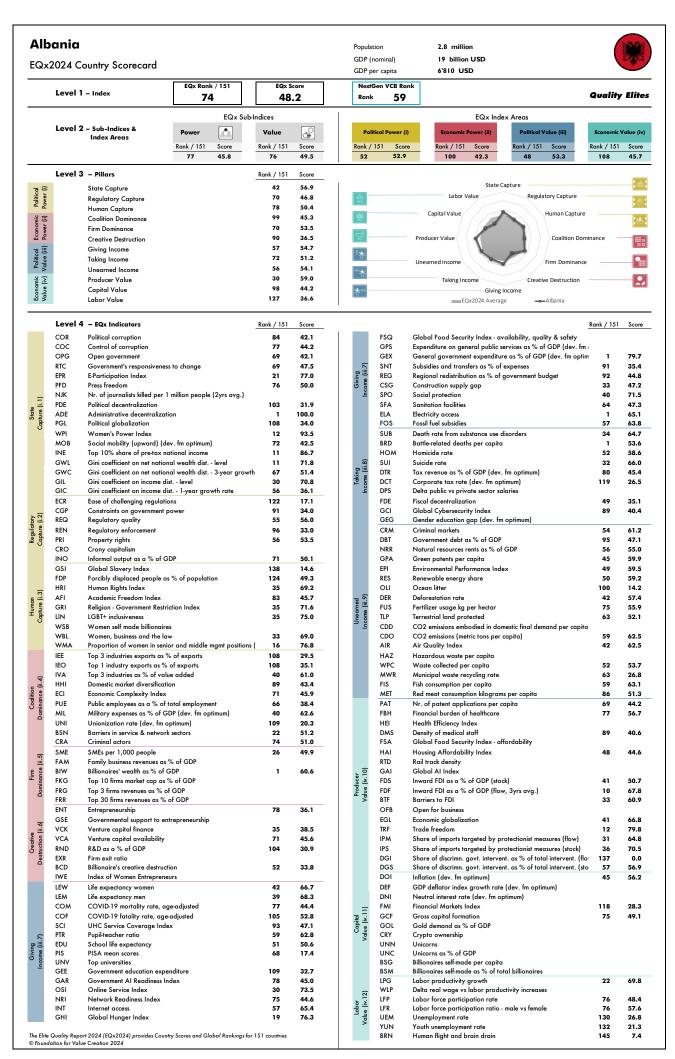


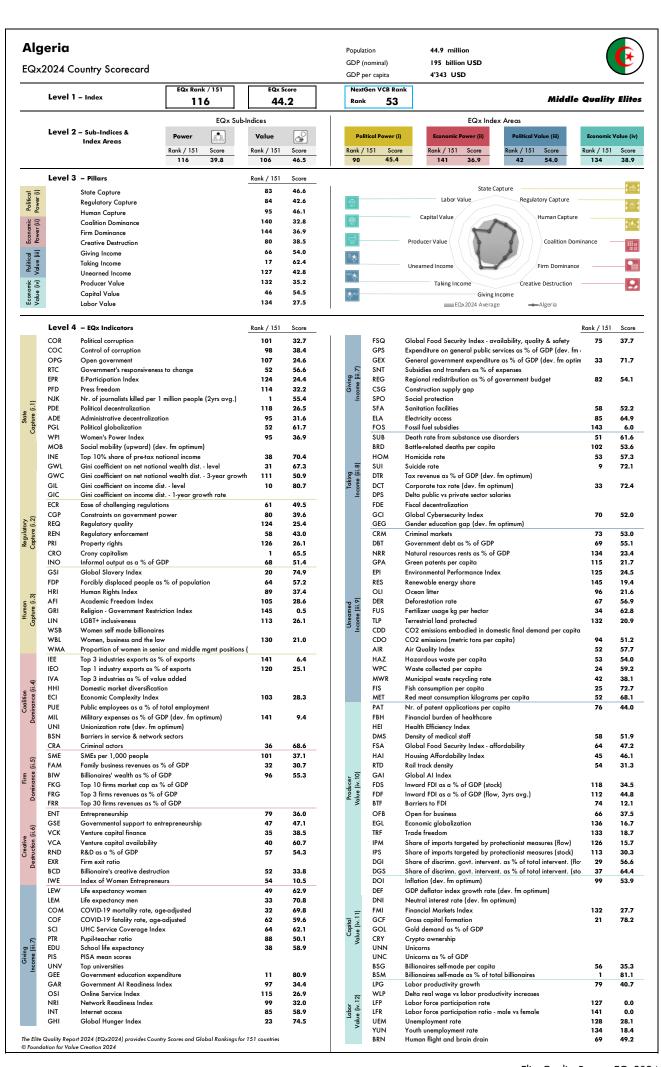
6. Country Scorecards

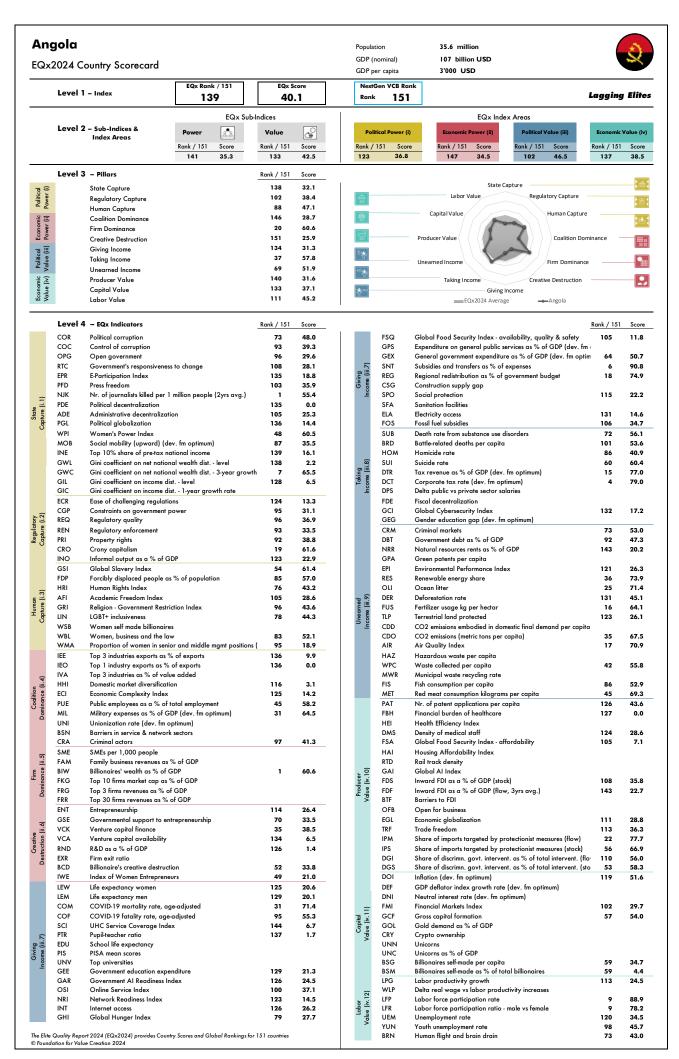
This Chapter comprises the complete collection of the 151 Country Scorecards included in the EQx2024.

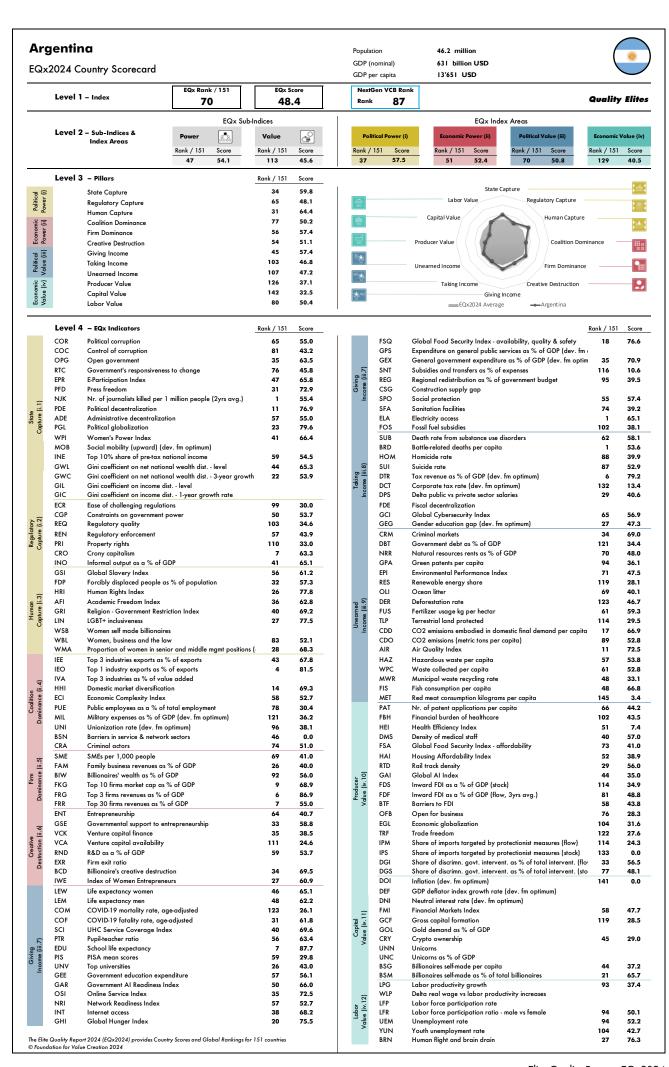
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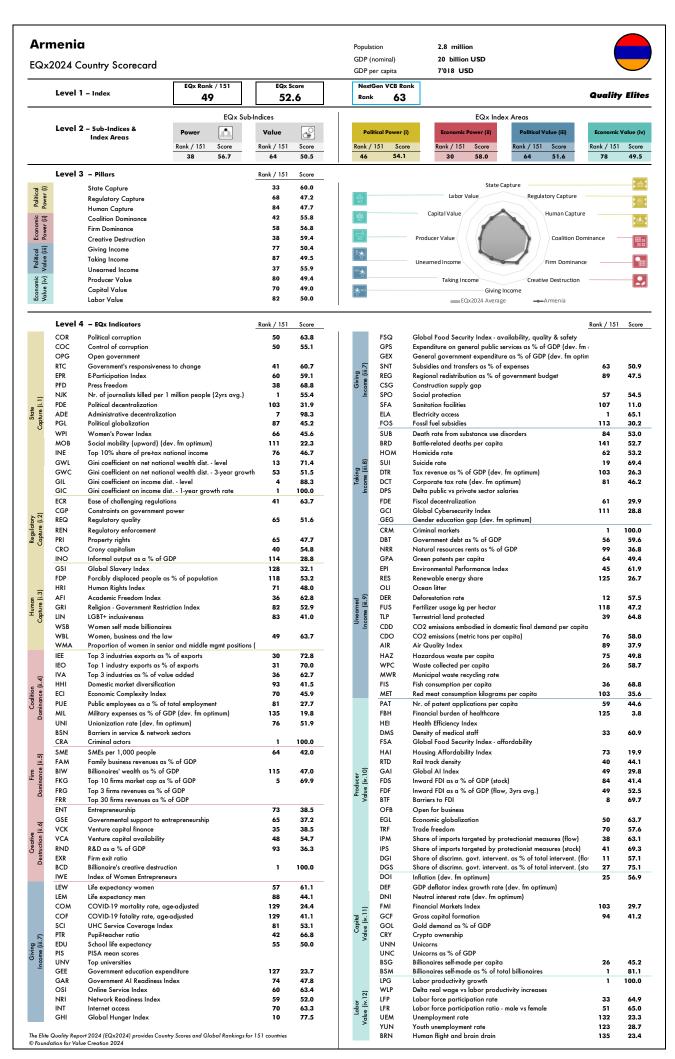


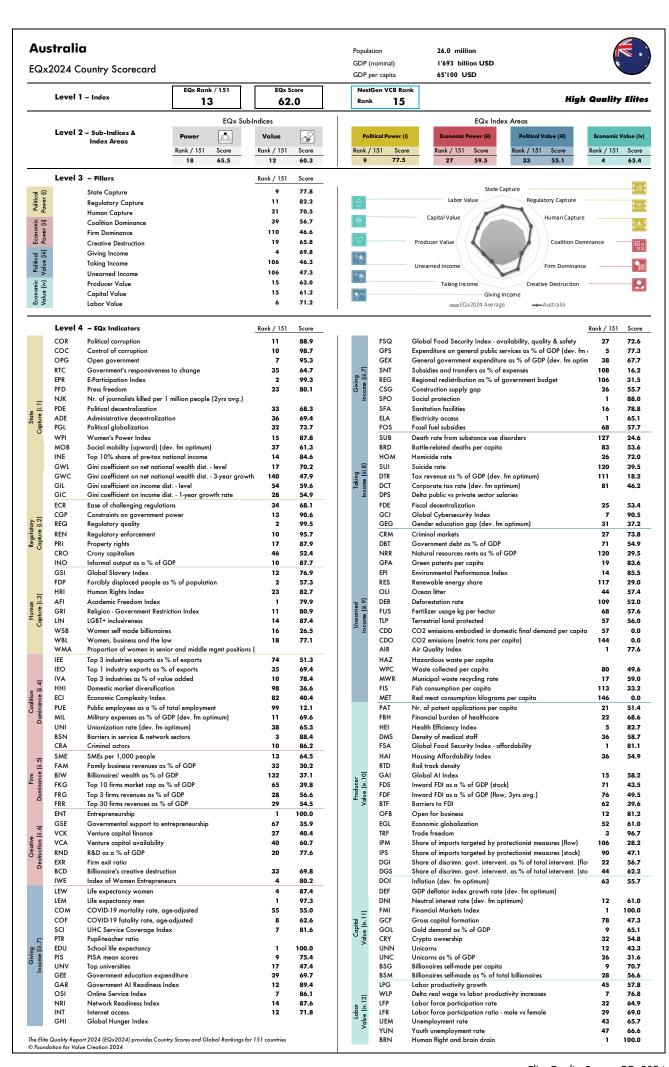


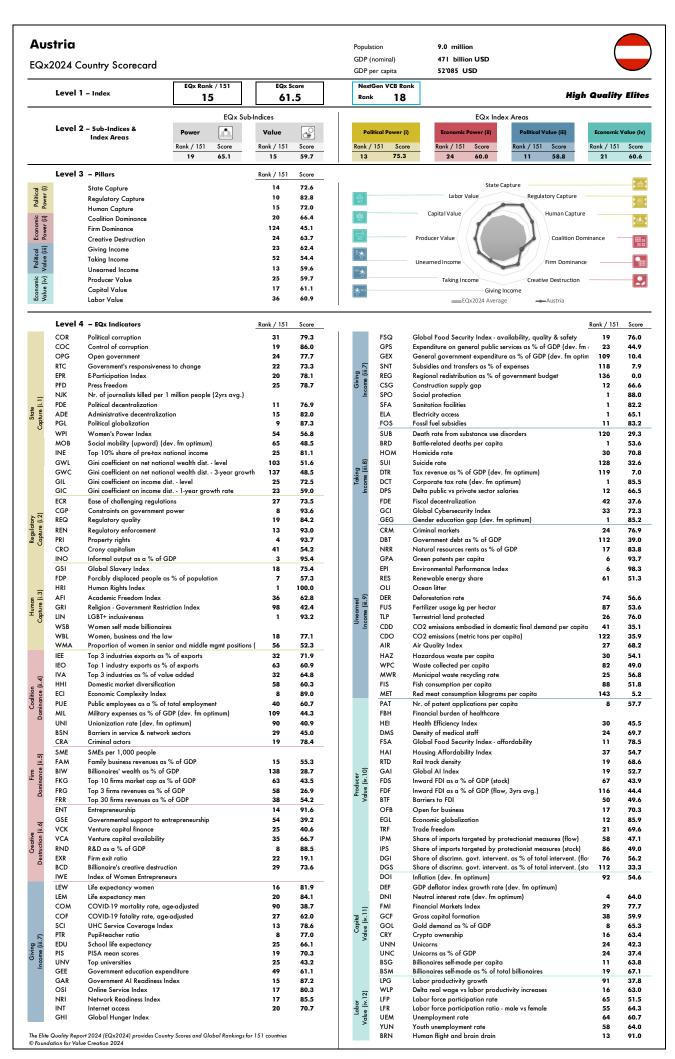


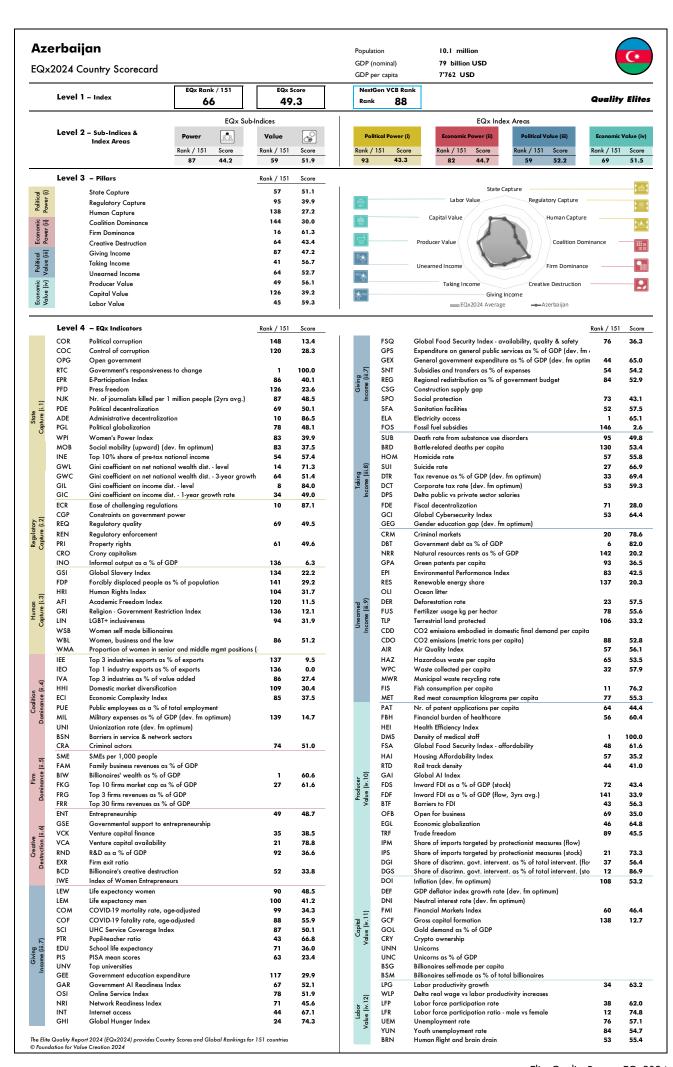


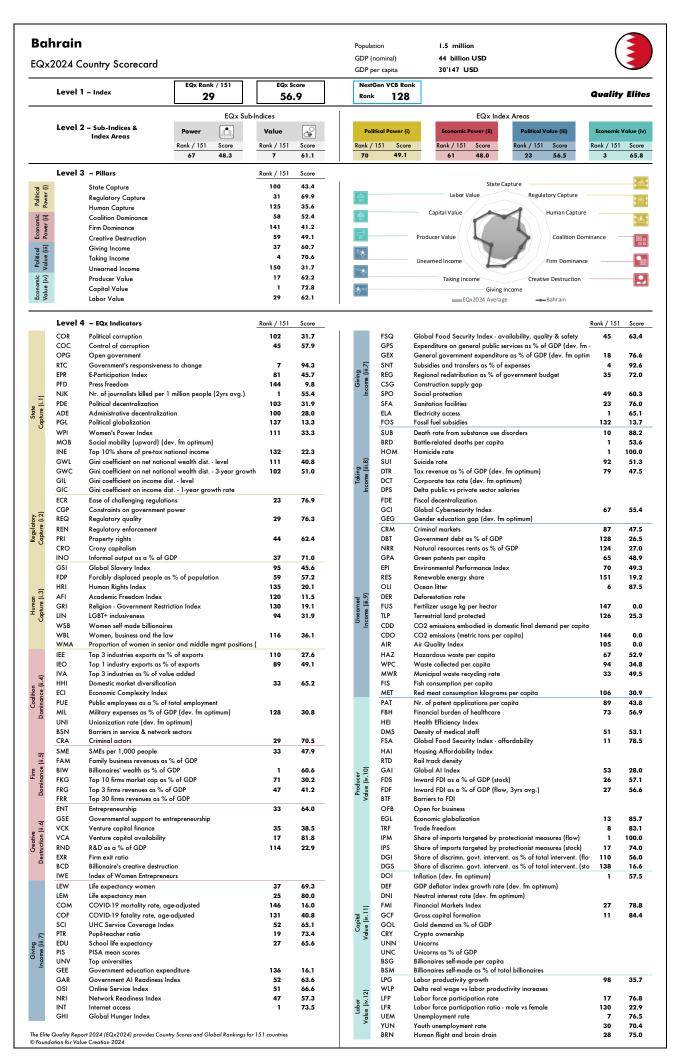


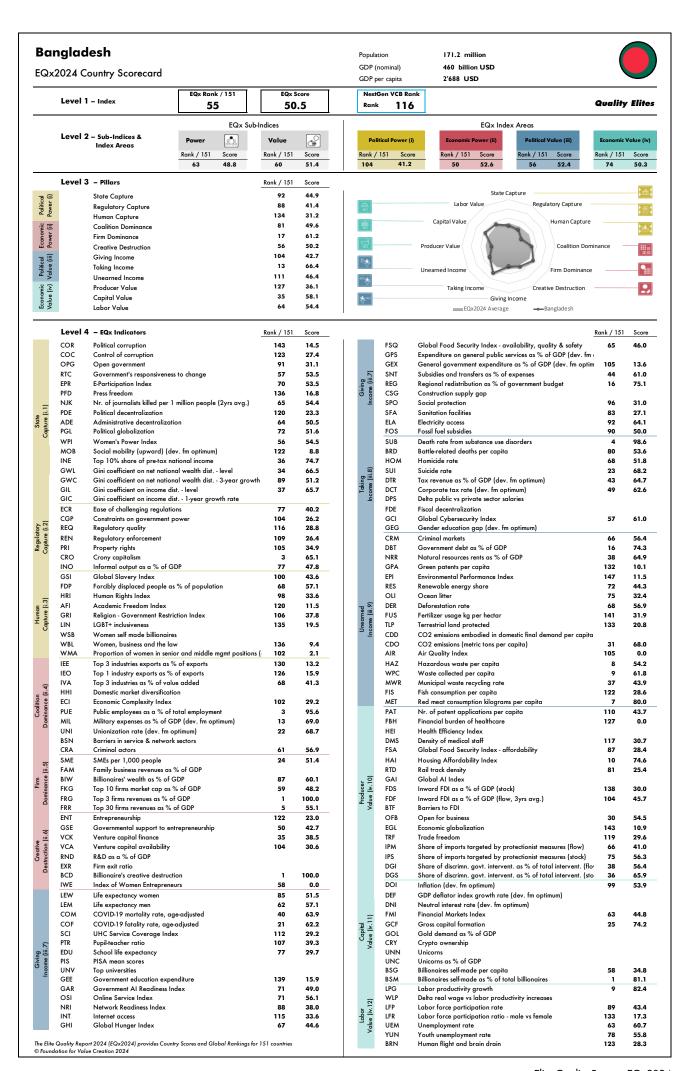


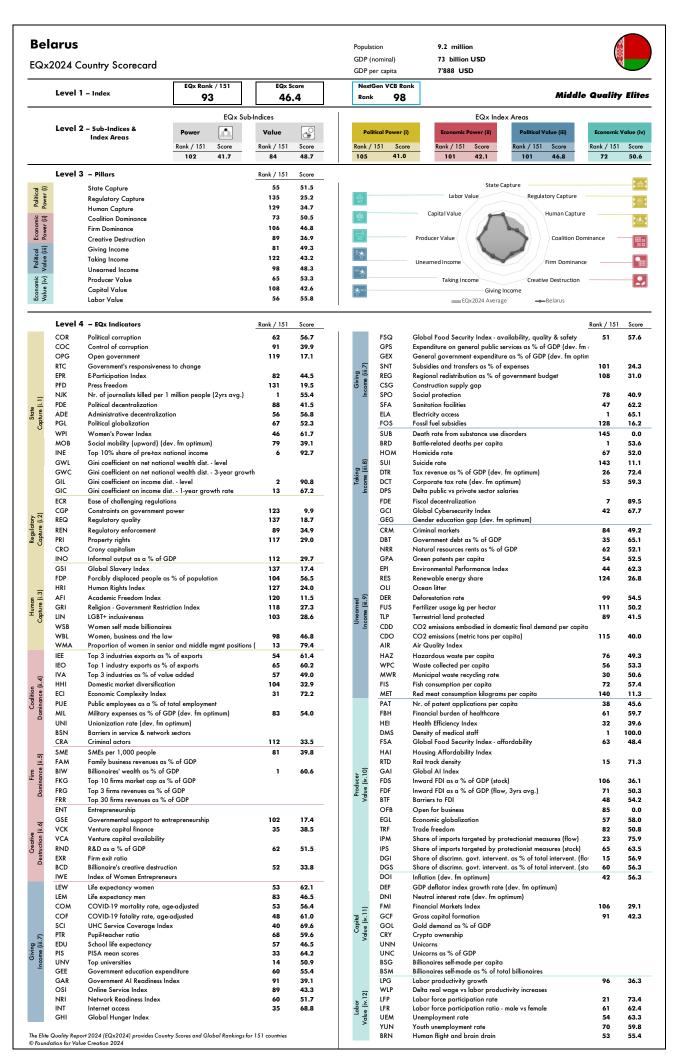


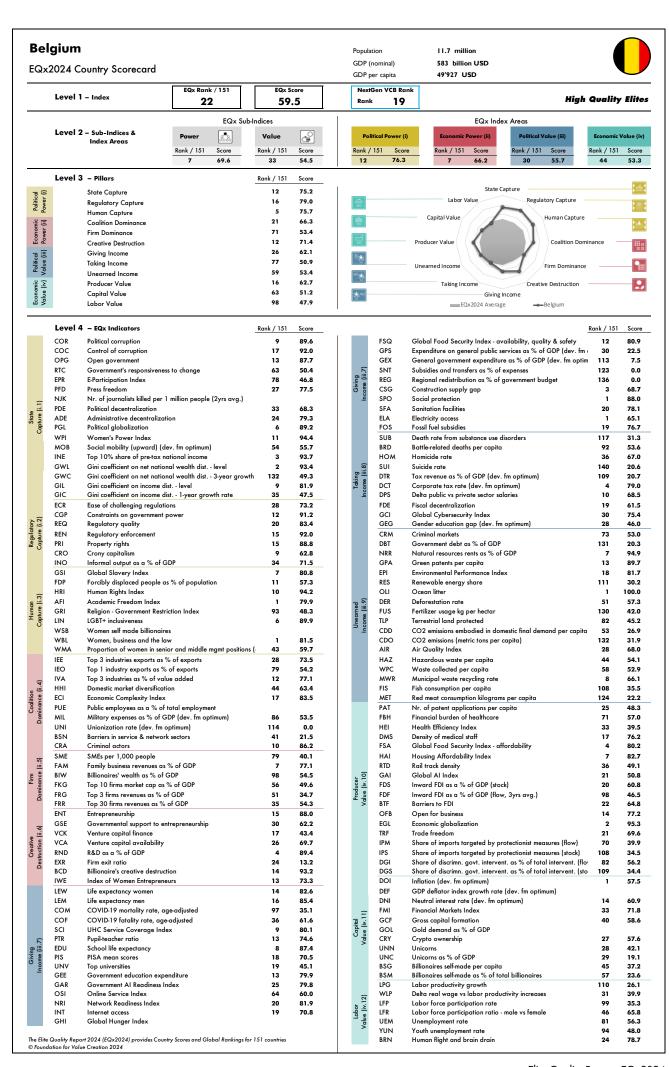


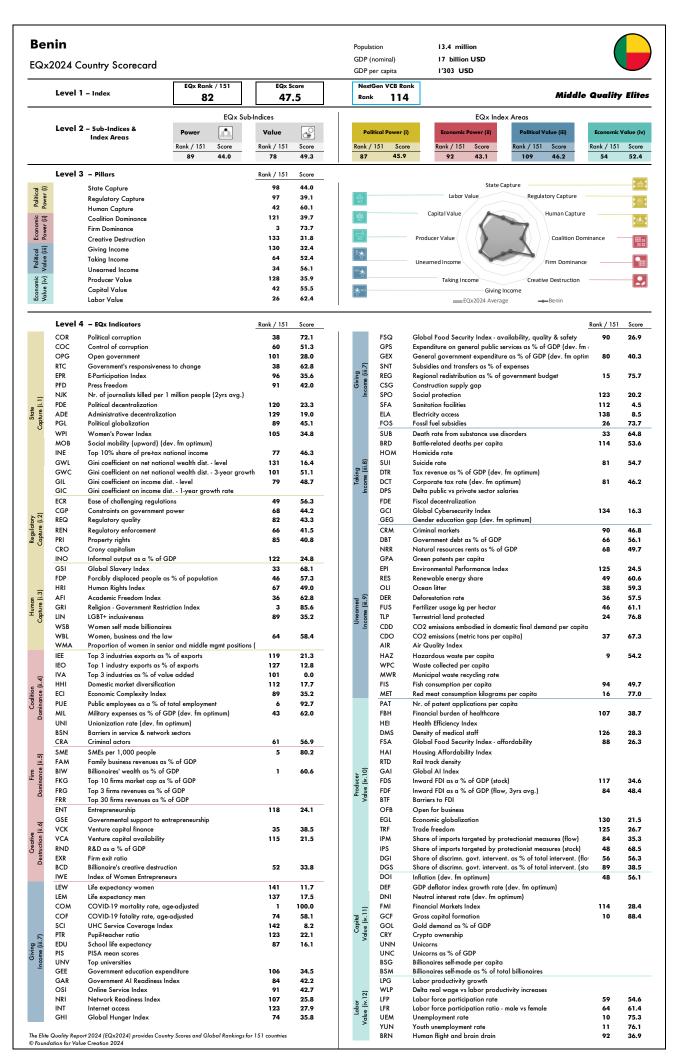


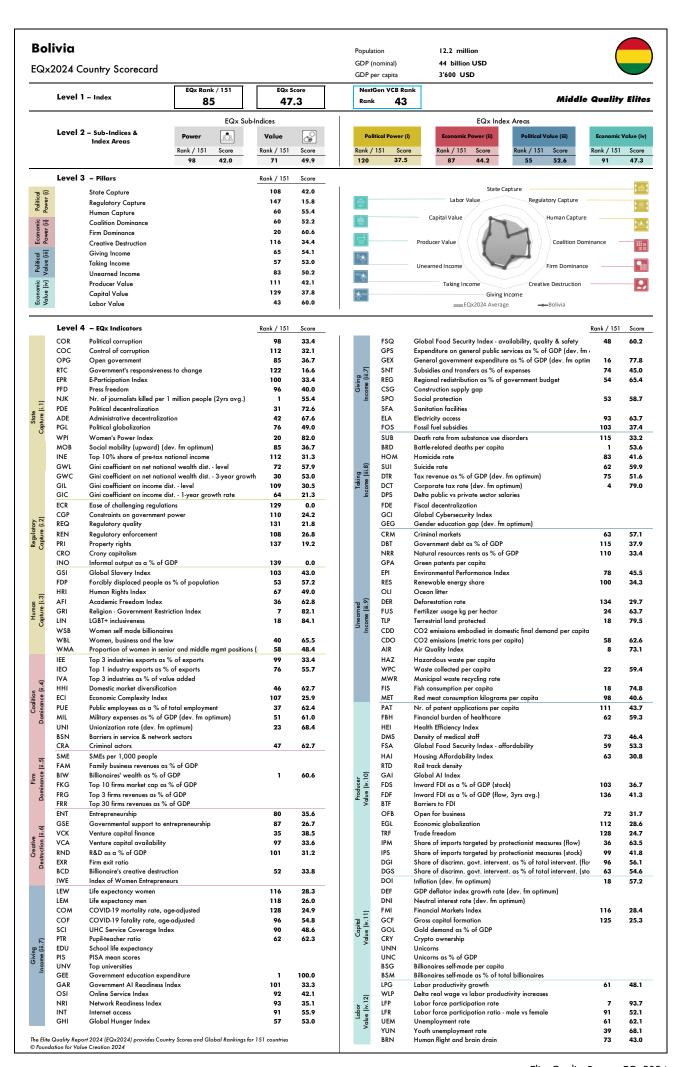


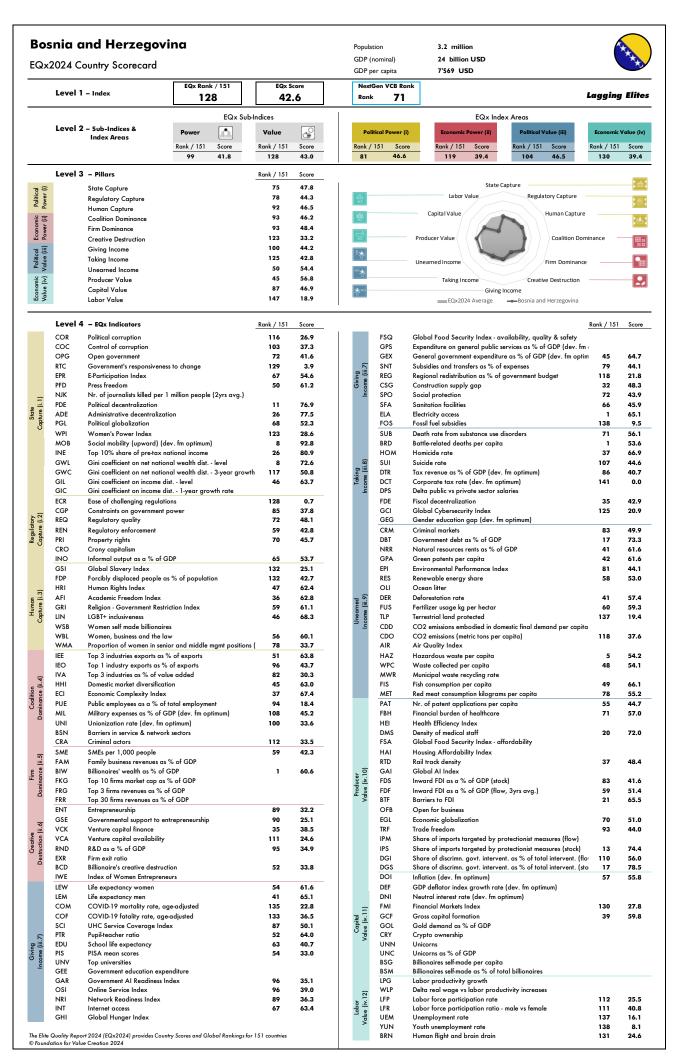


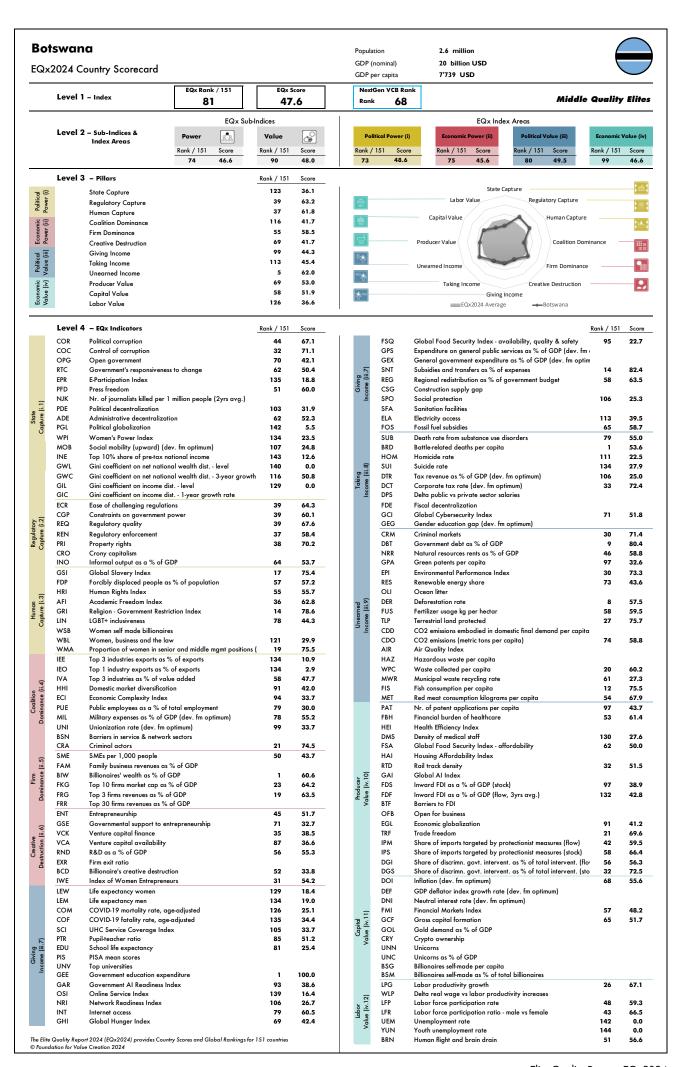


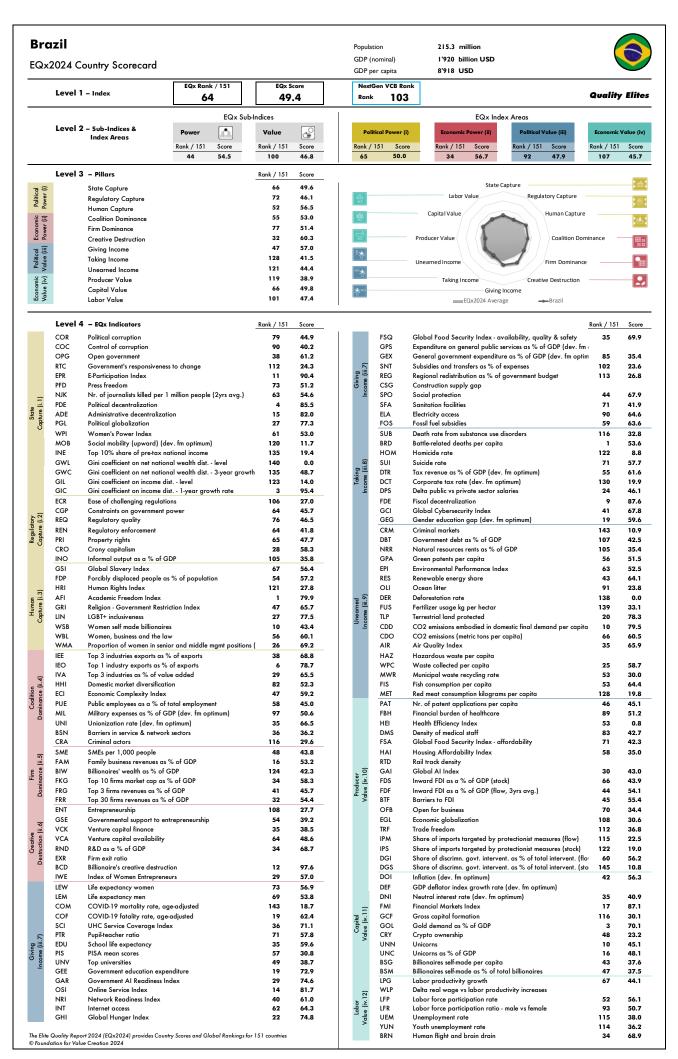


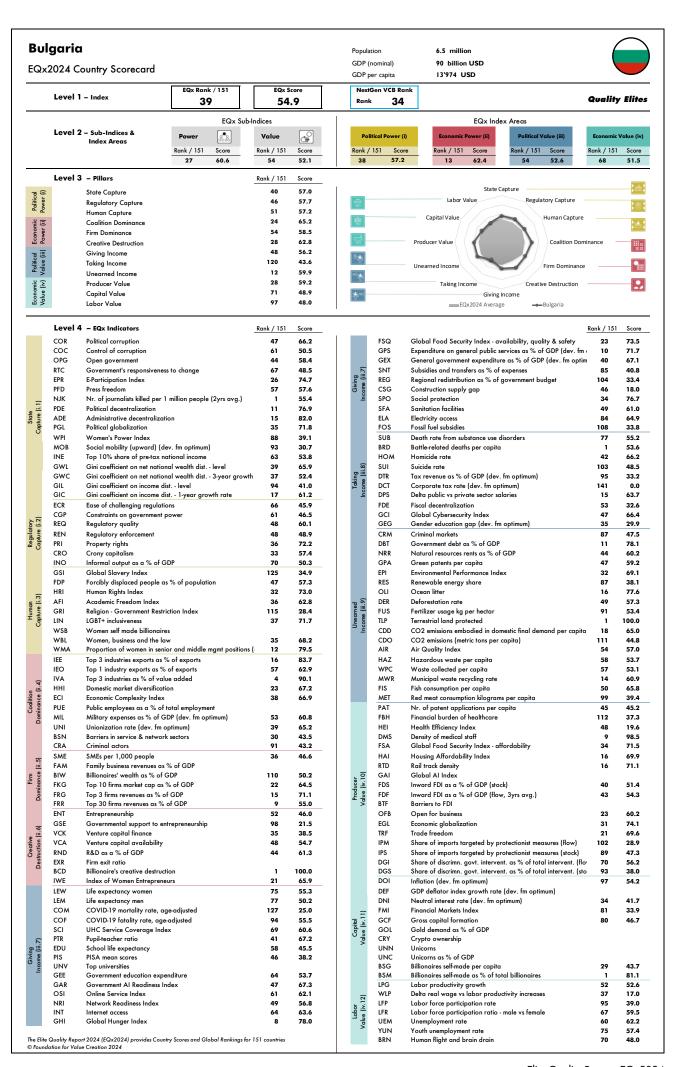


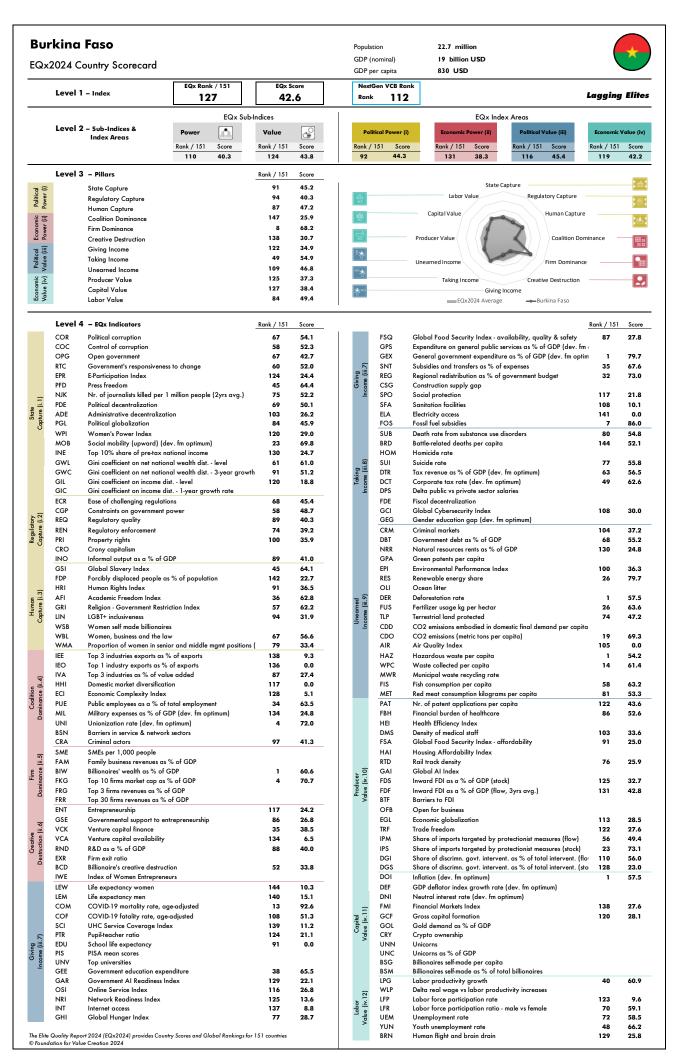


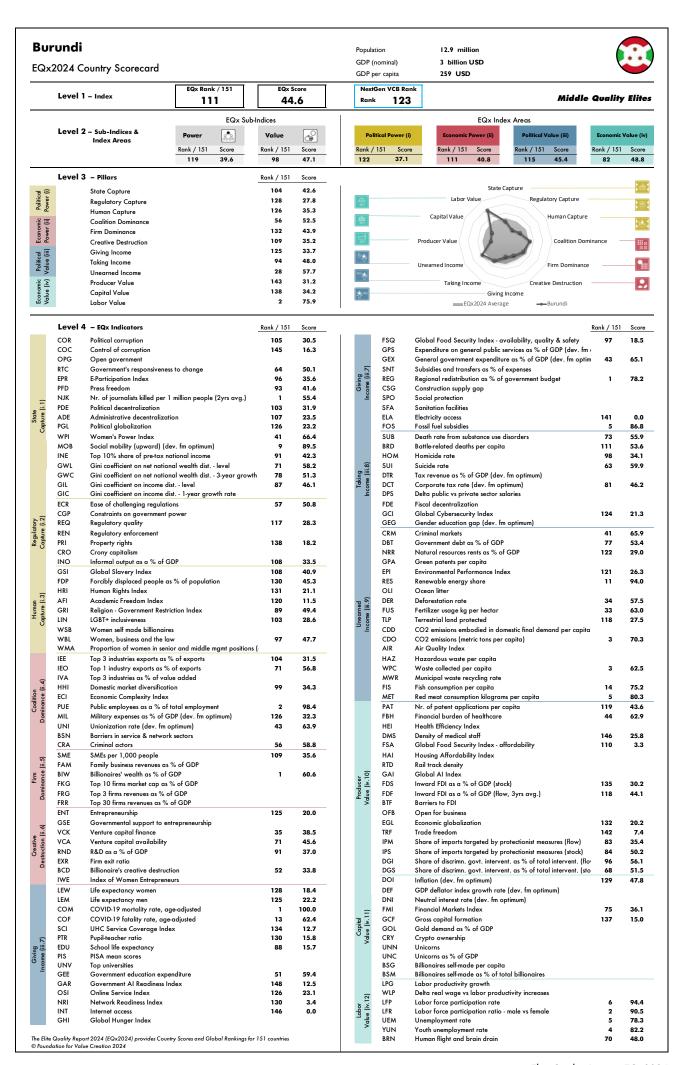


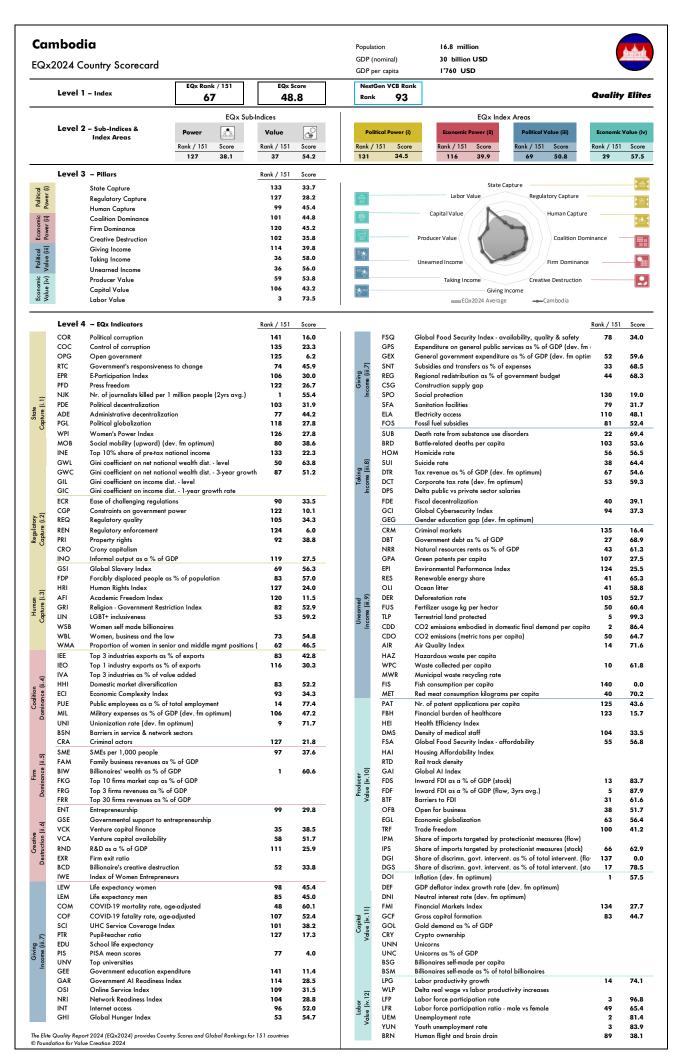


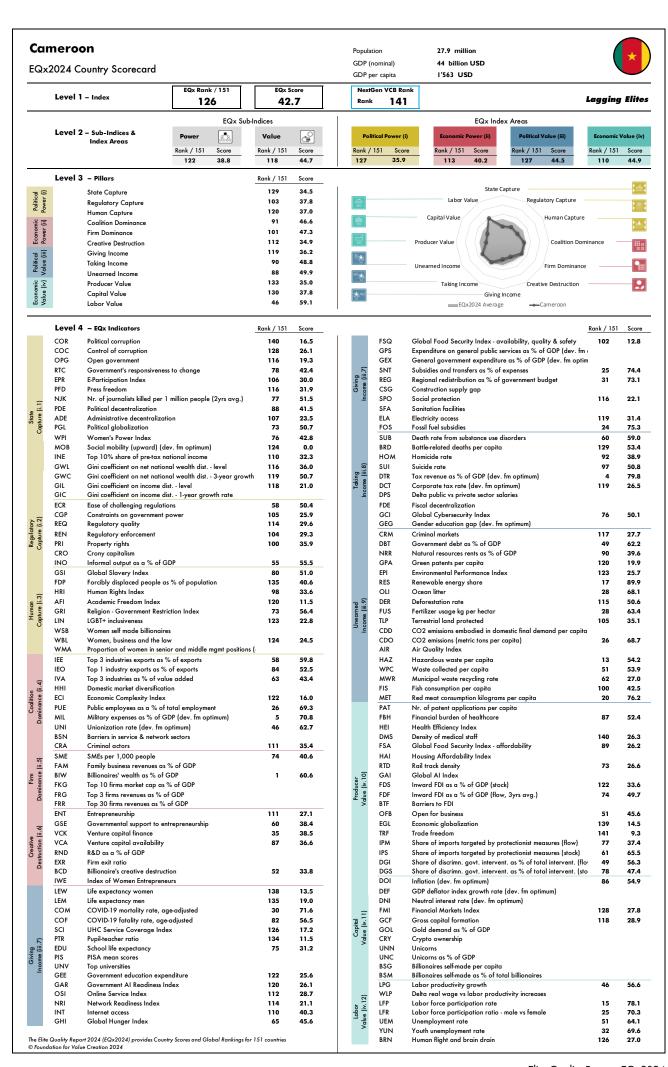


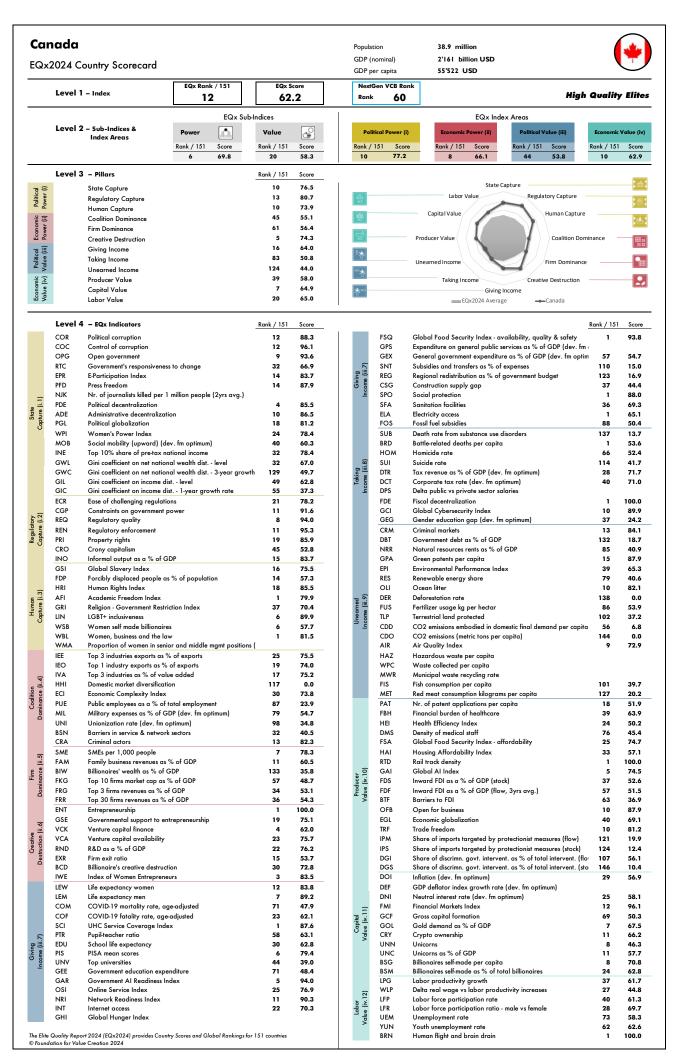


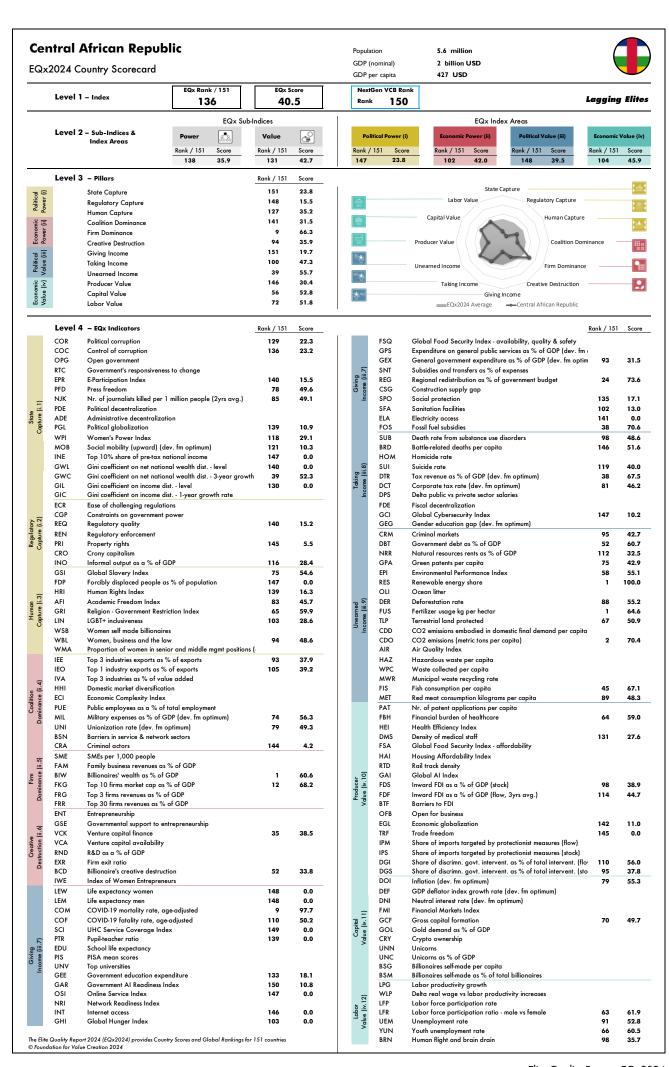


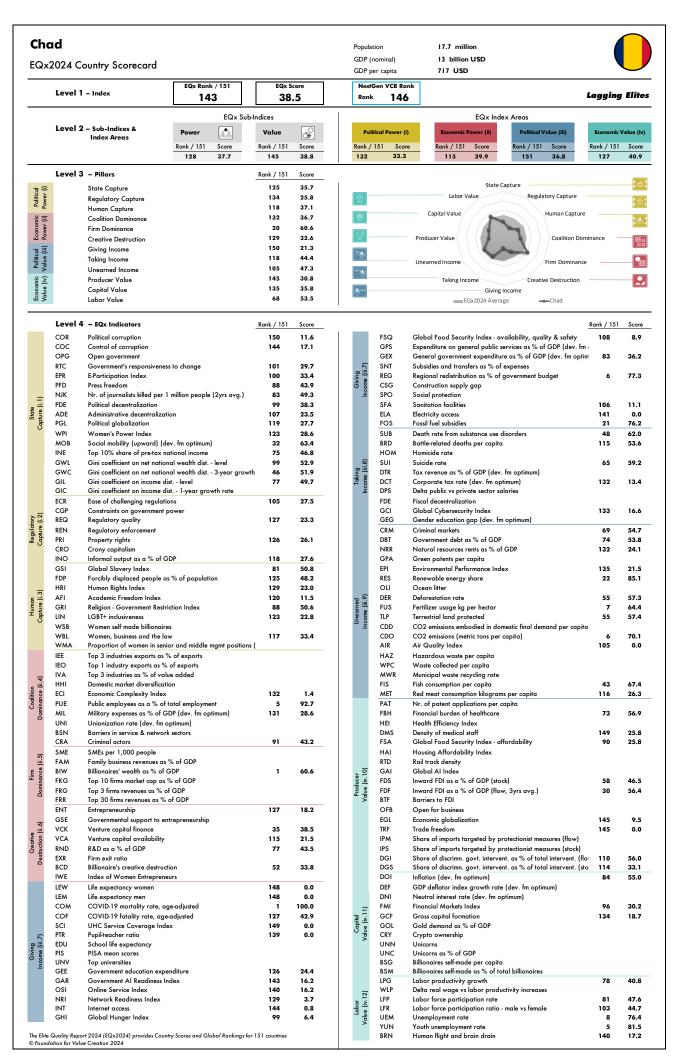


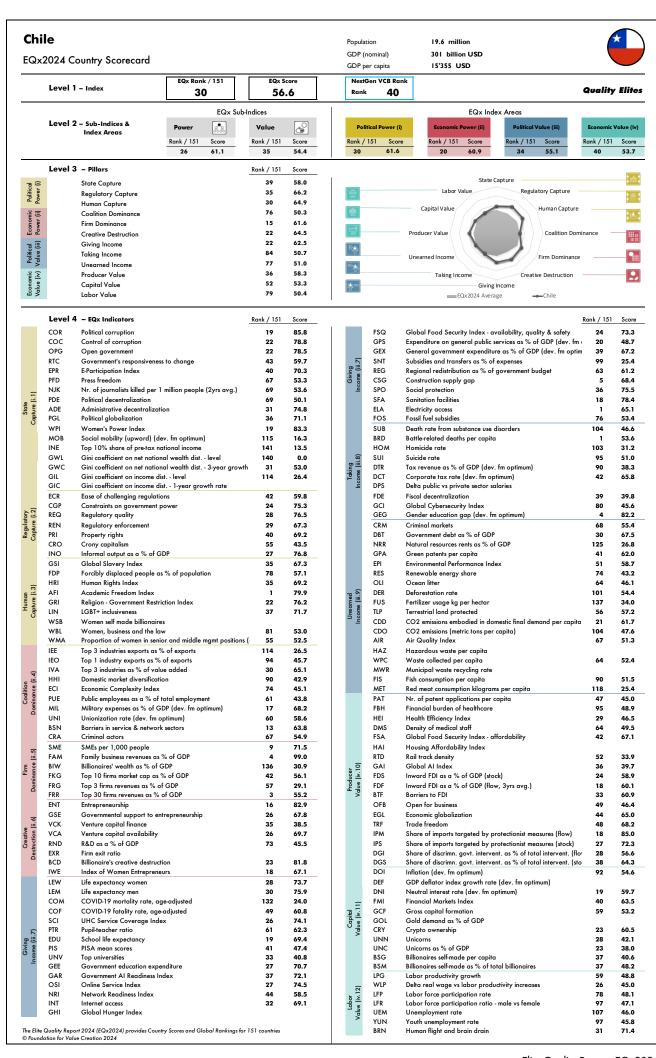


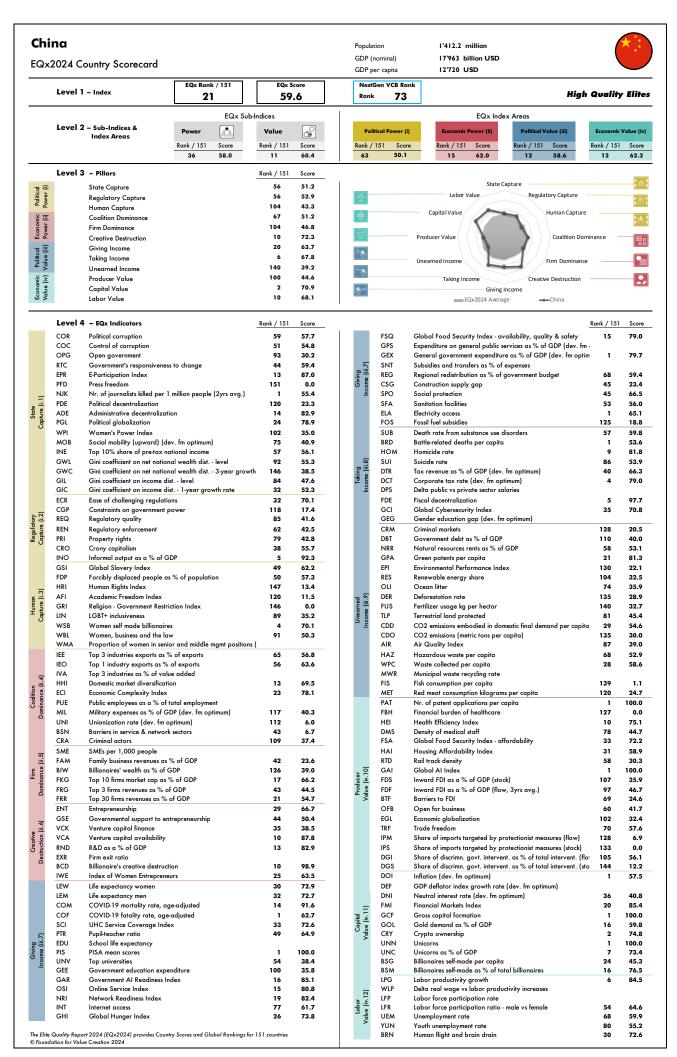


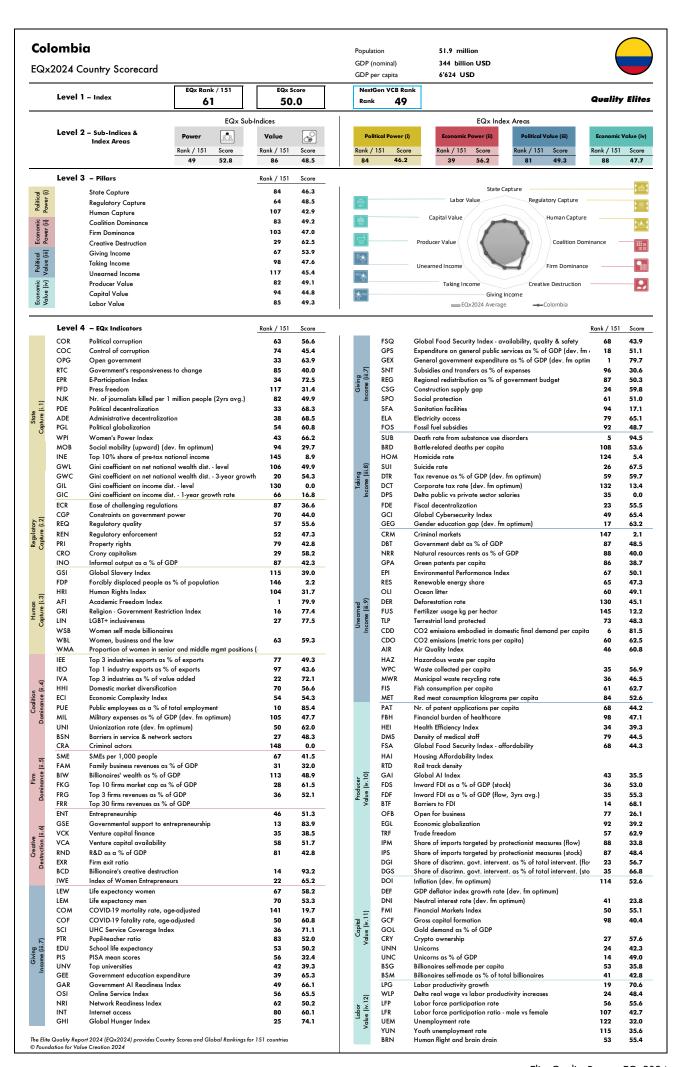


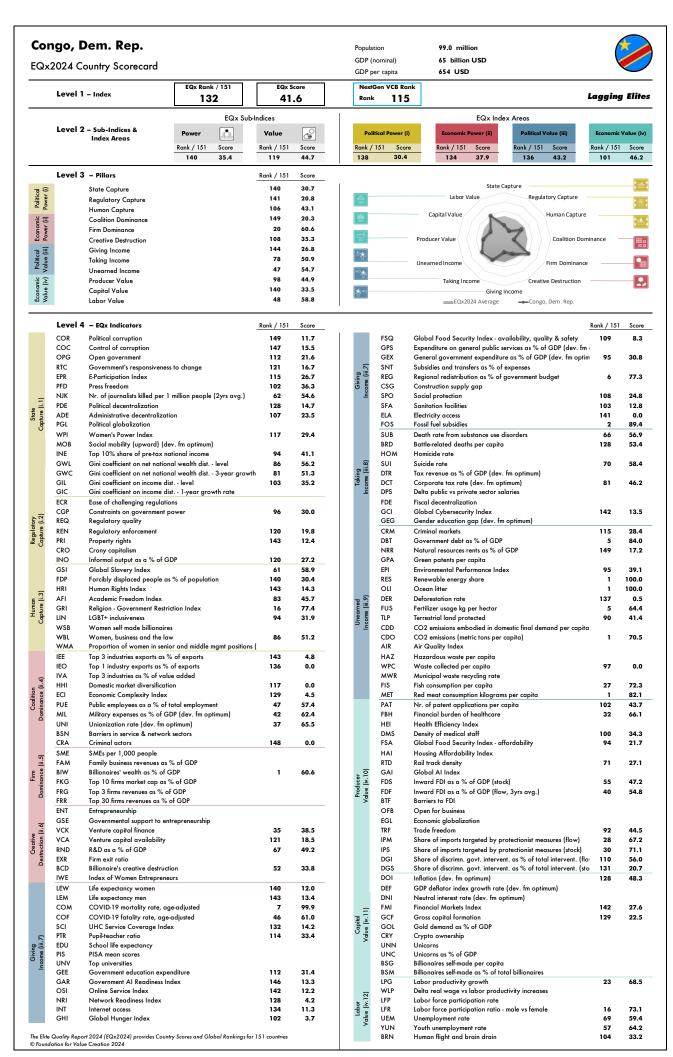


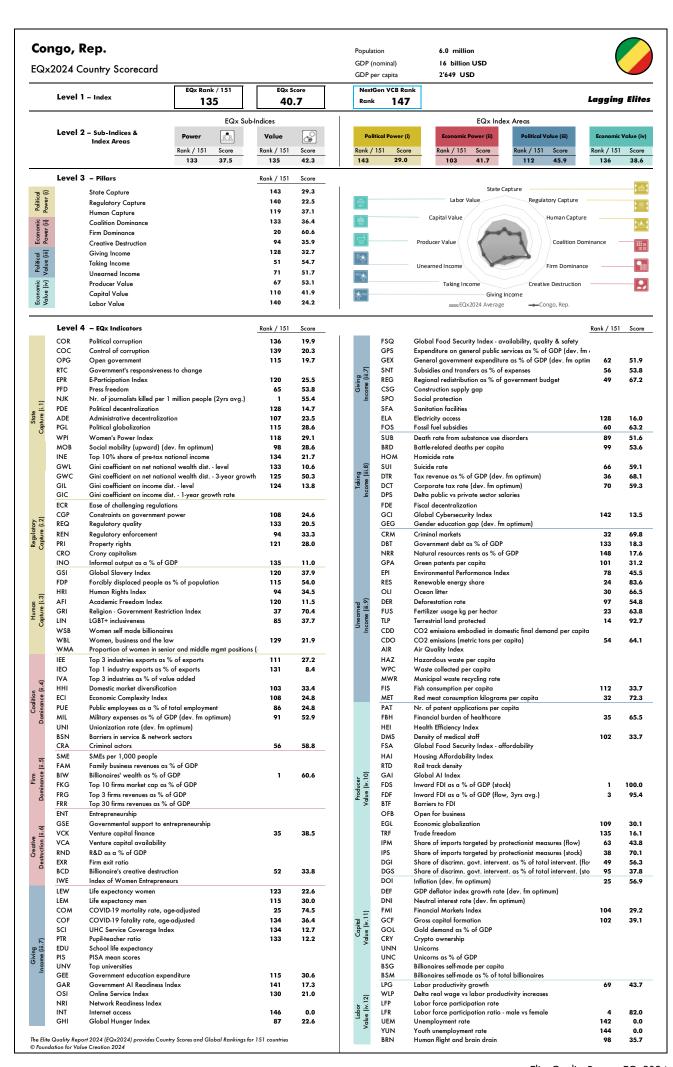


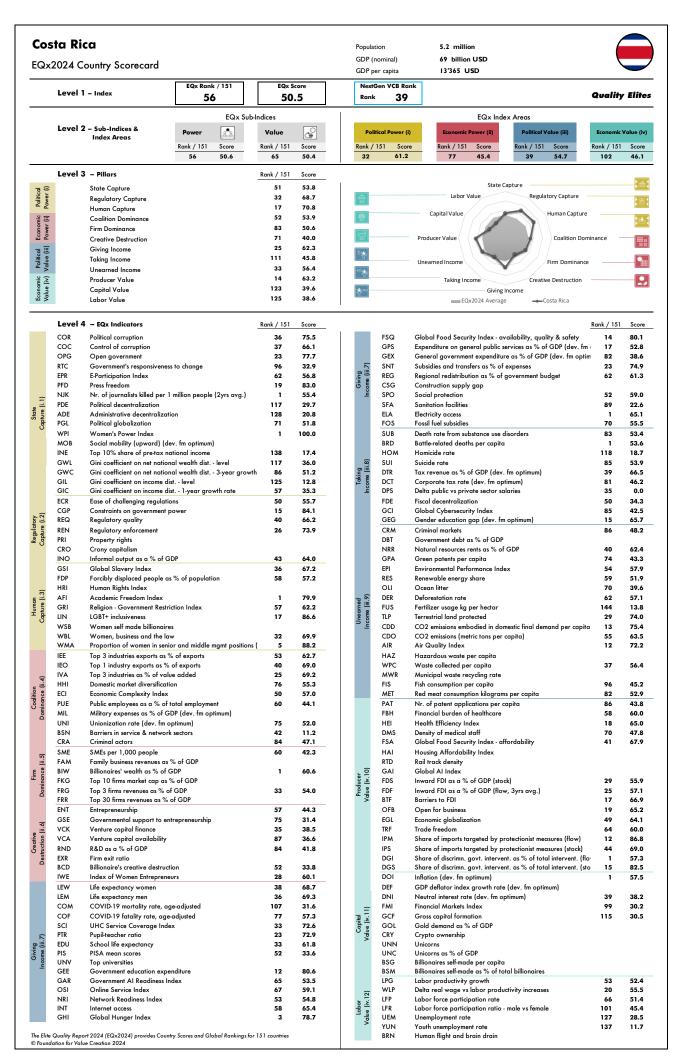


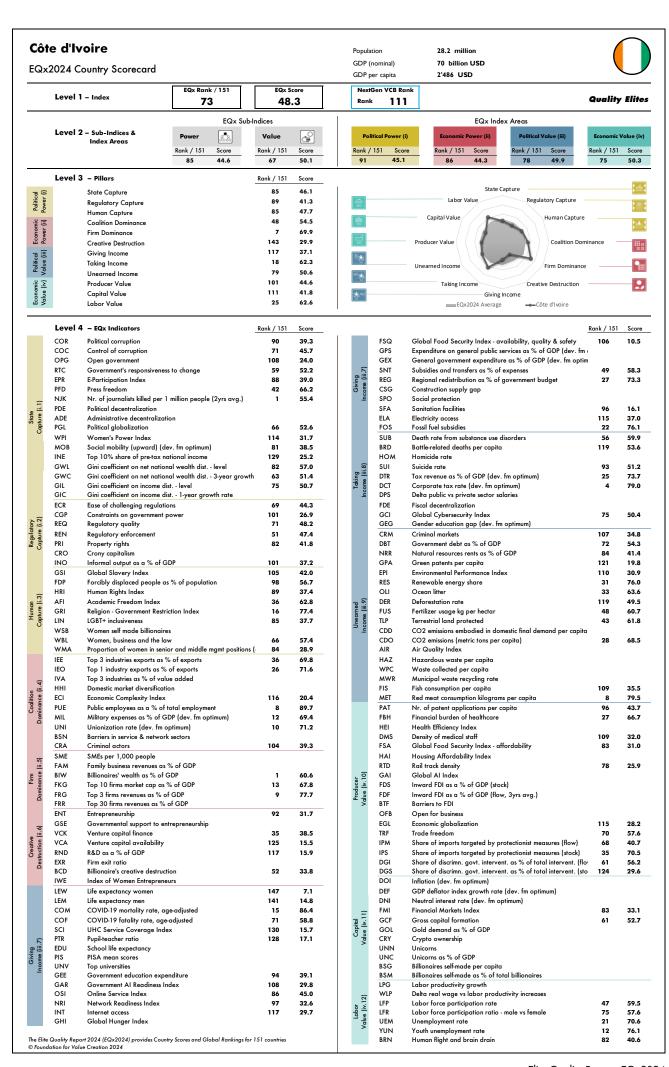


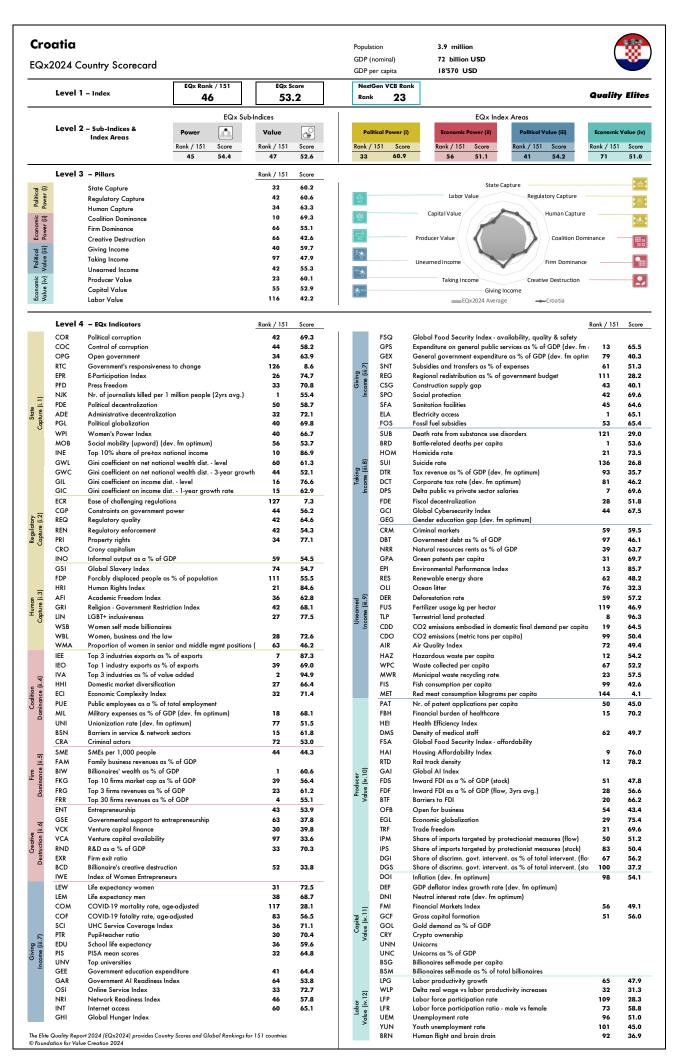


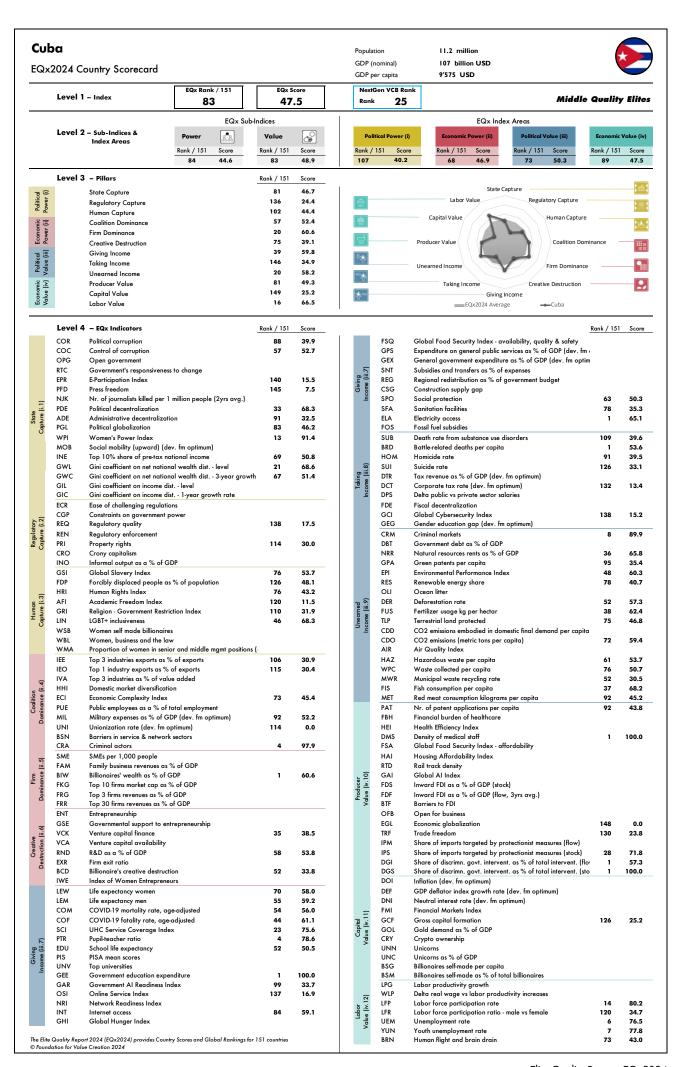


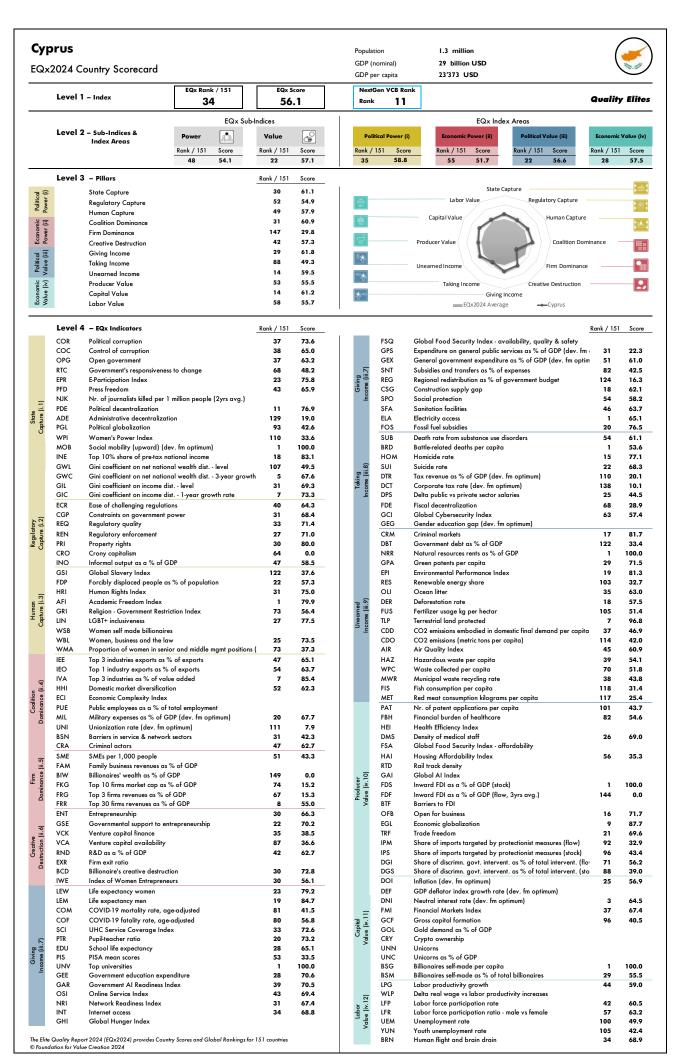


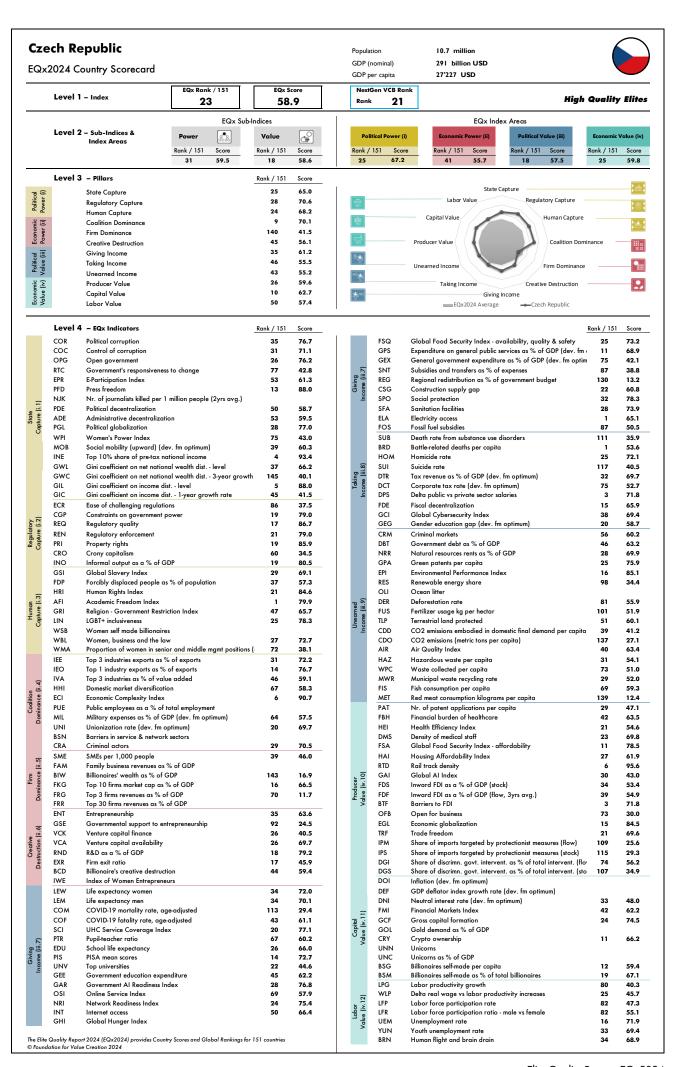


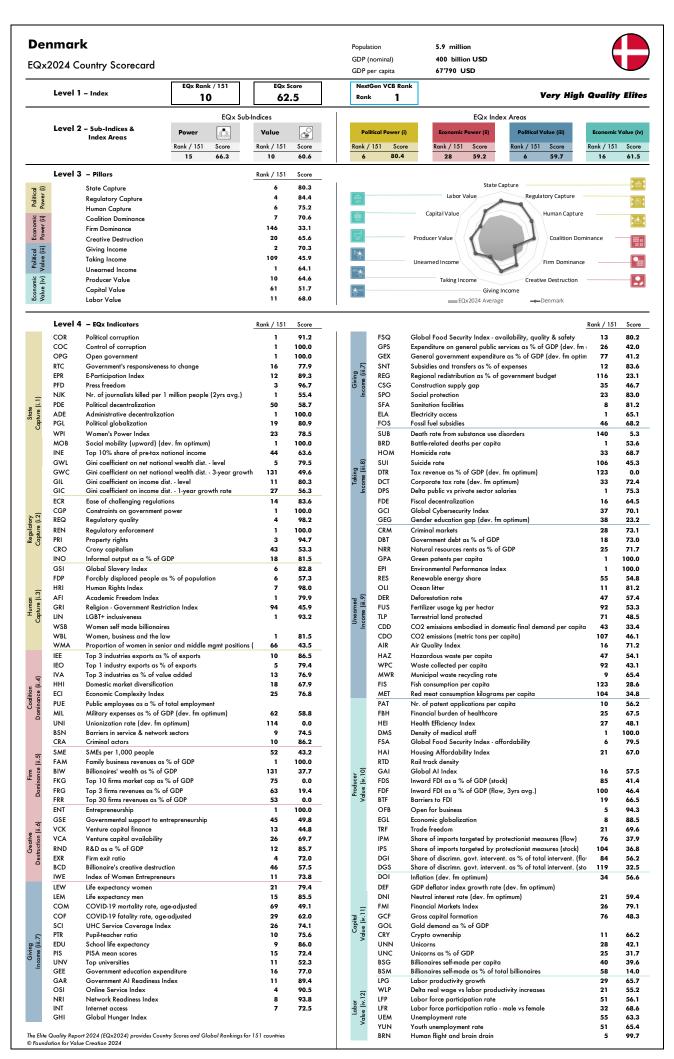


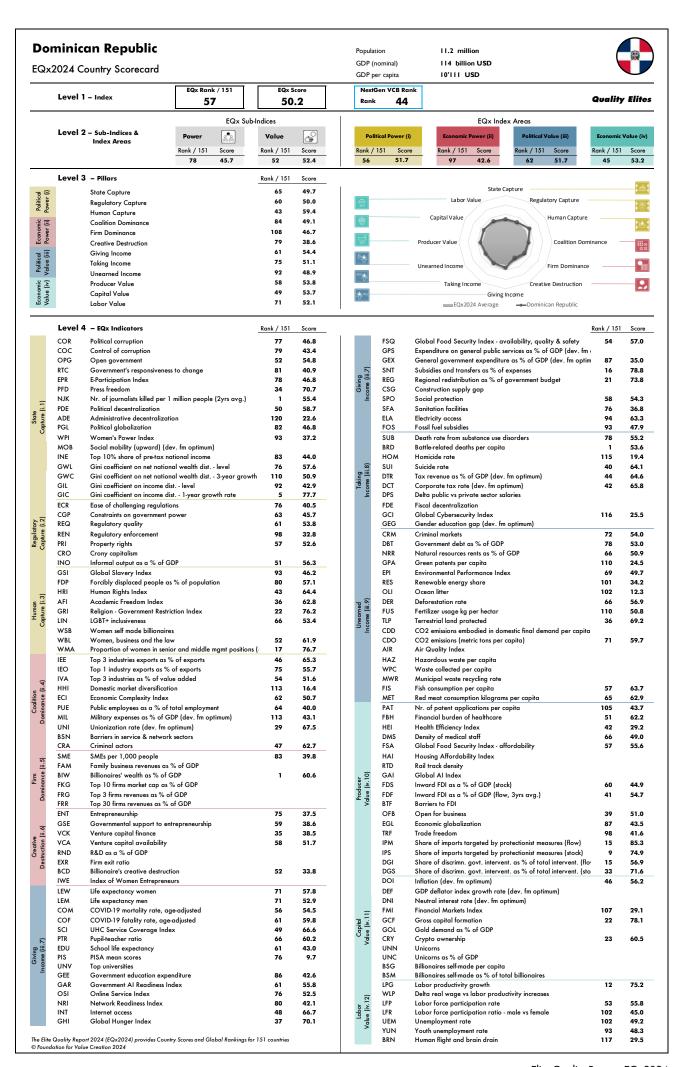


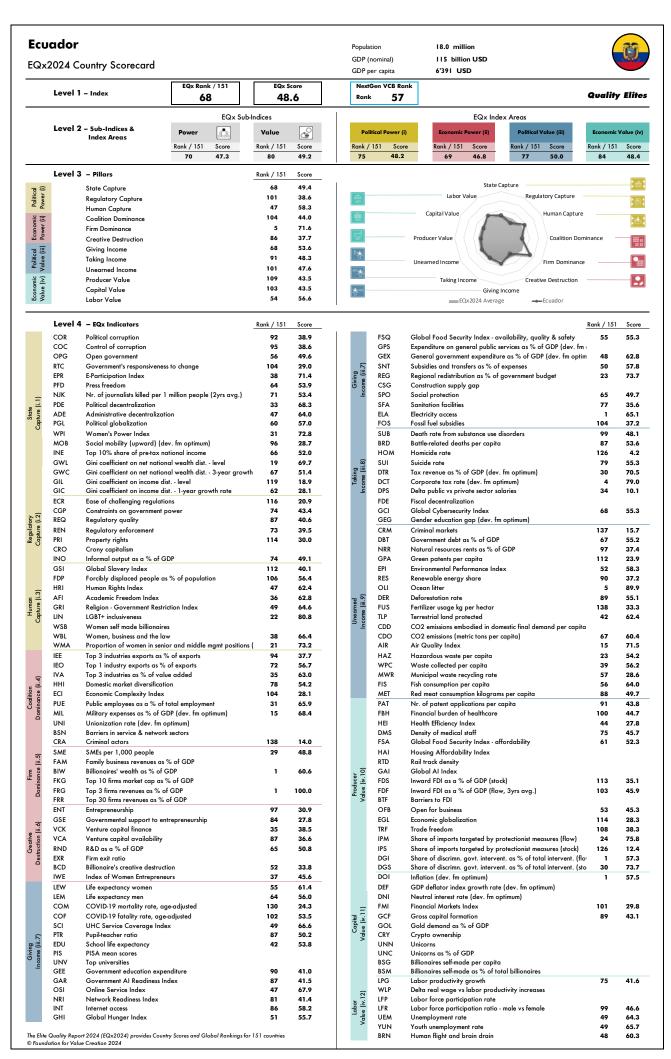


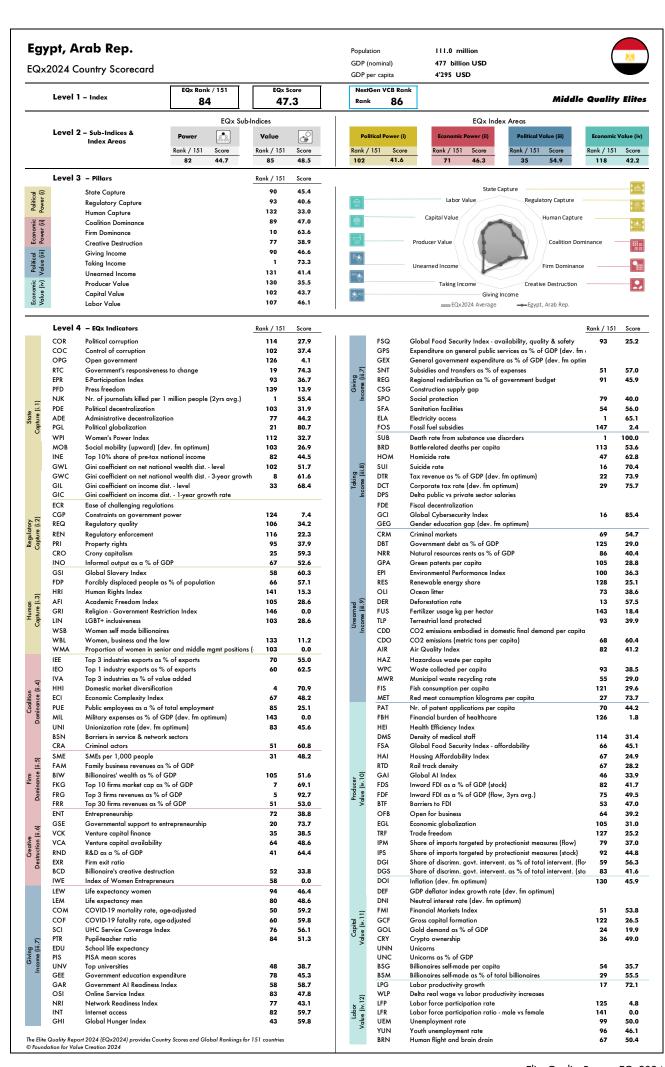


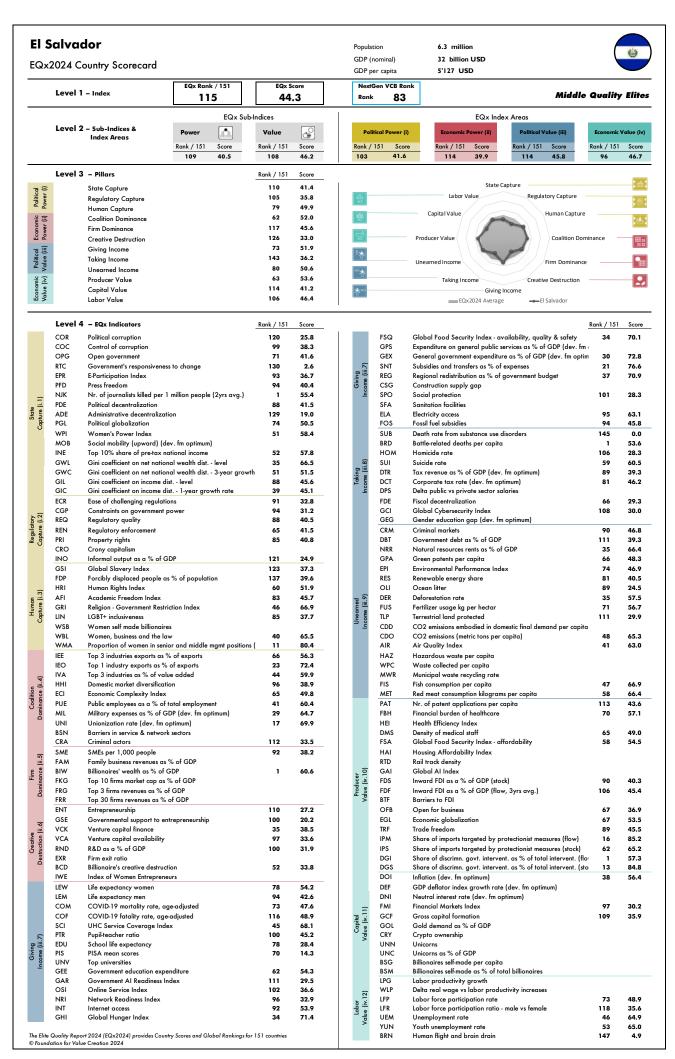


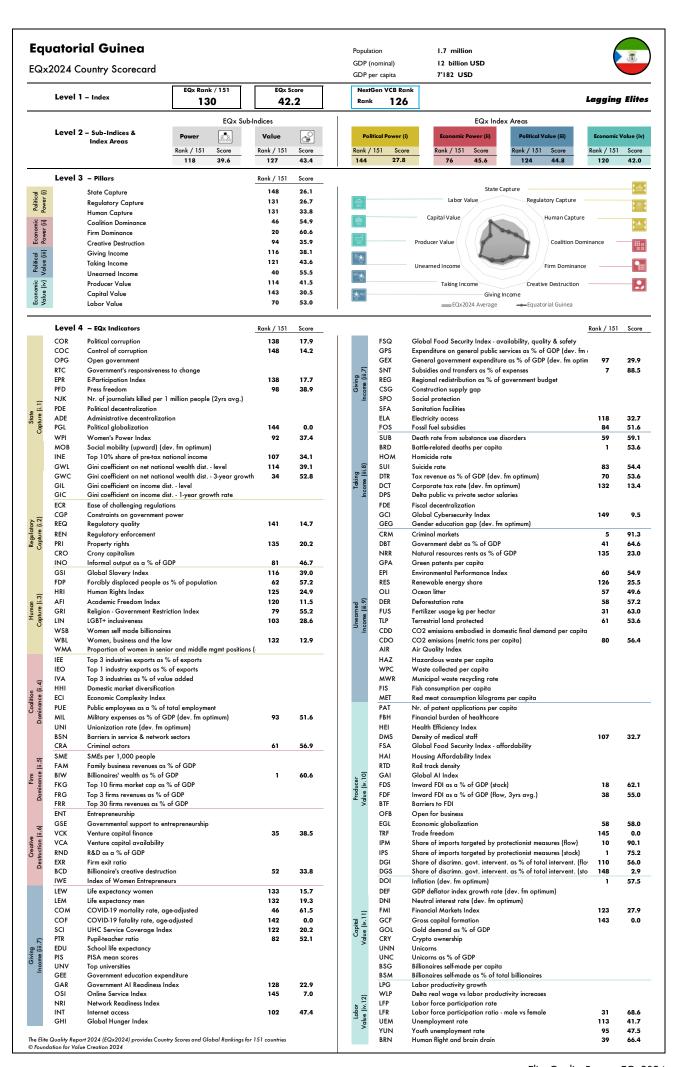


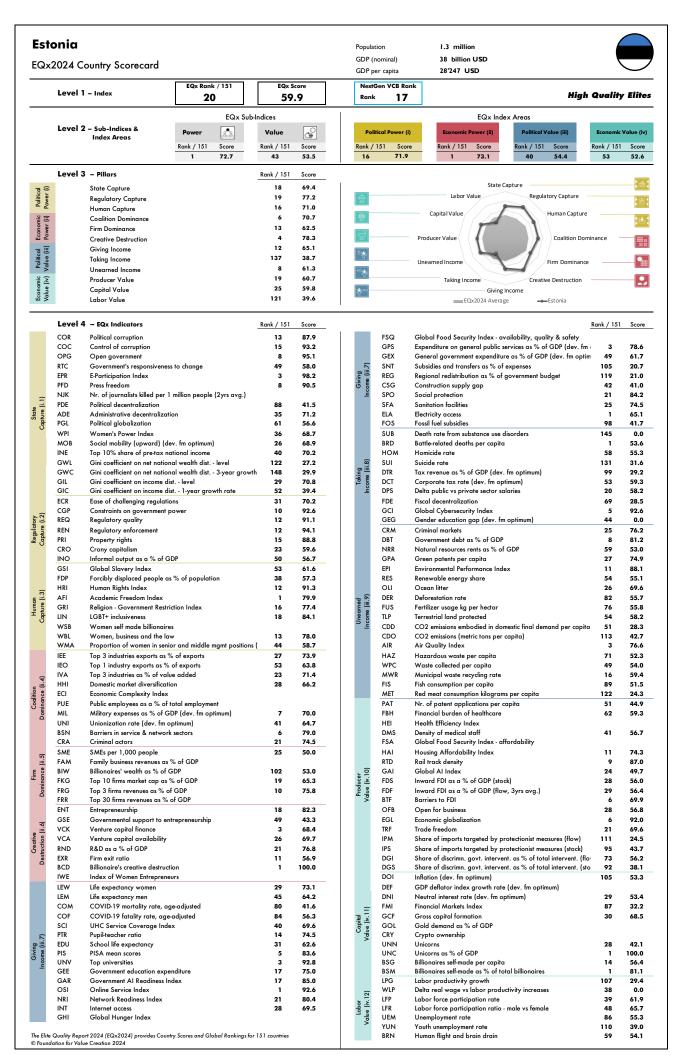


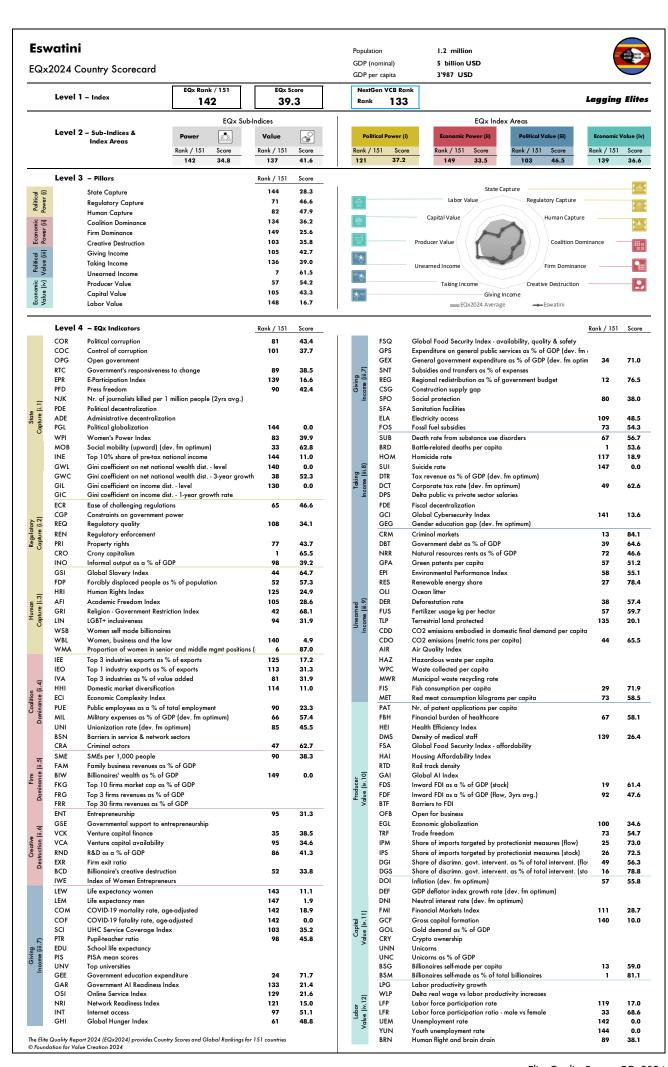


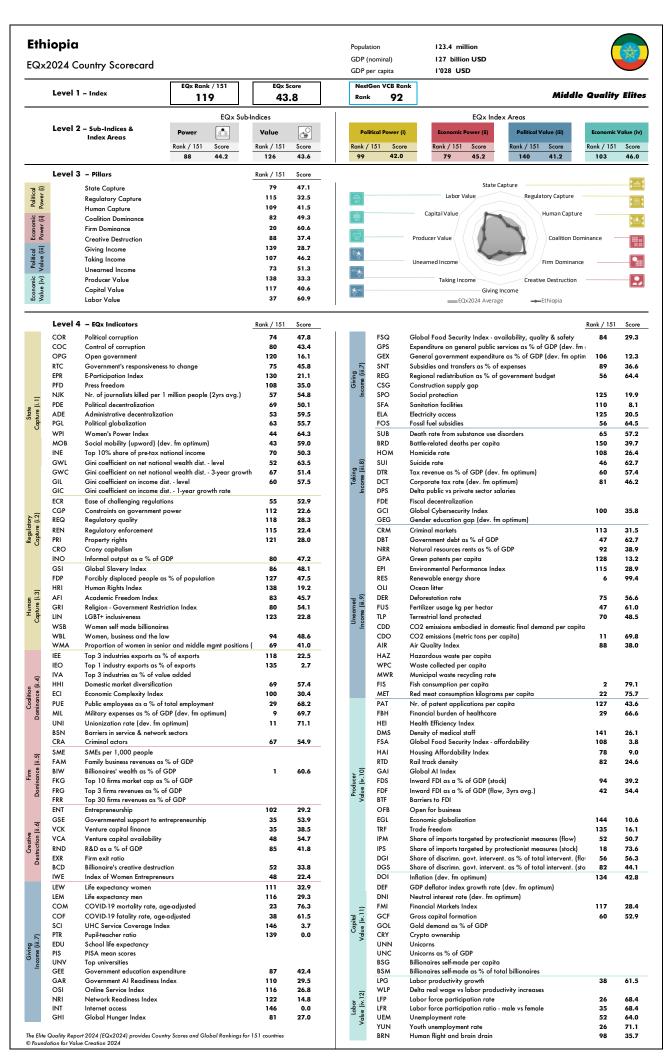


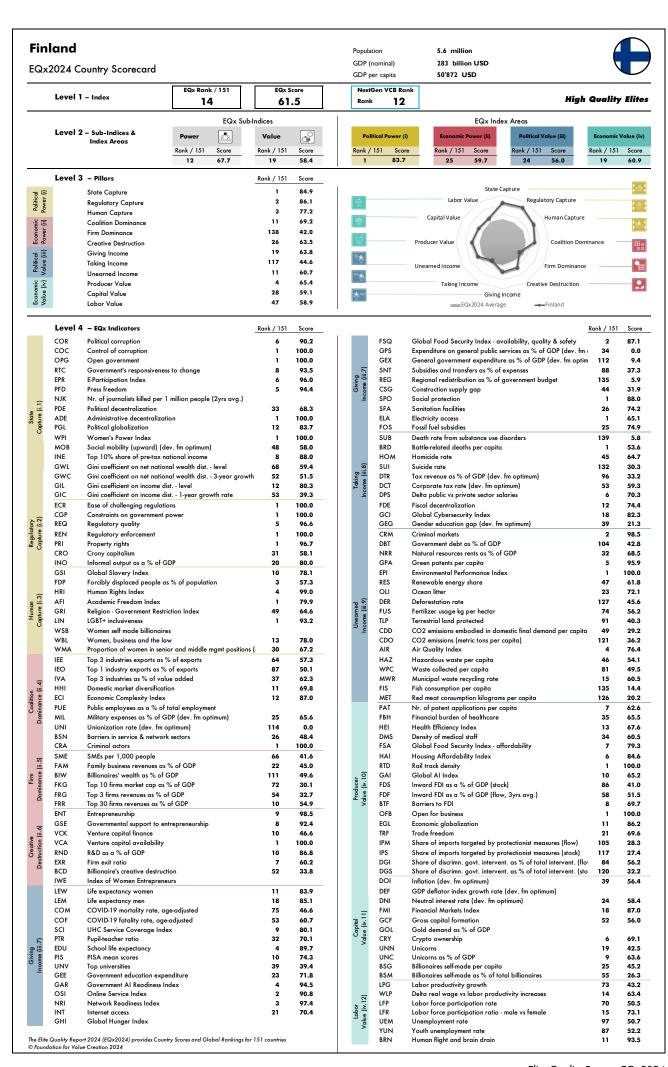


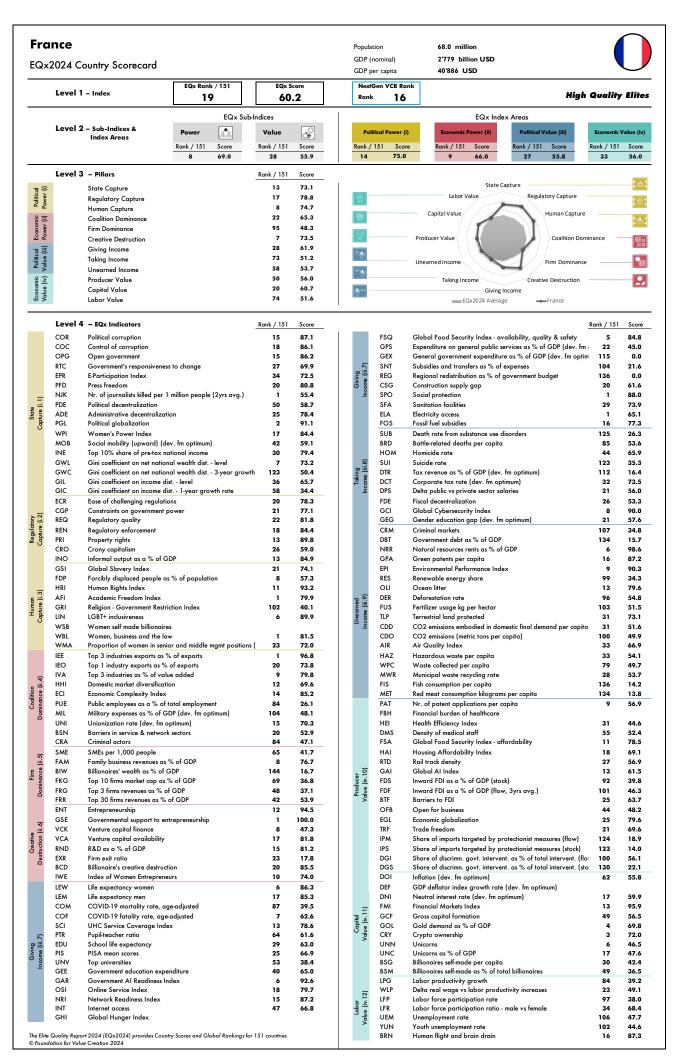


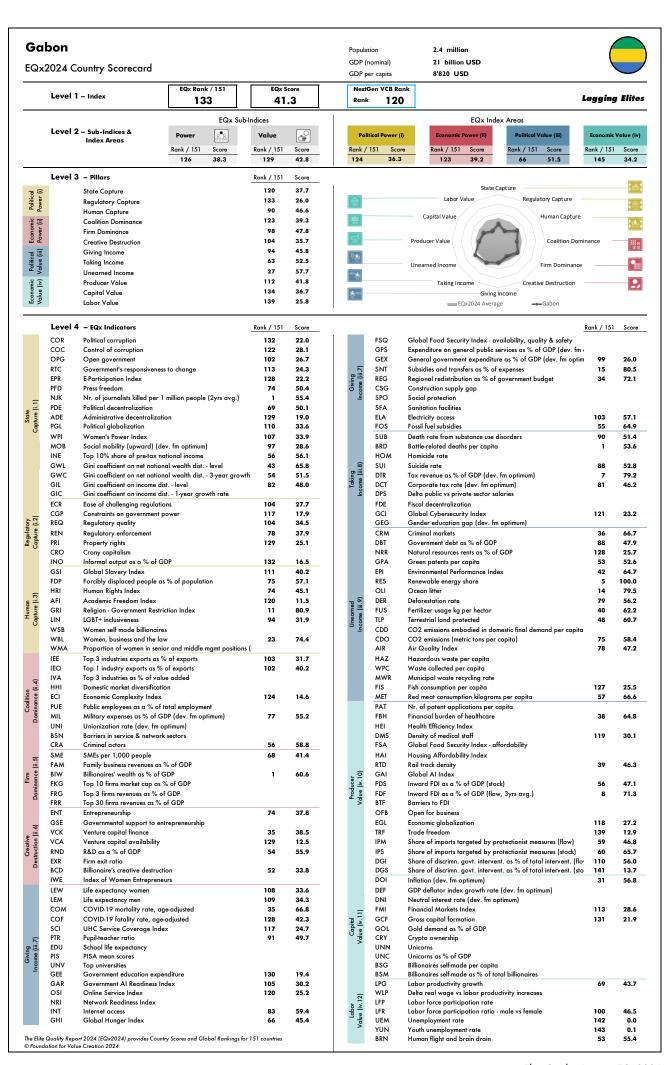


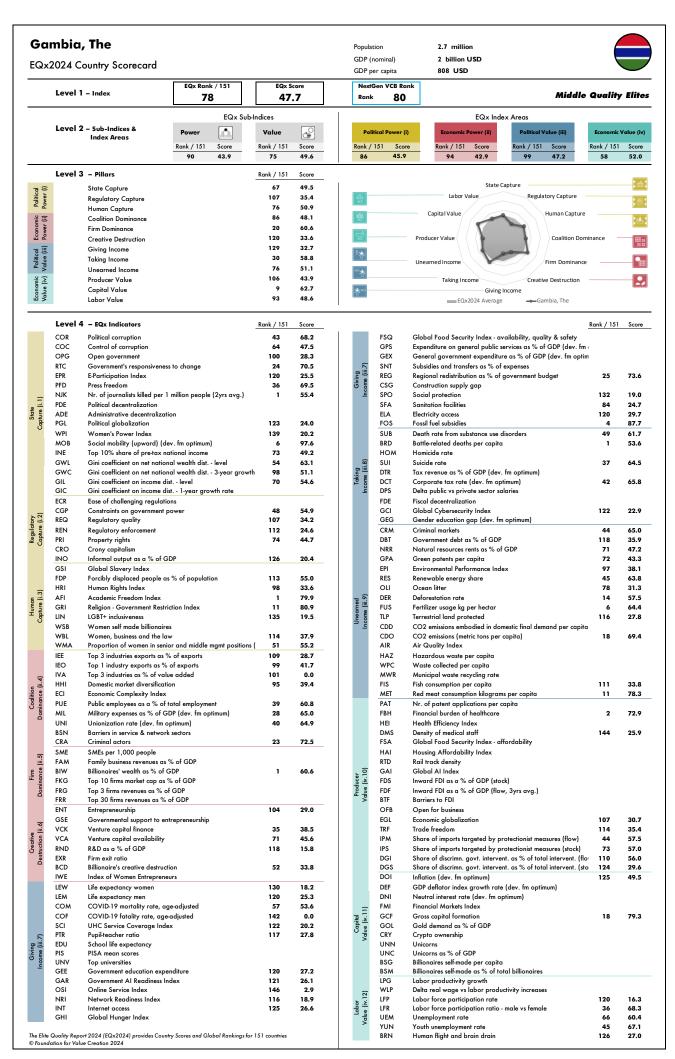


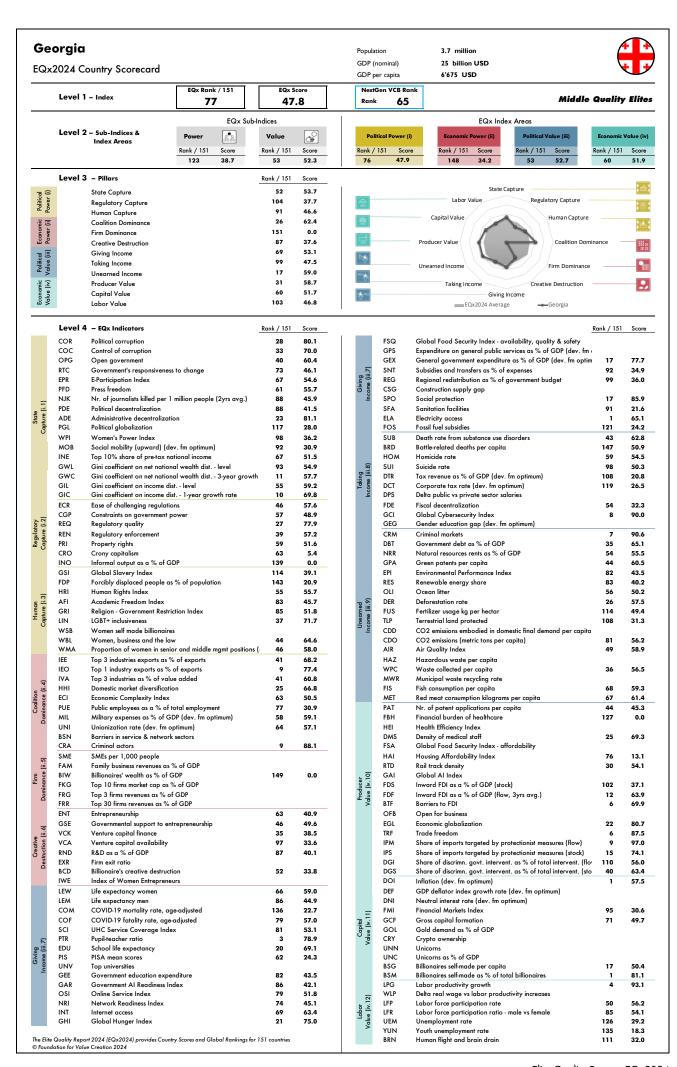


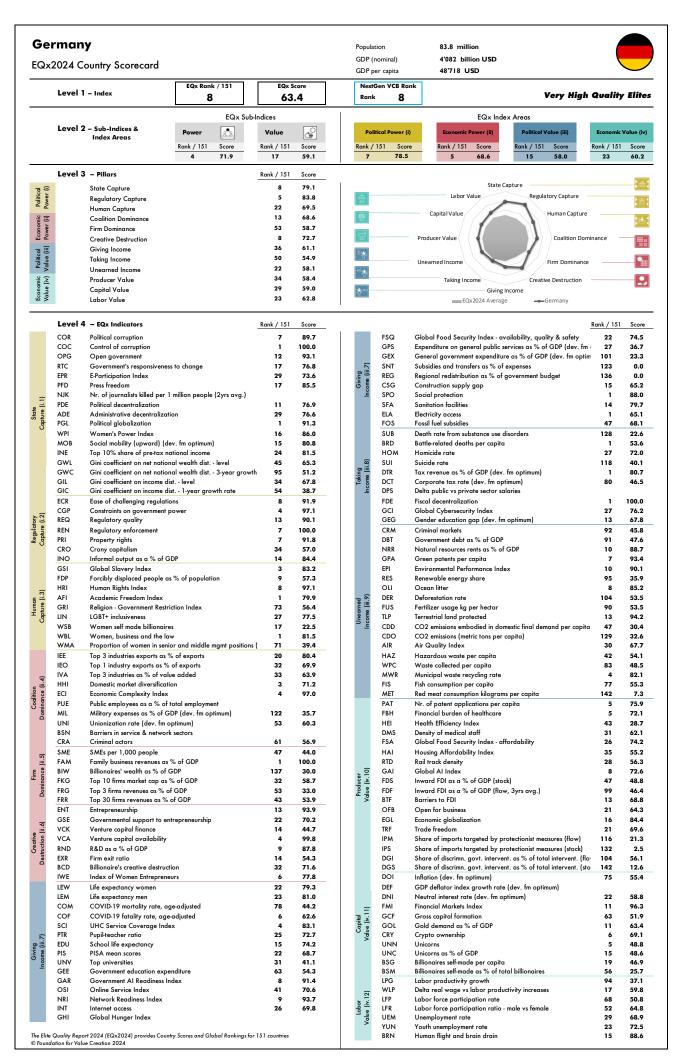


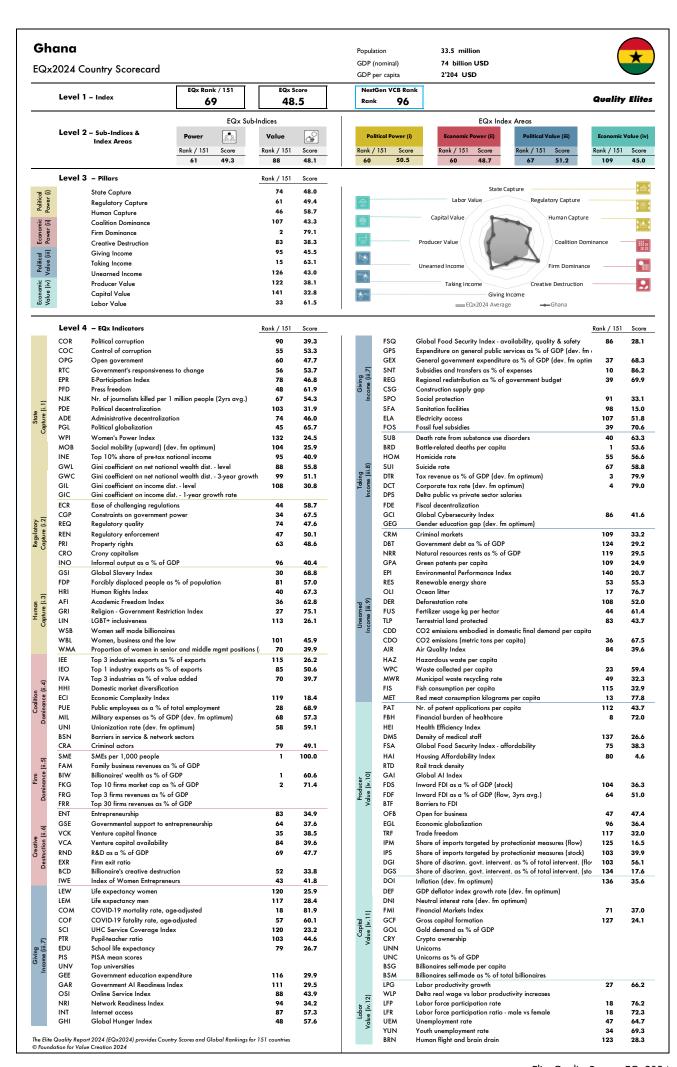


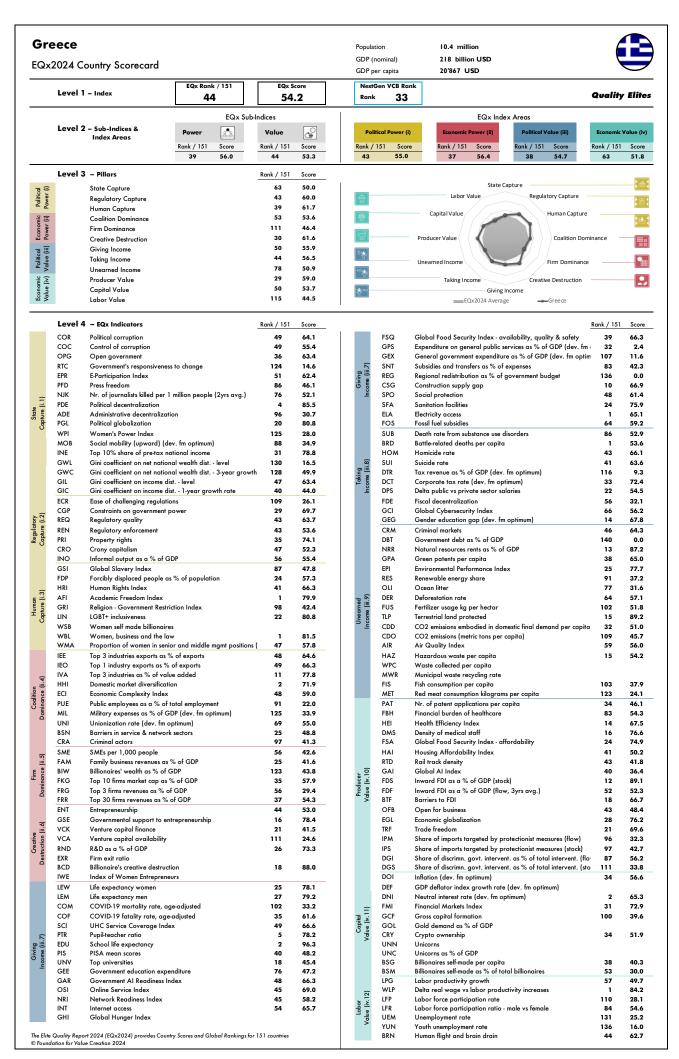


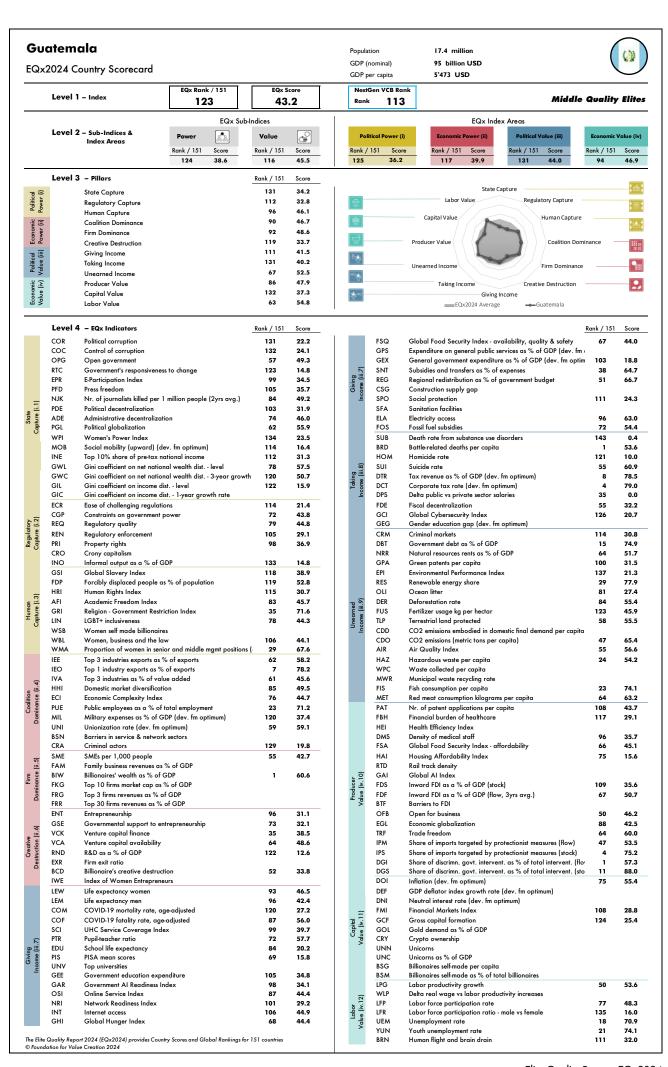


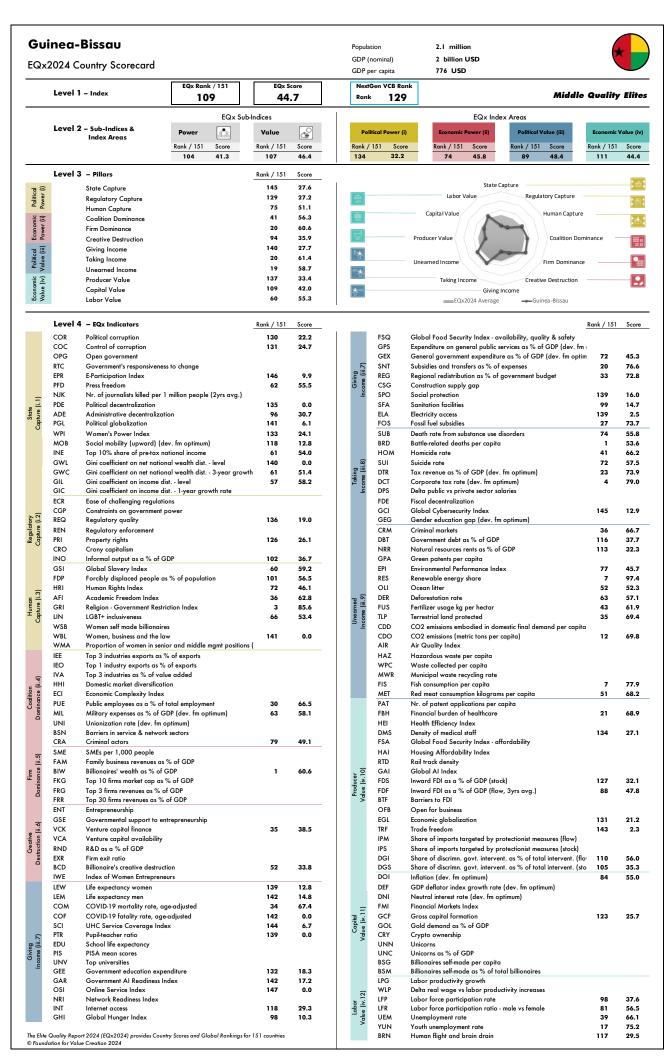


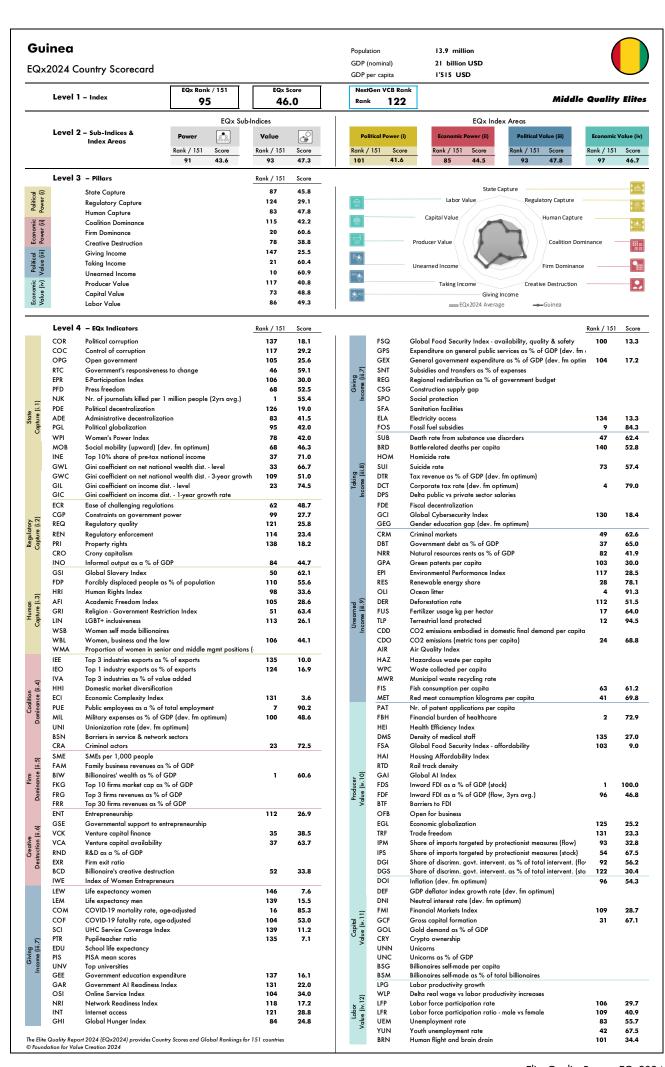


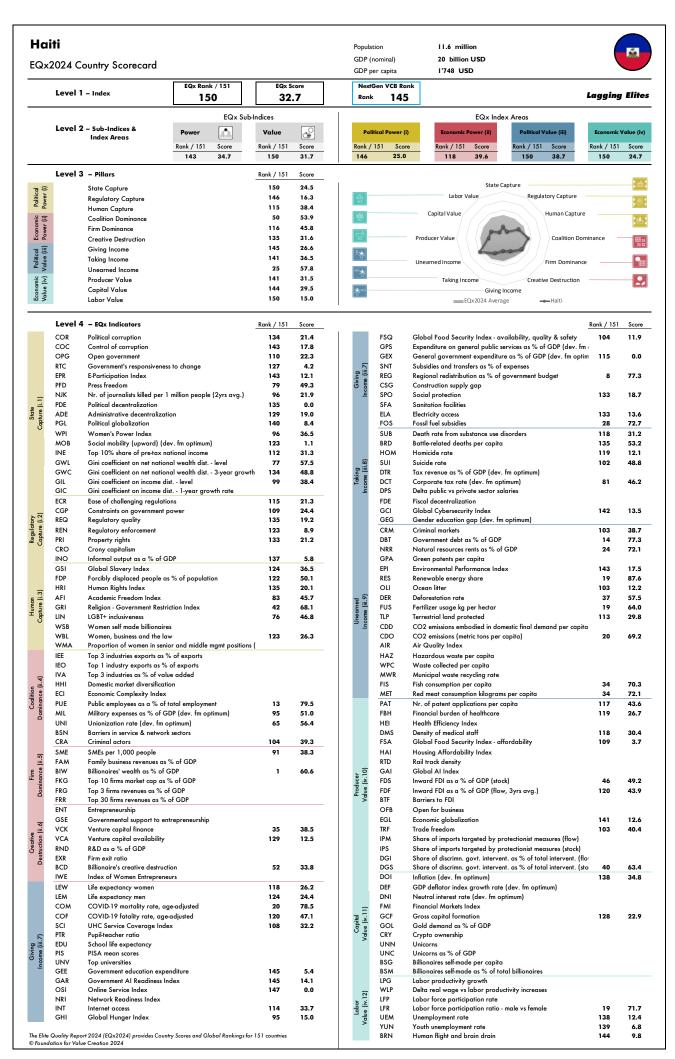


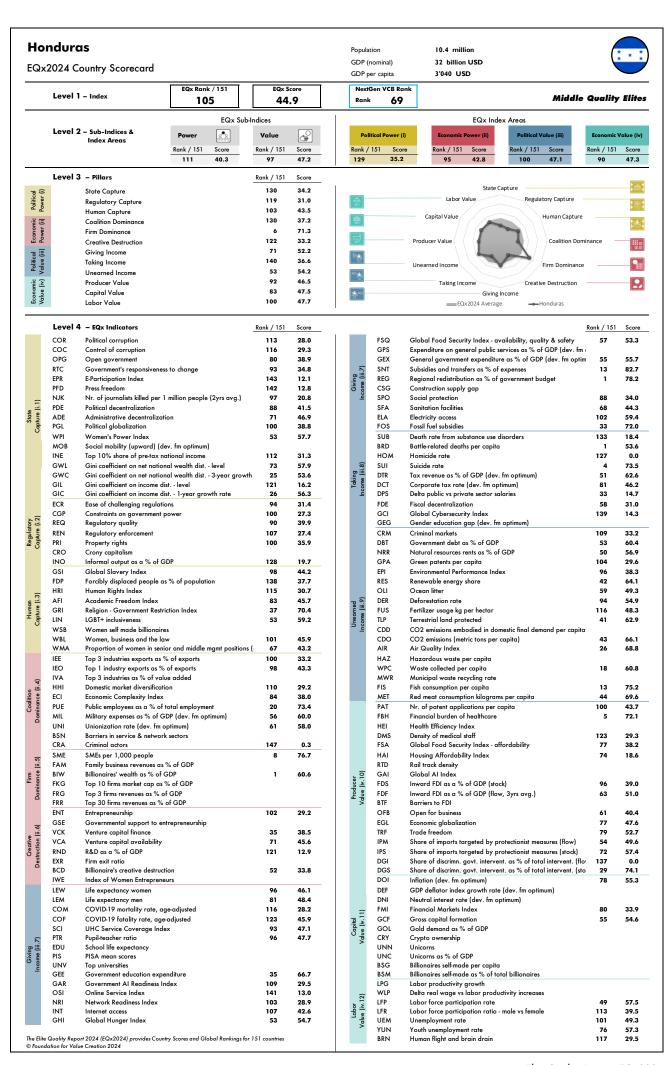


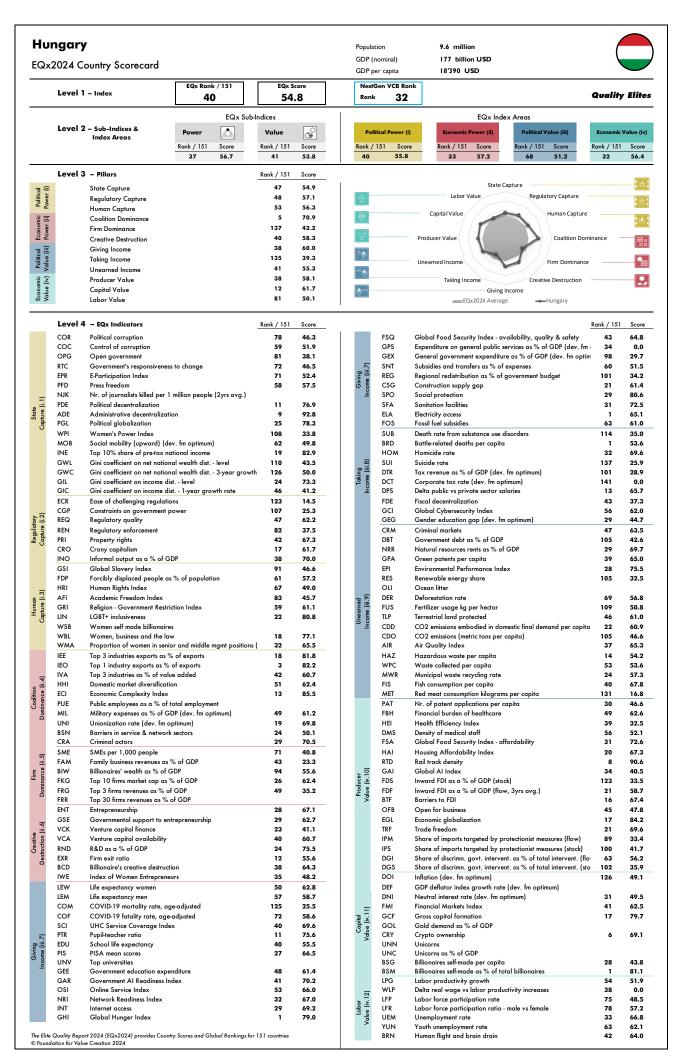


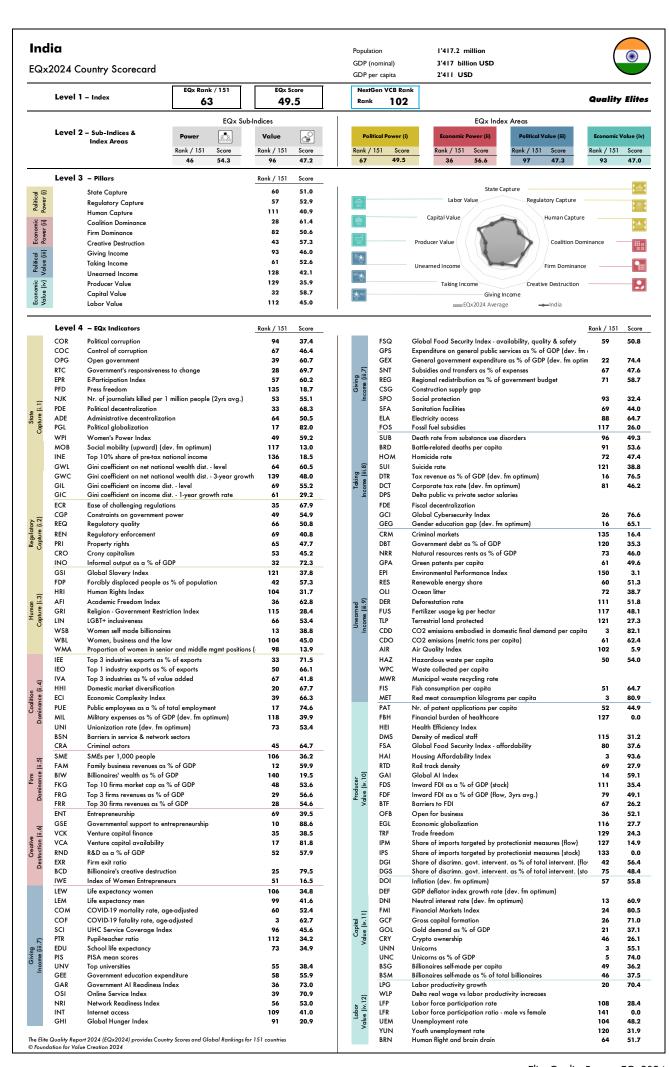


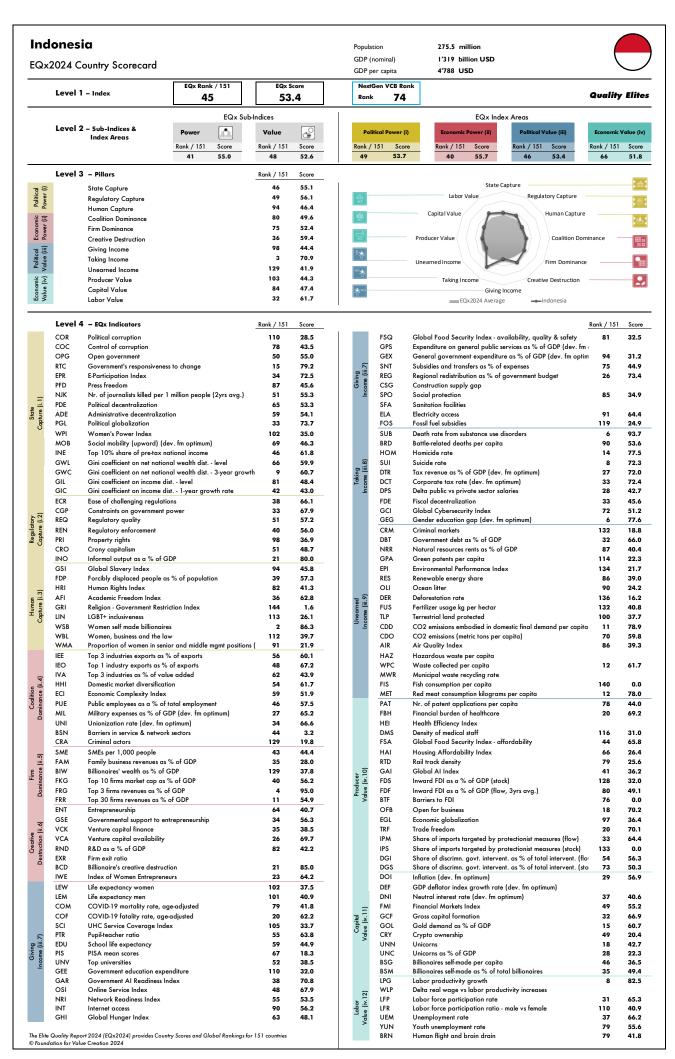


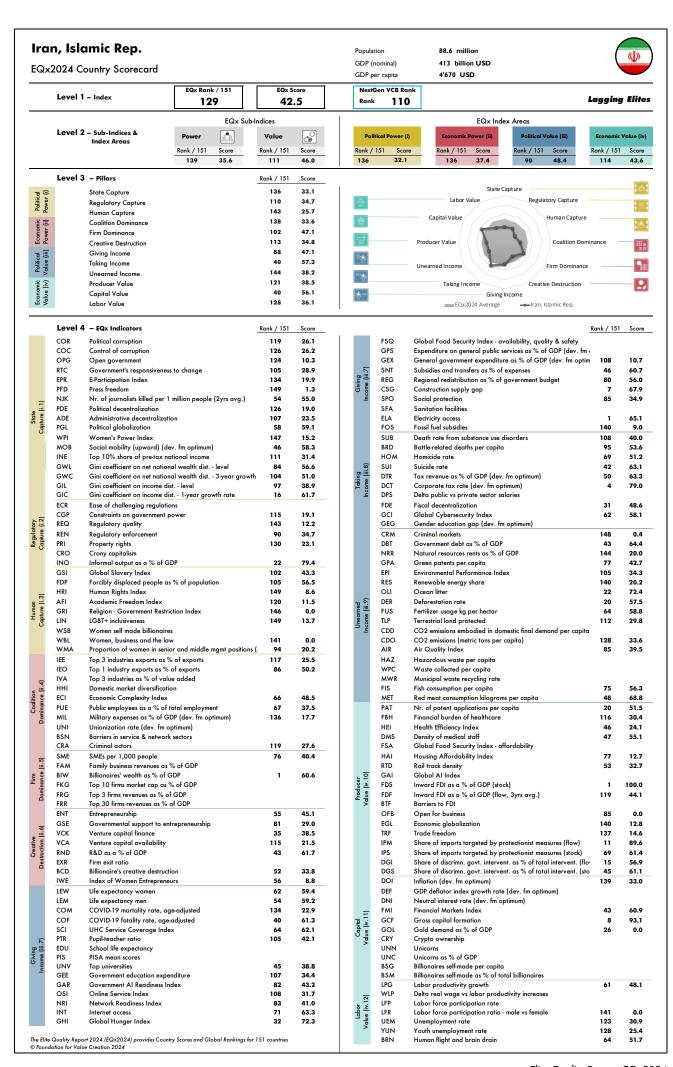


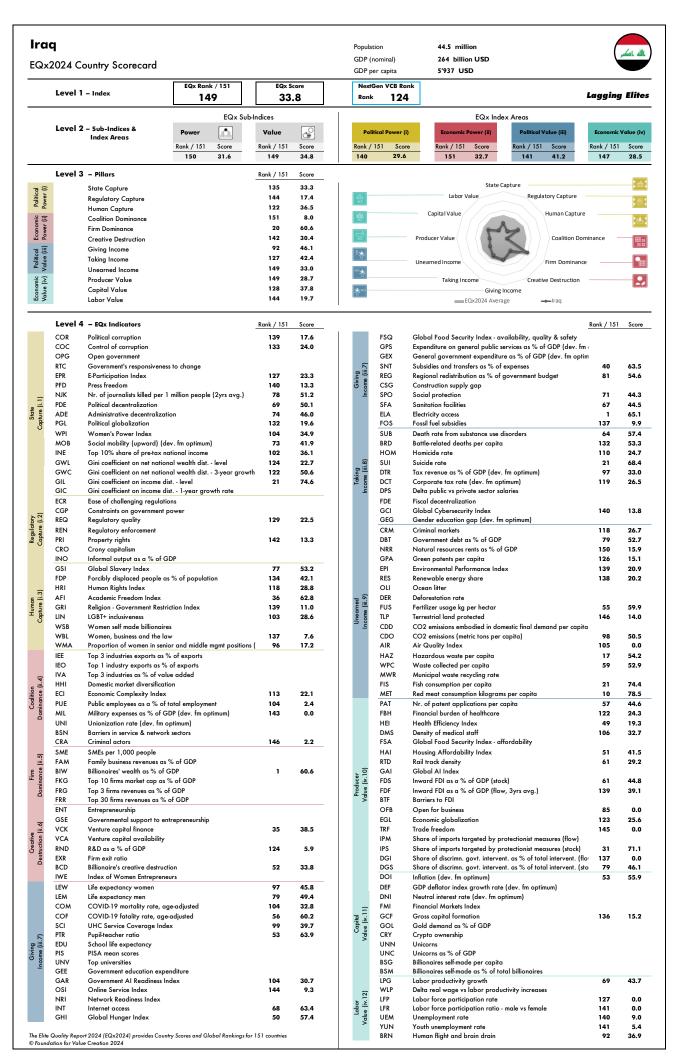


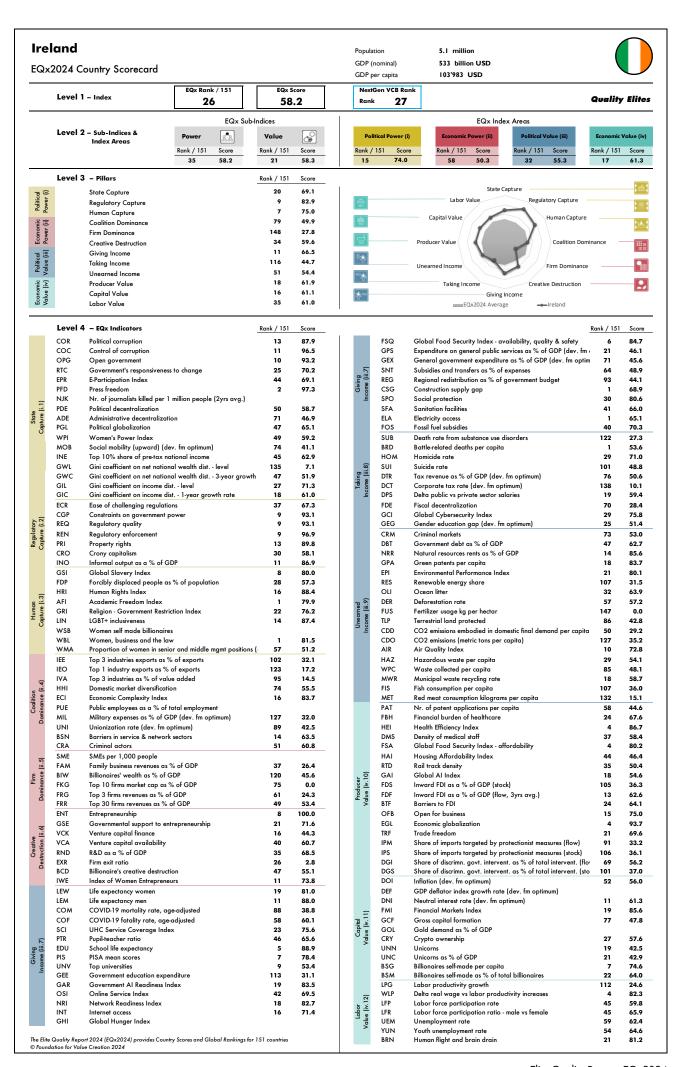


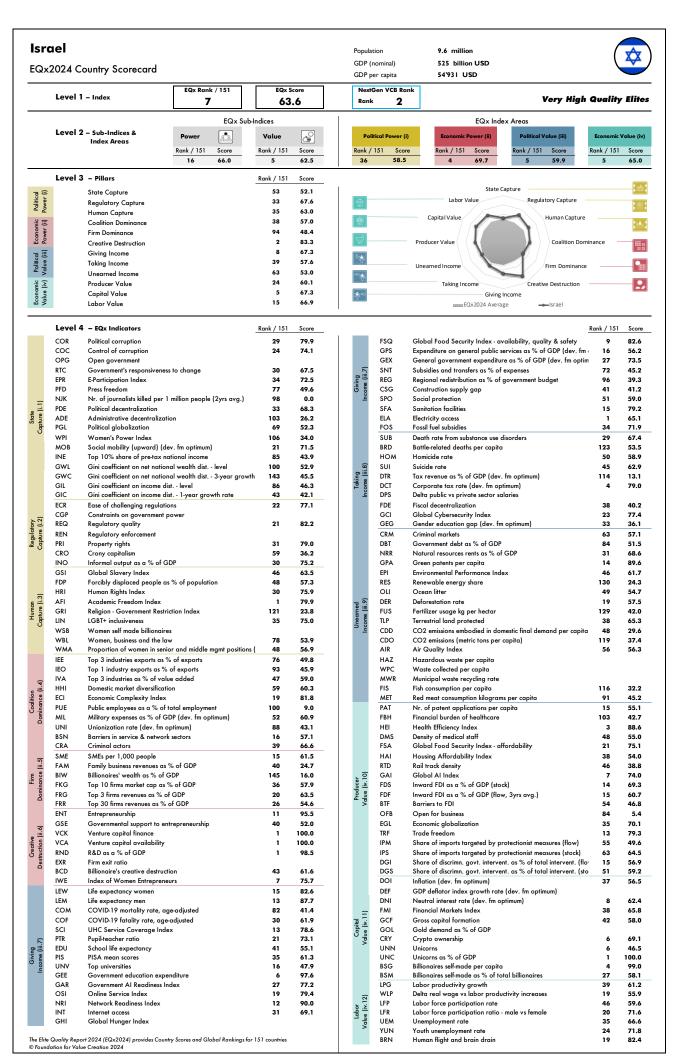


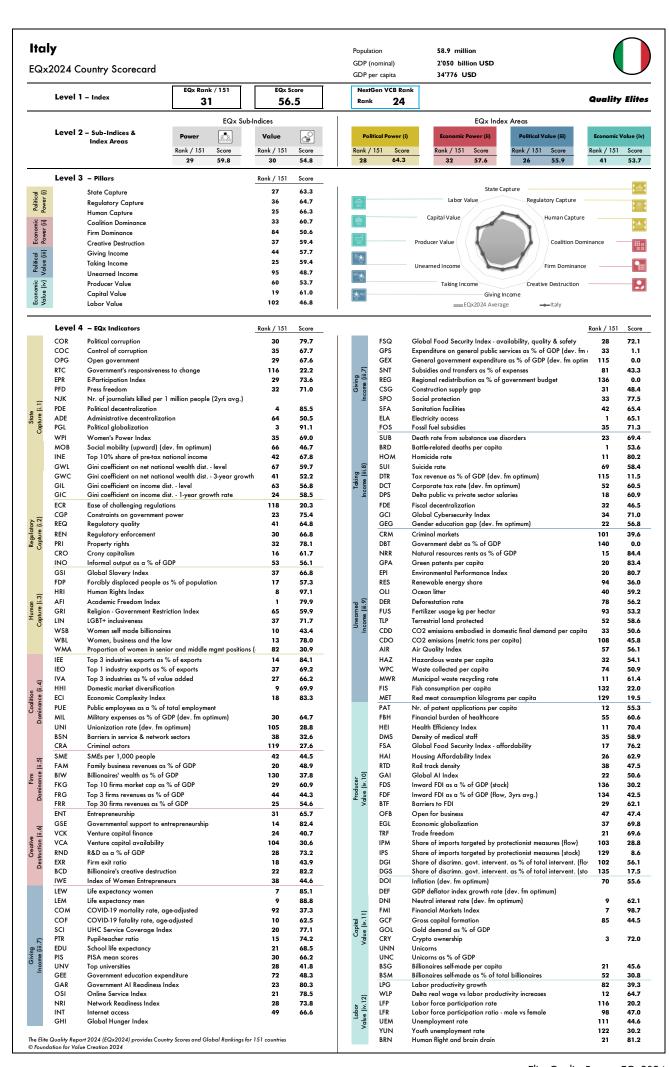


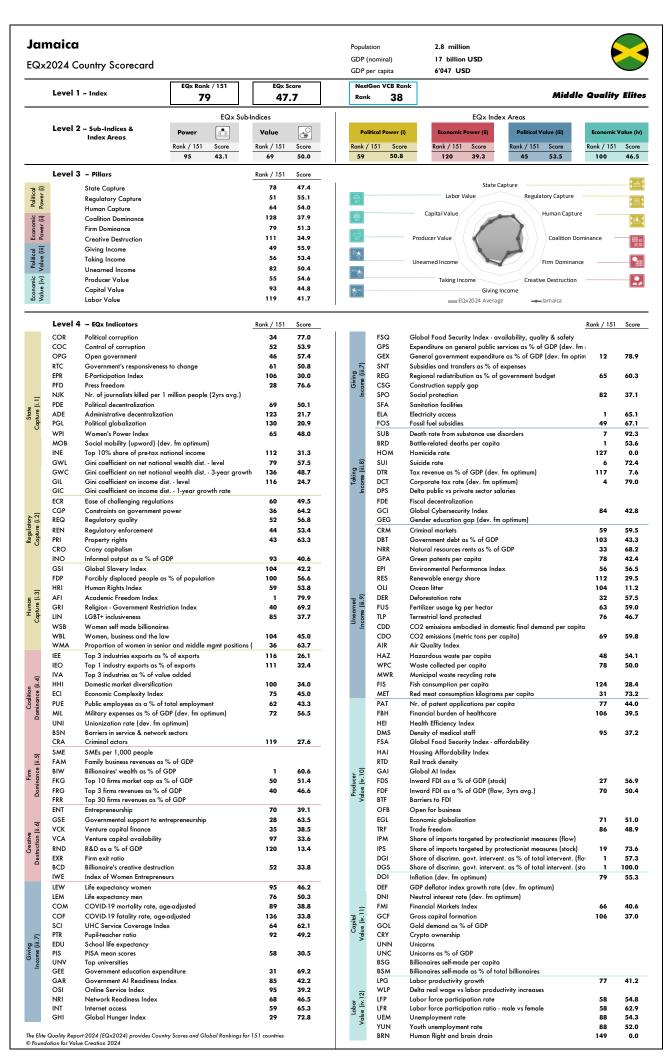


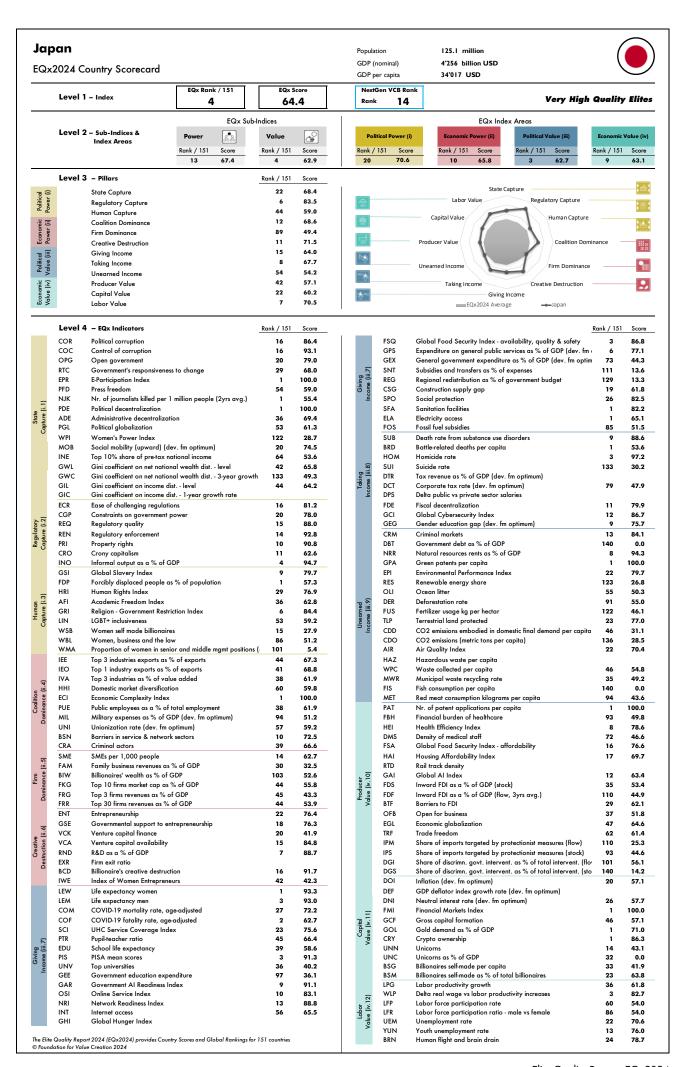


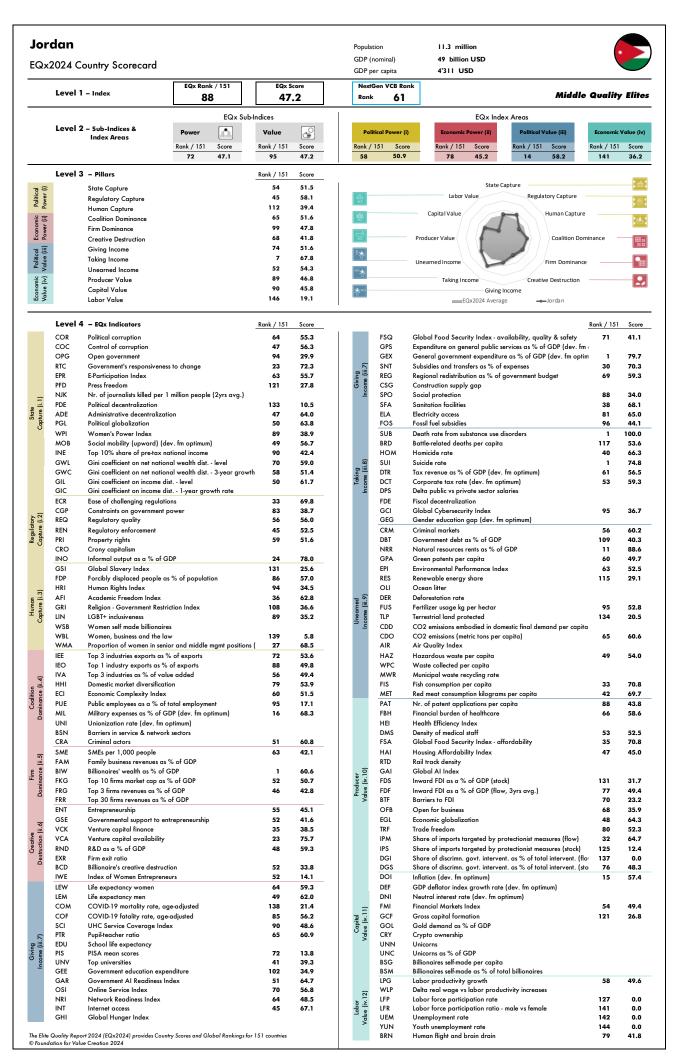


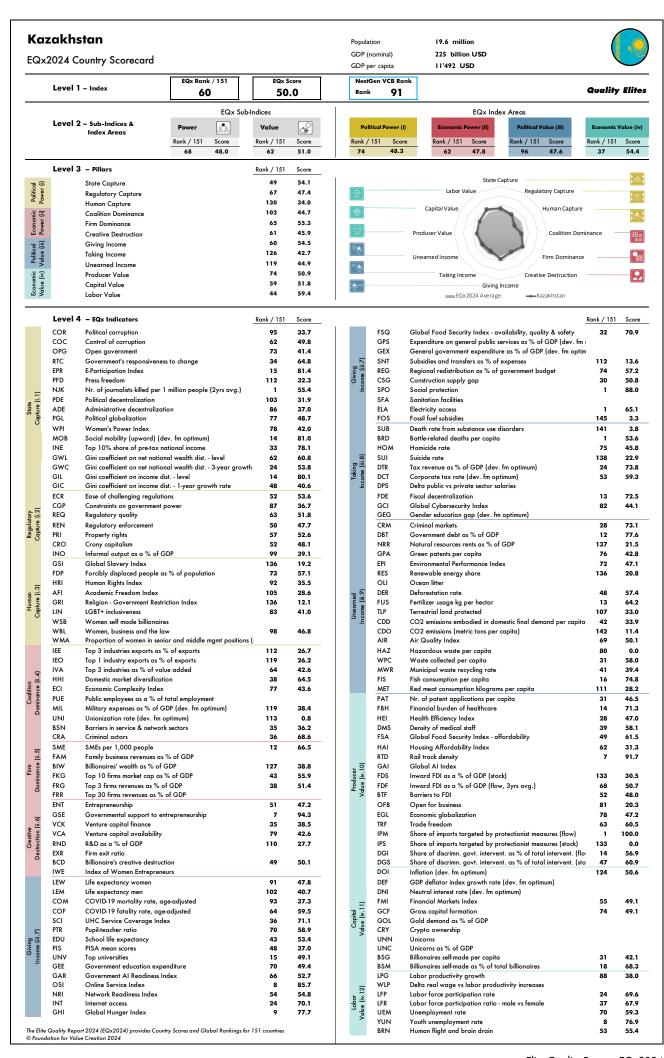


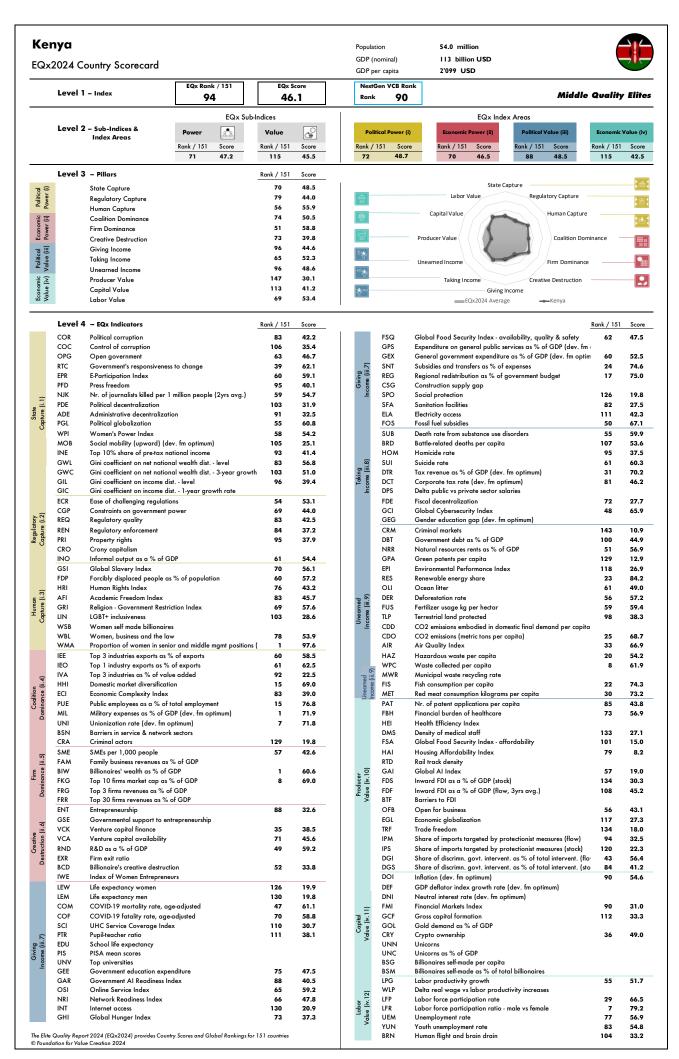


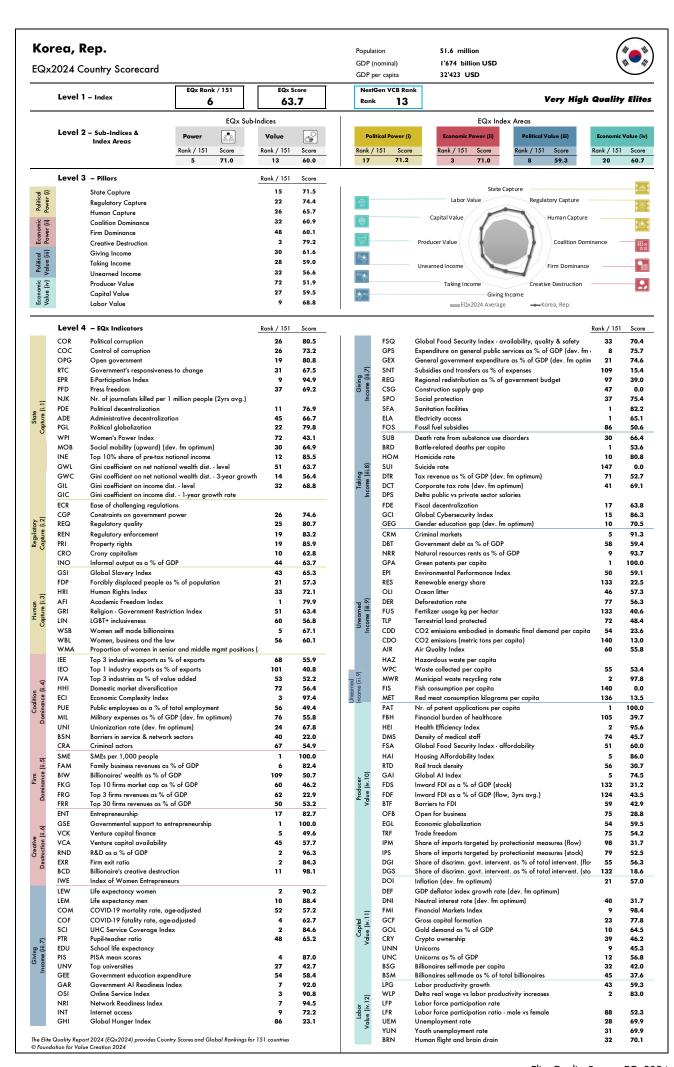


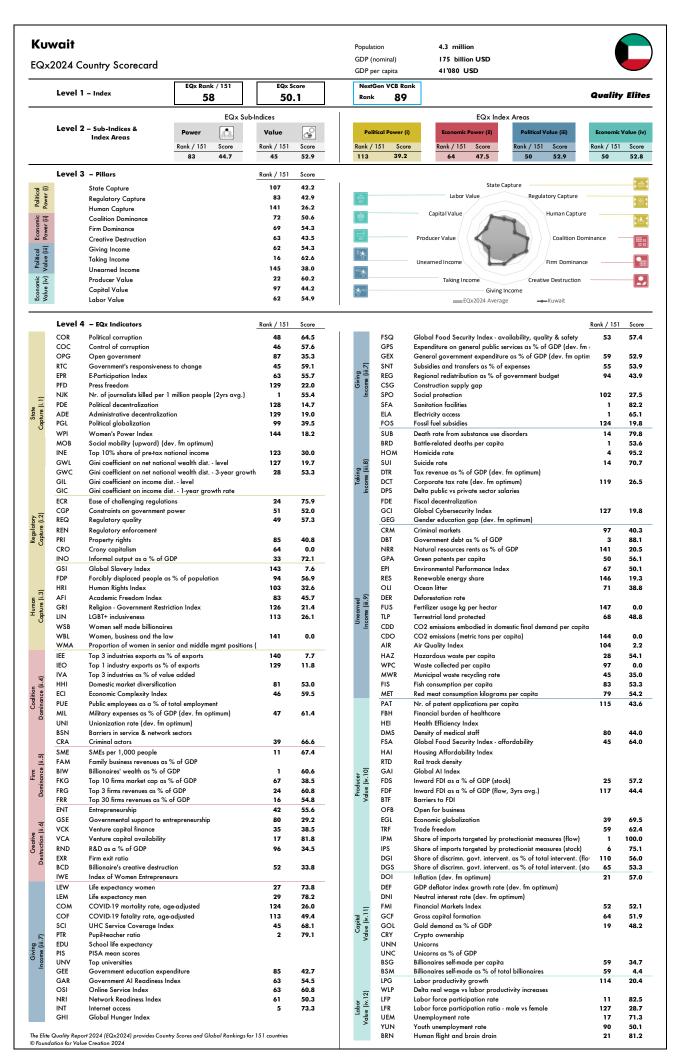


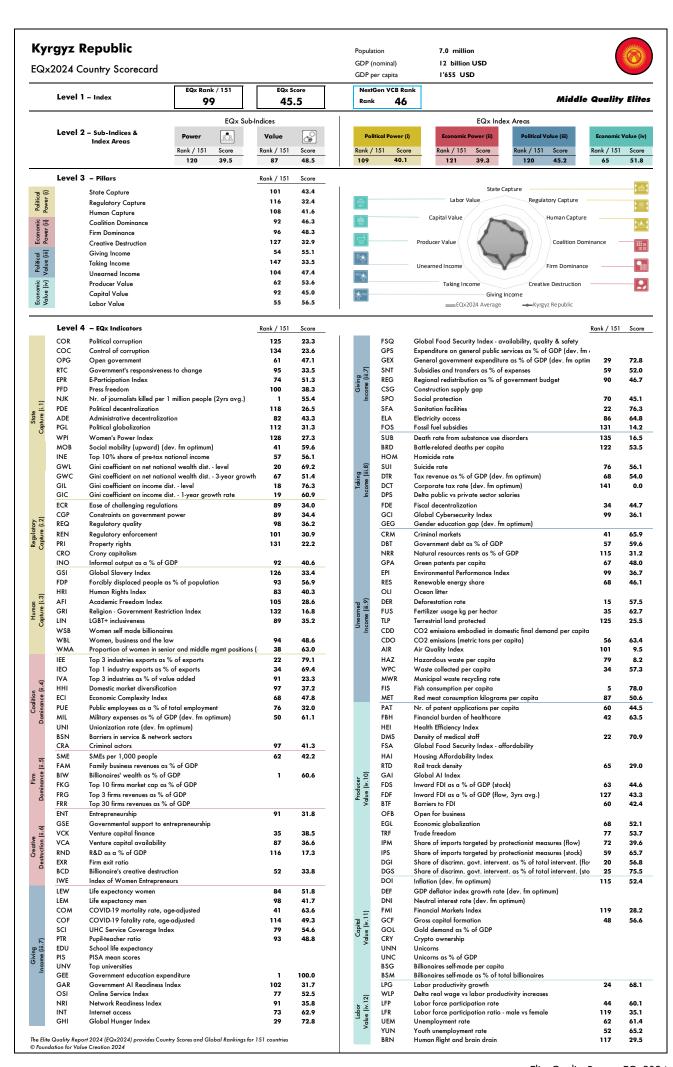


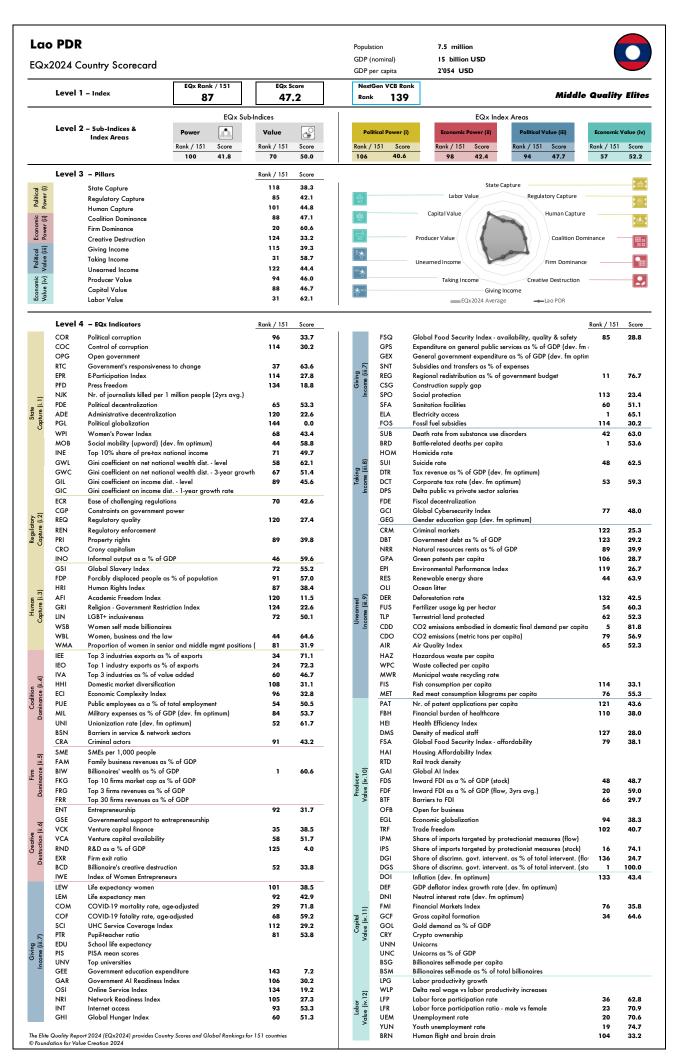


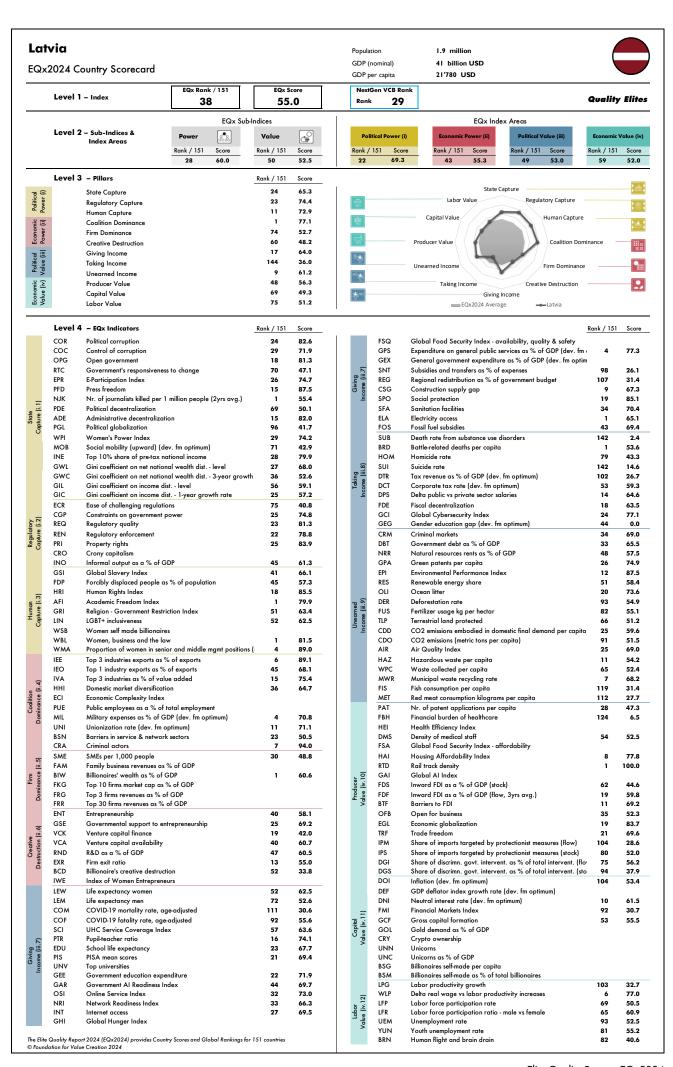


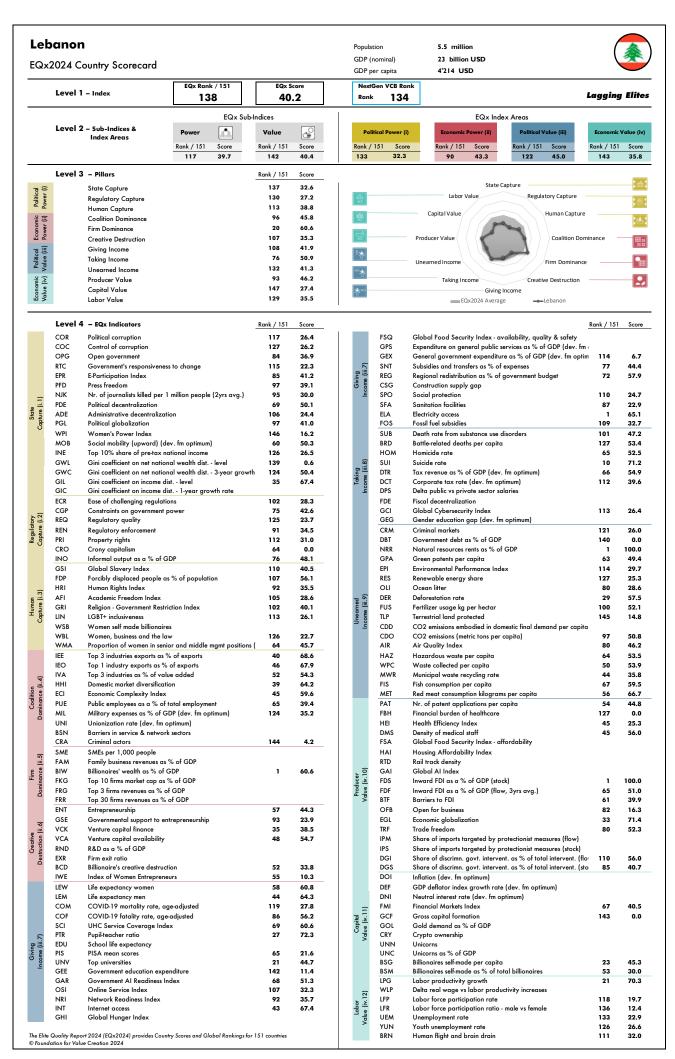


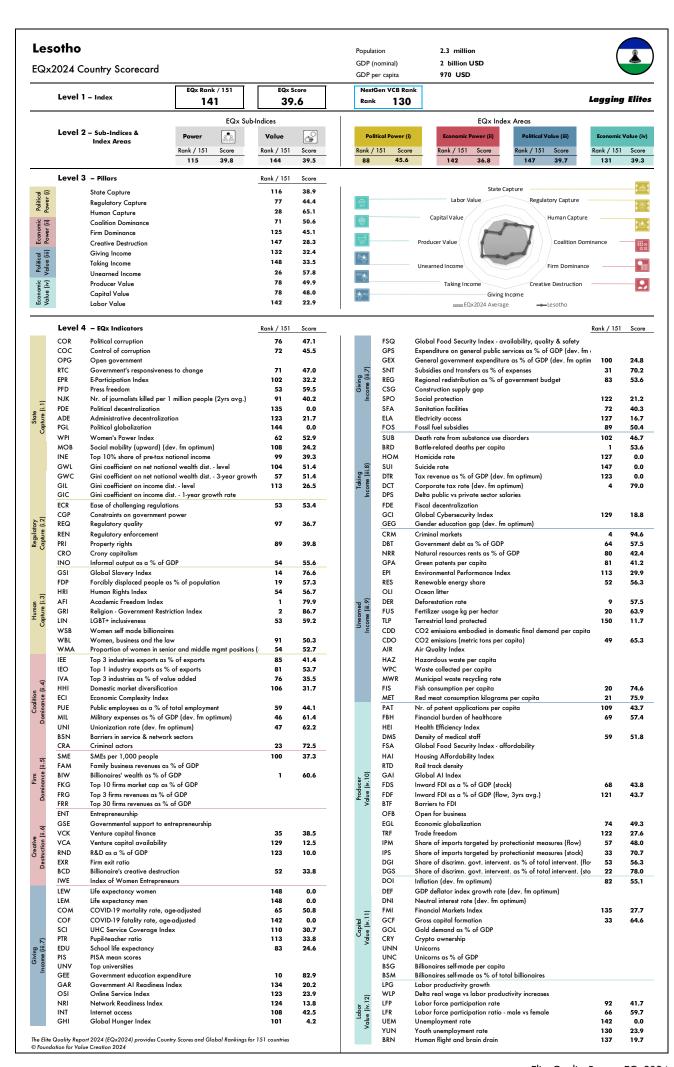


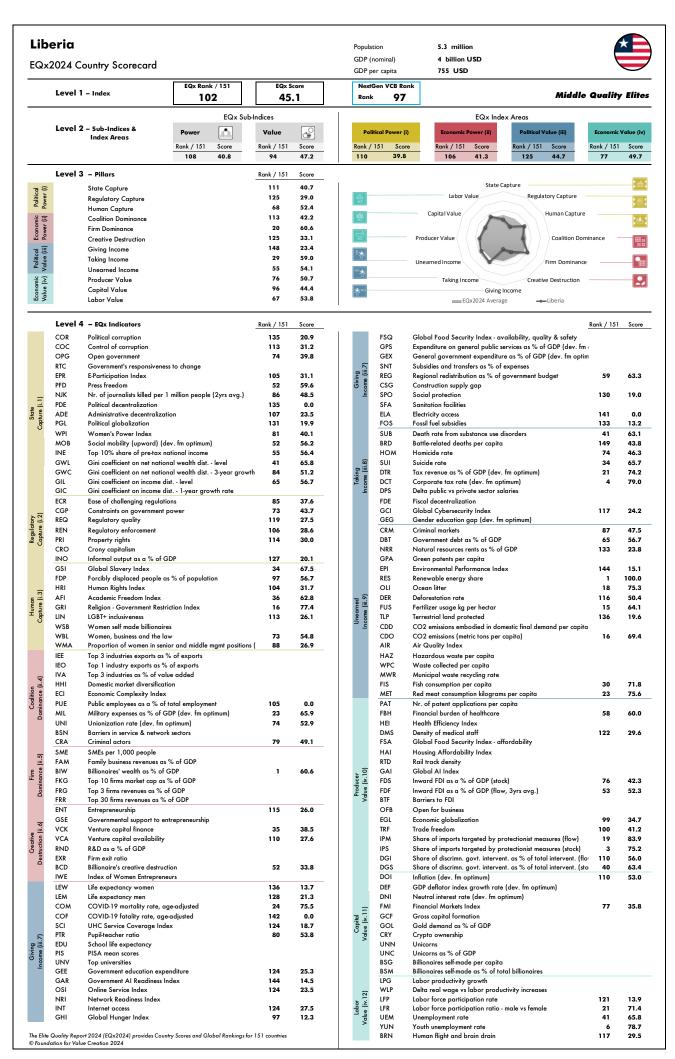


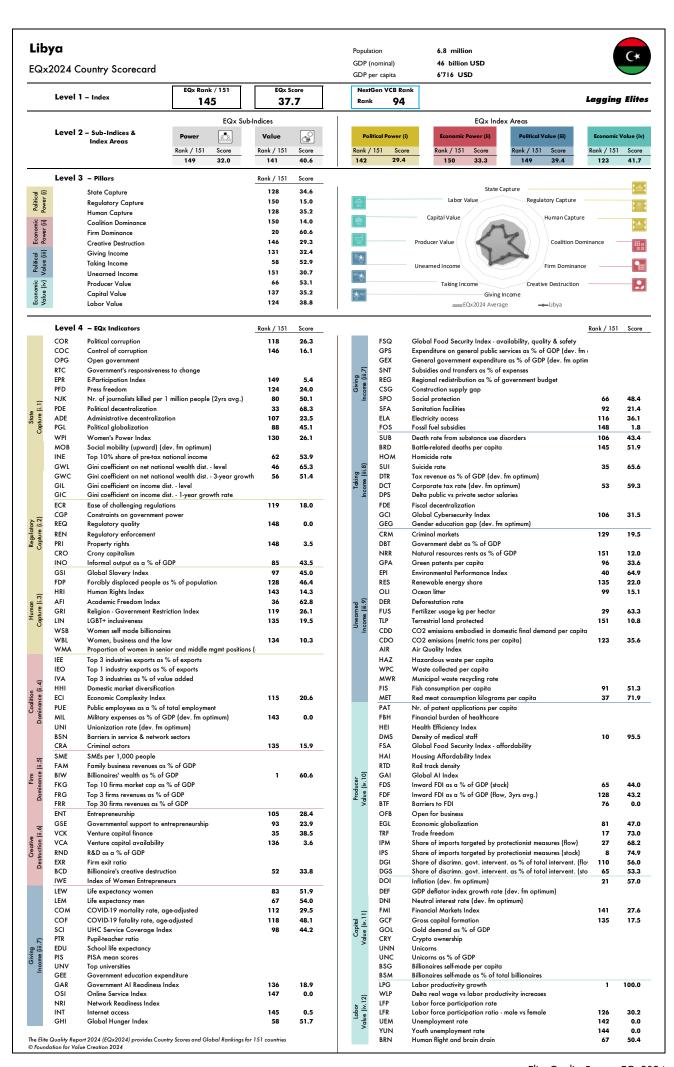


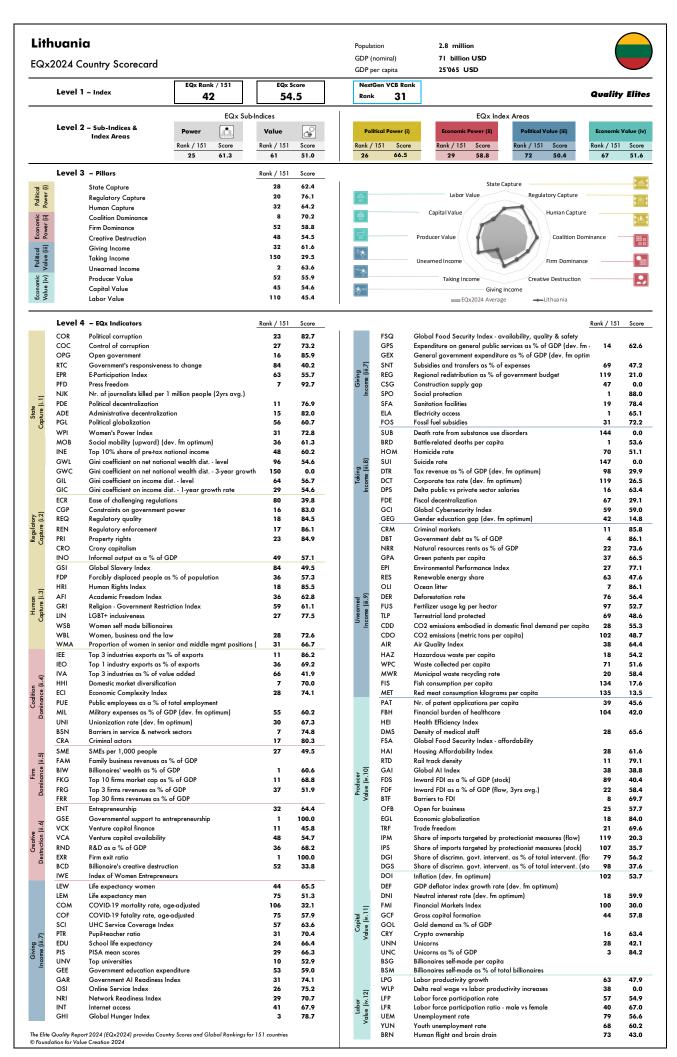


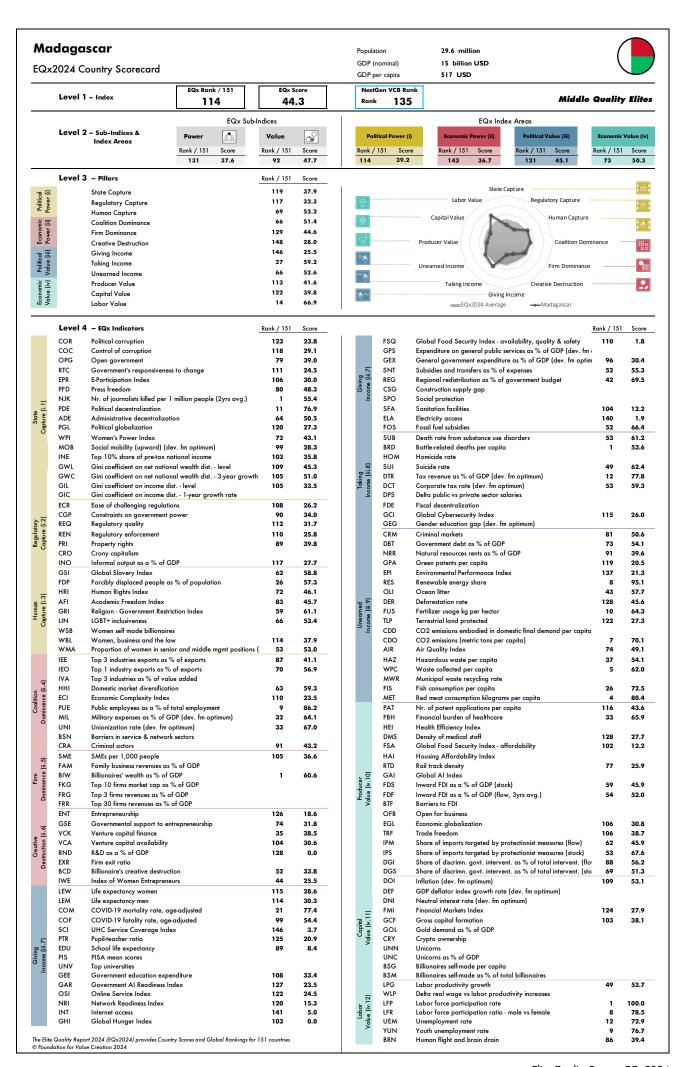


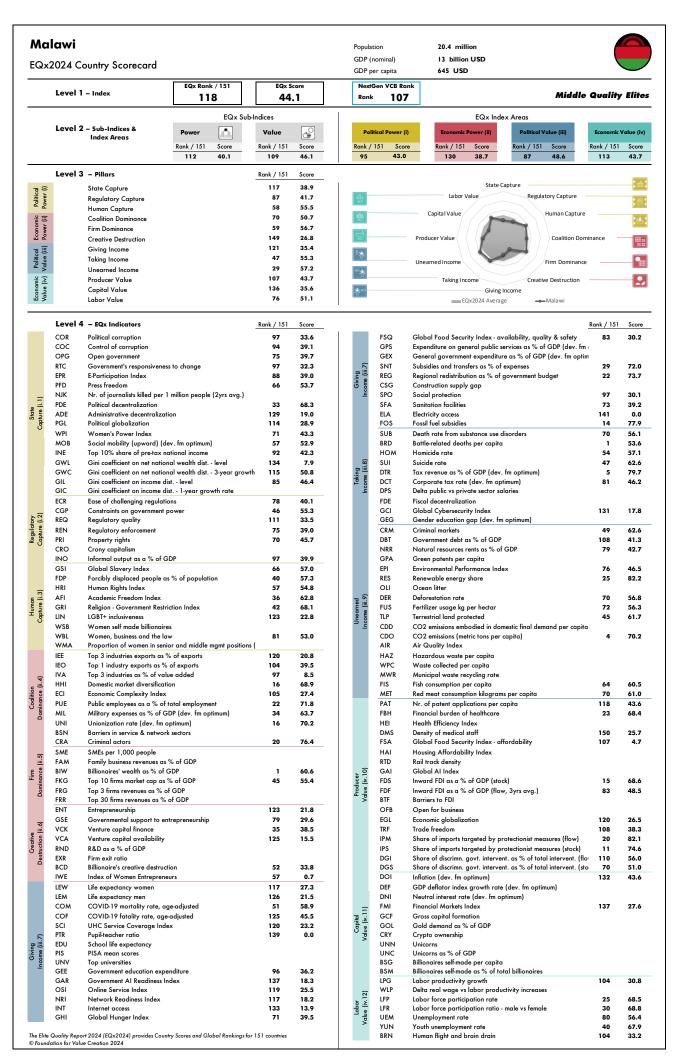


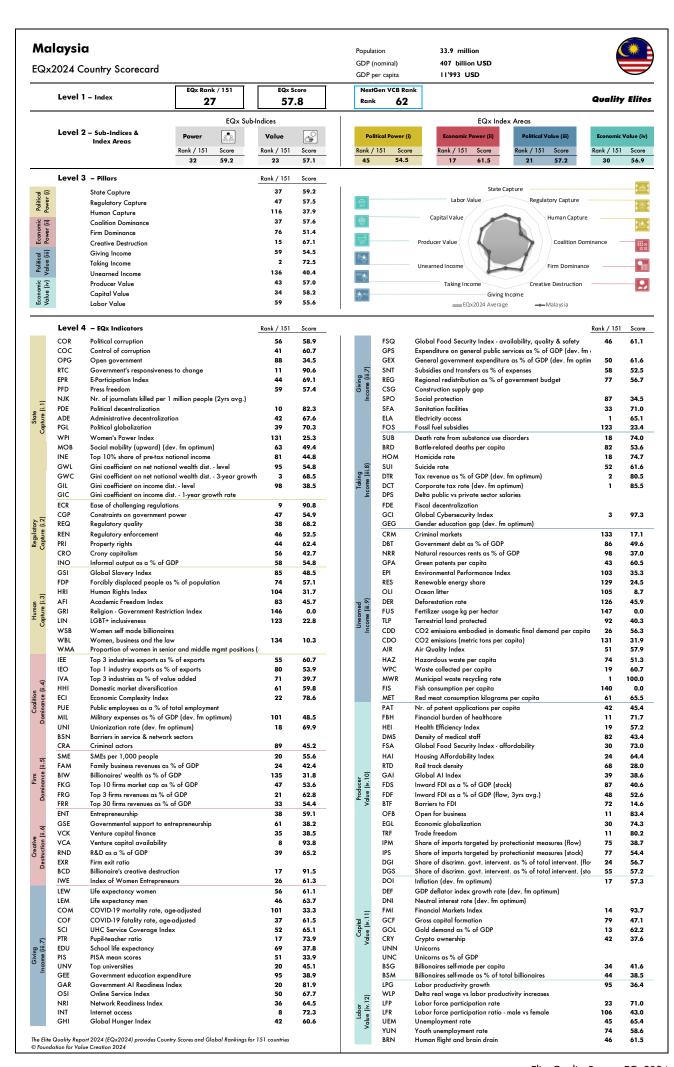


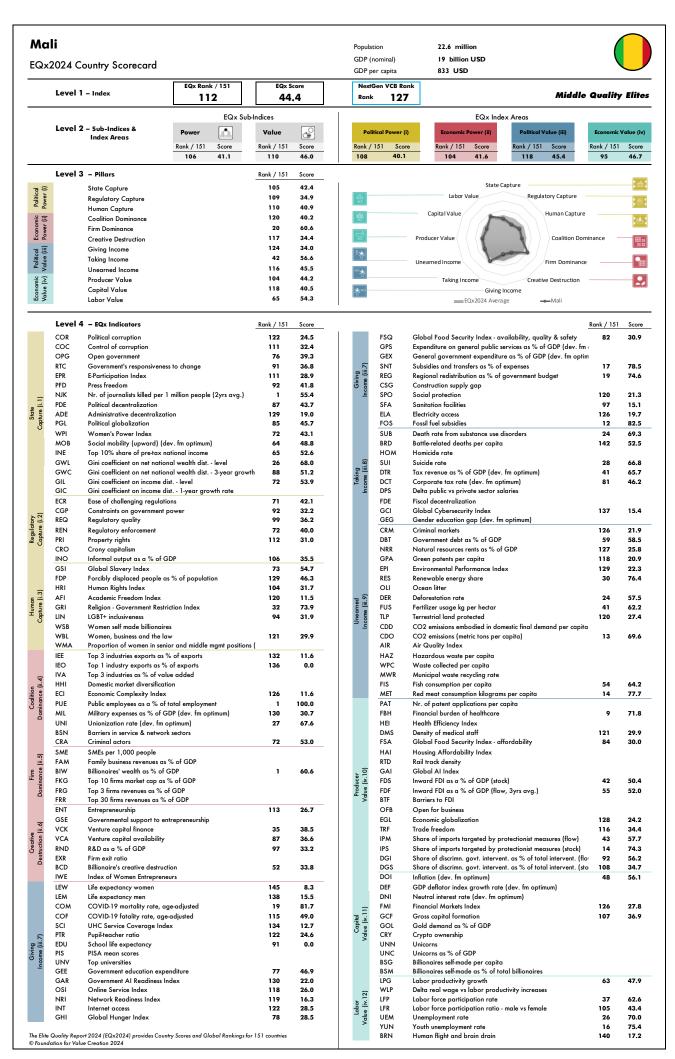


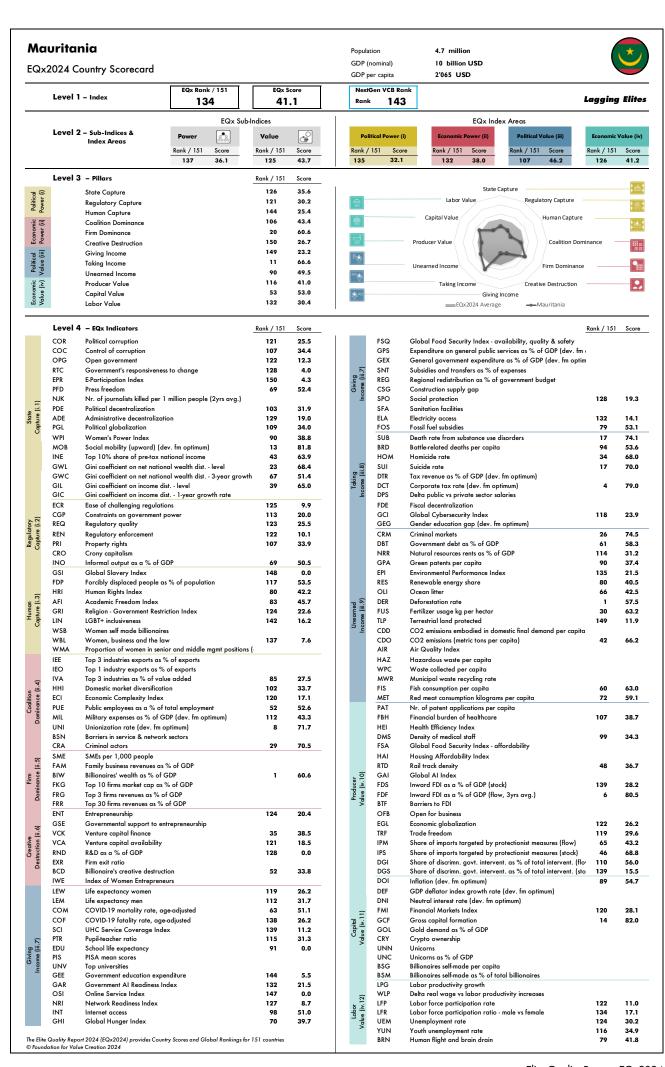


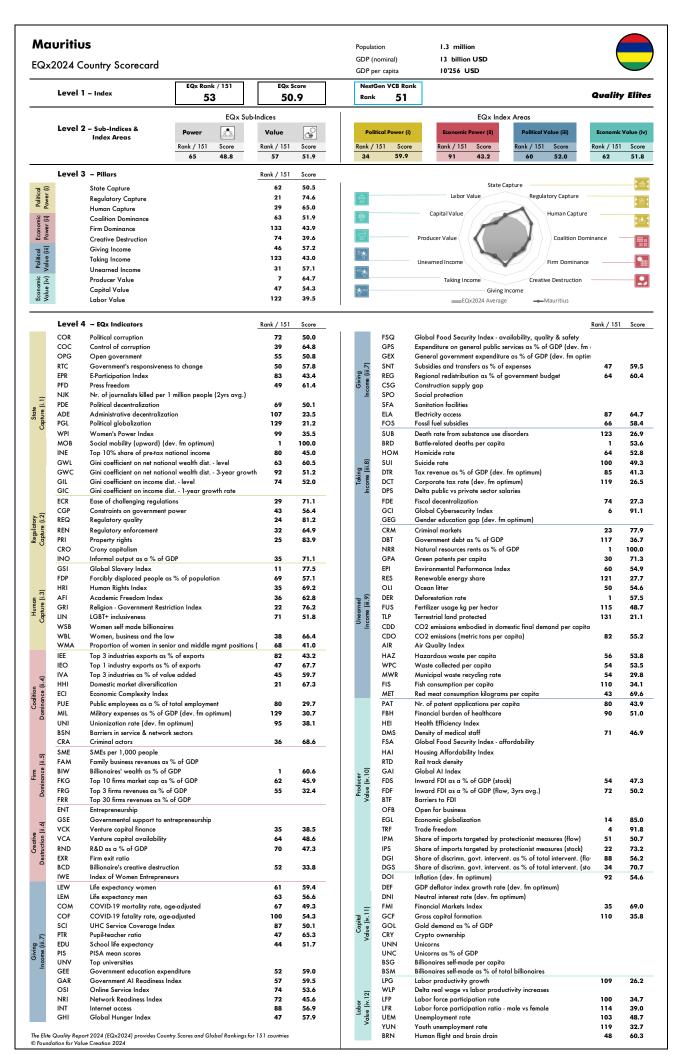


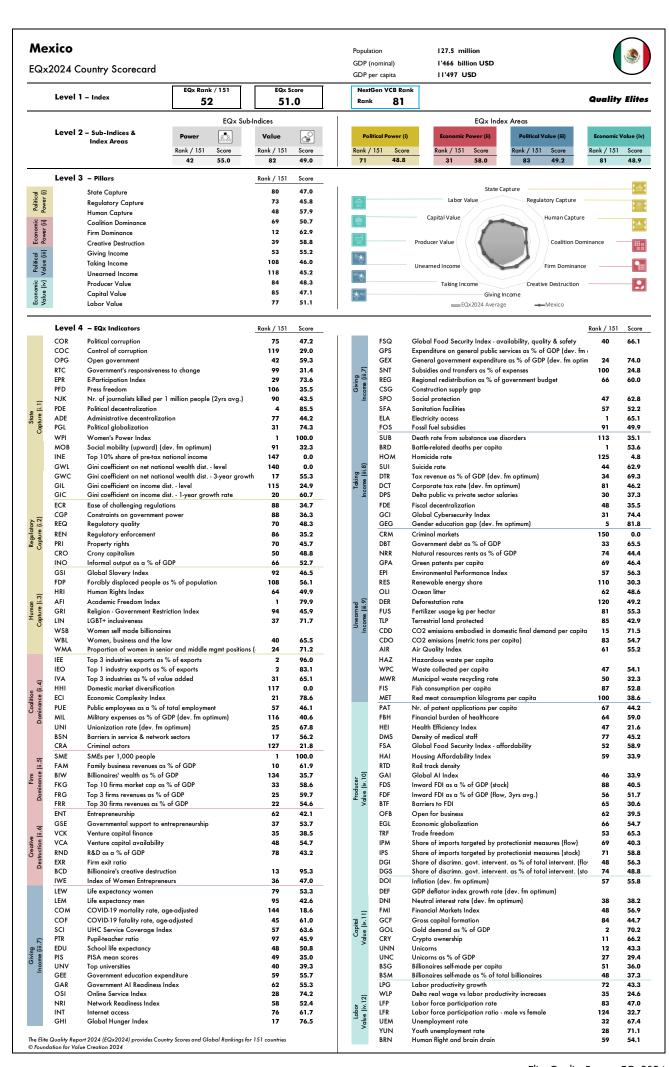


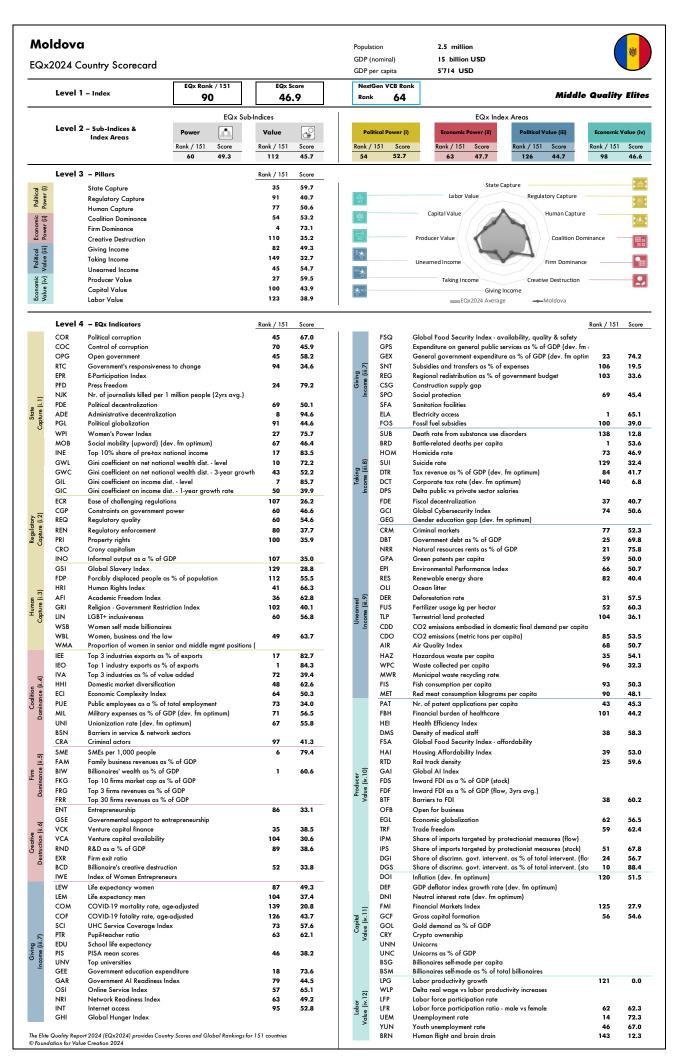


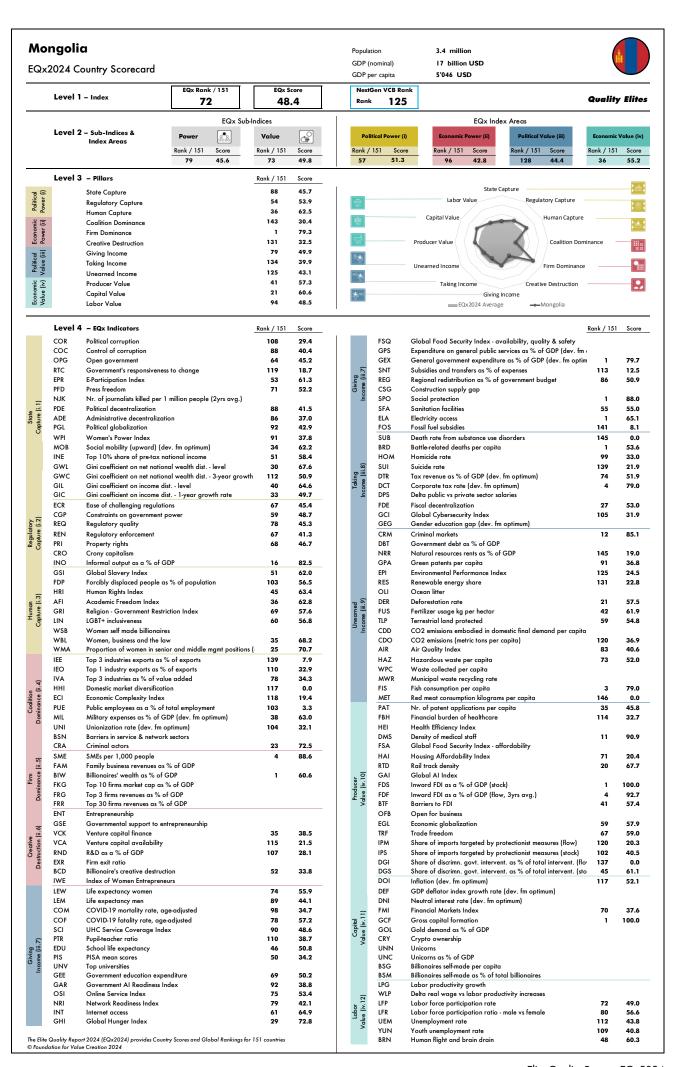


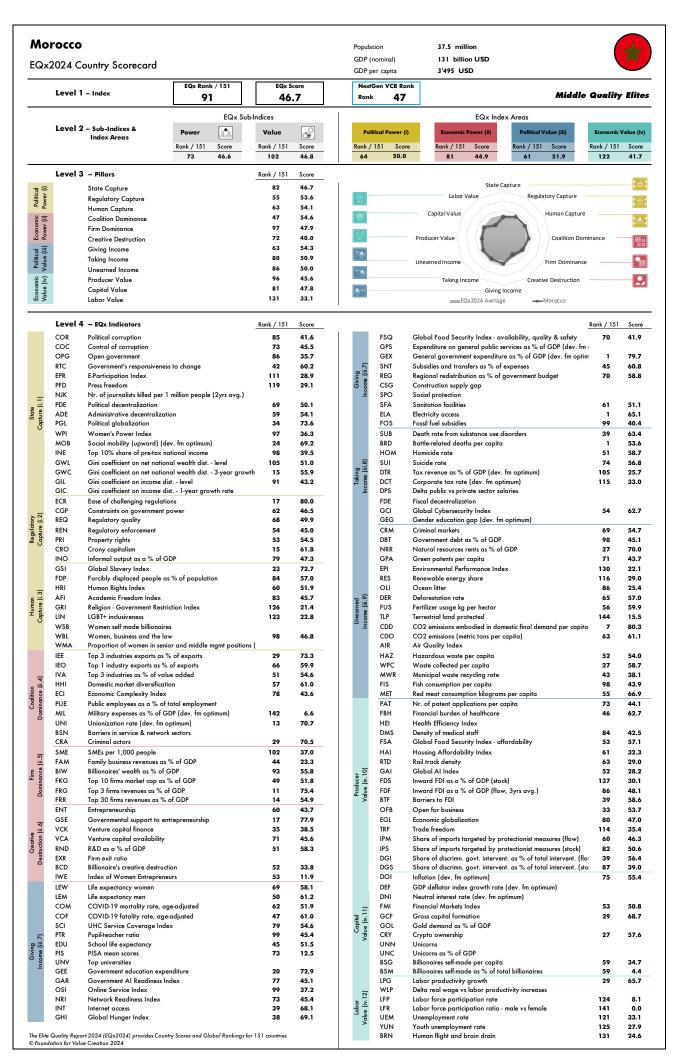


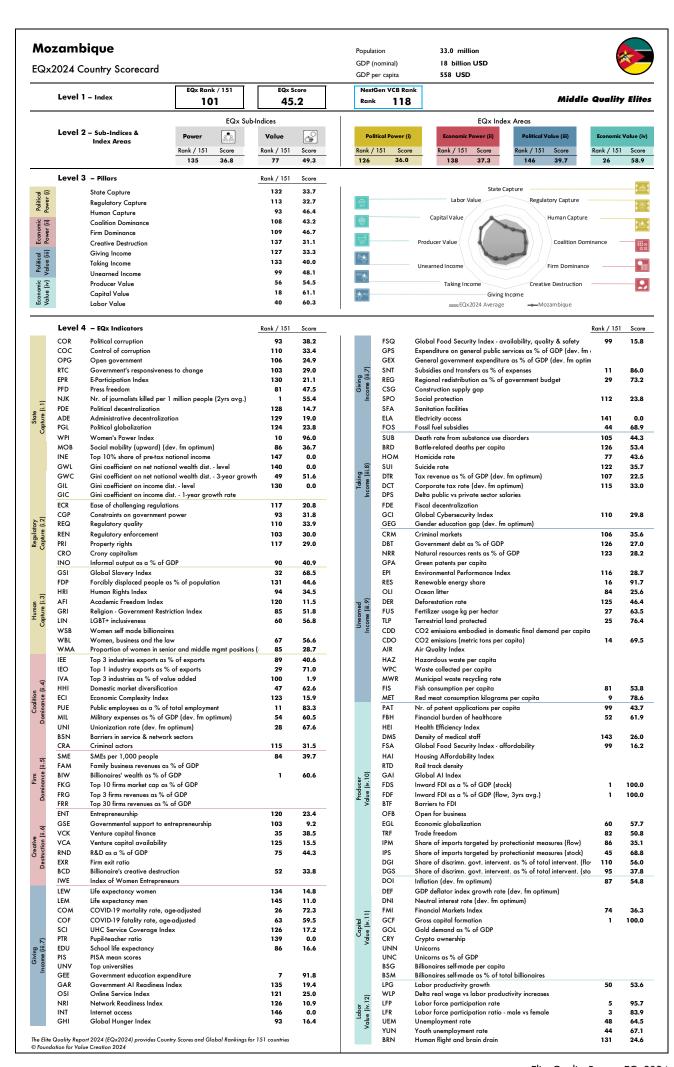


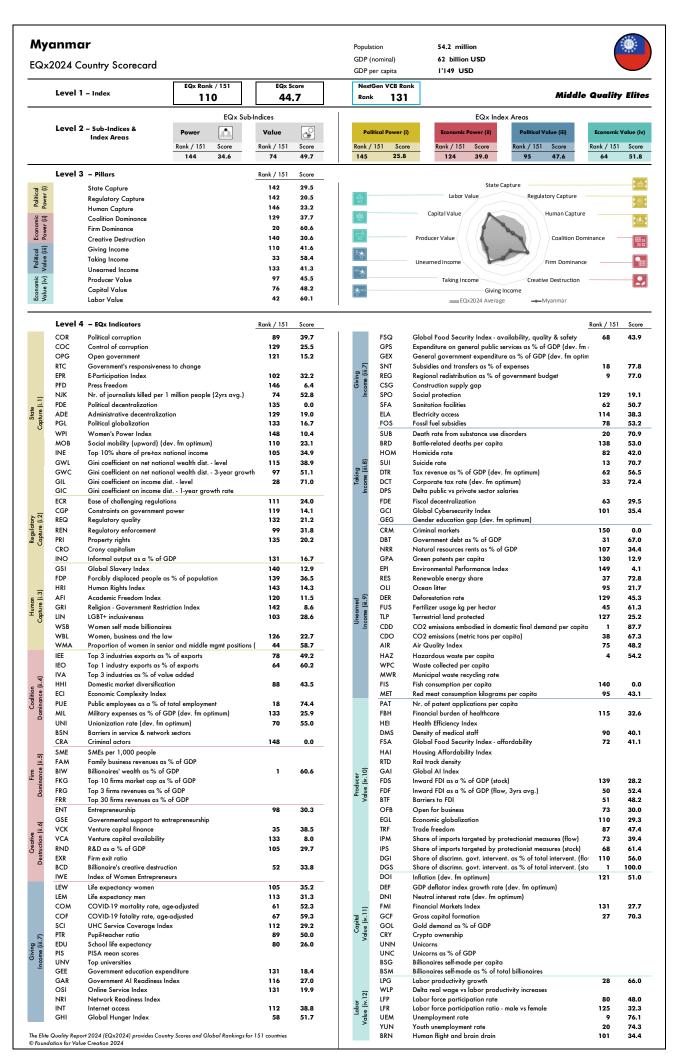


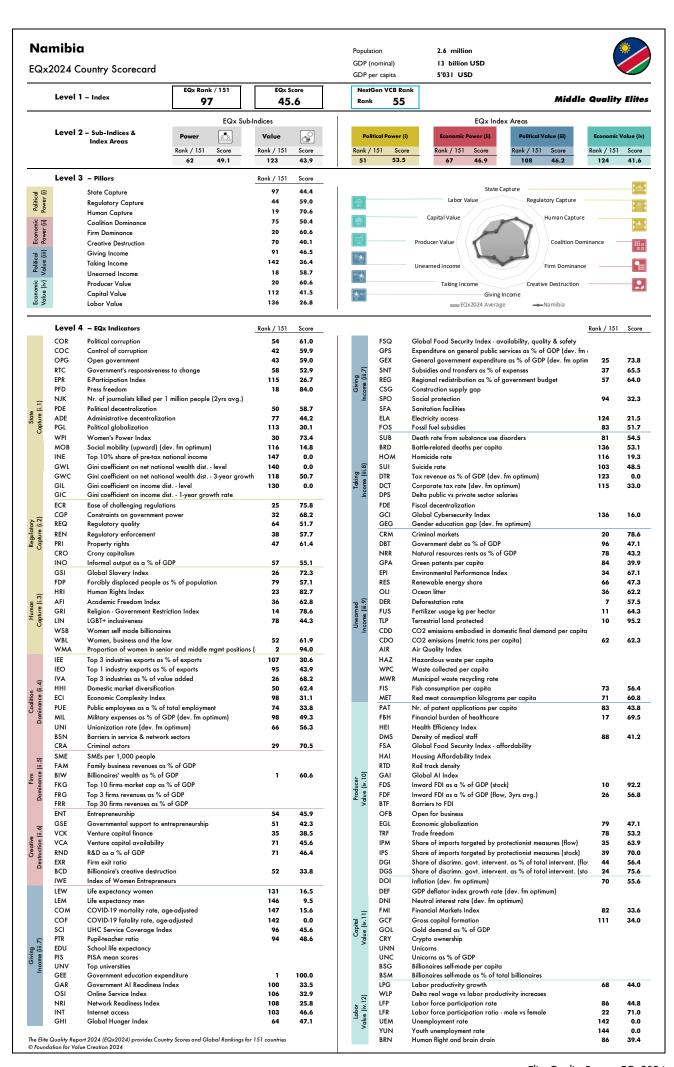


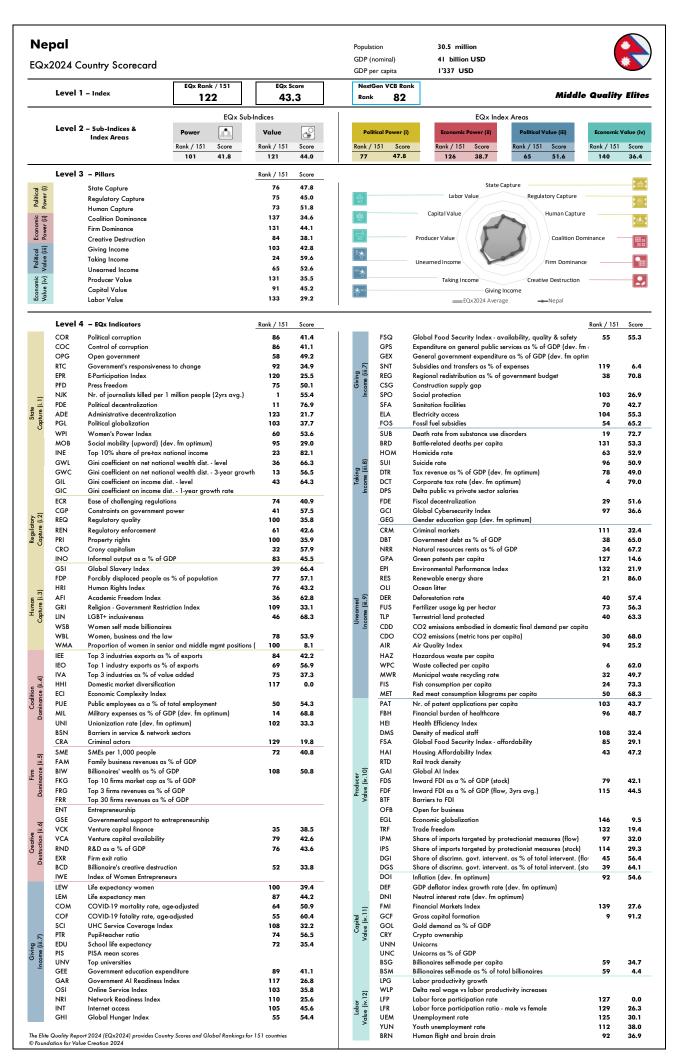


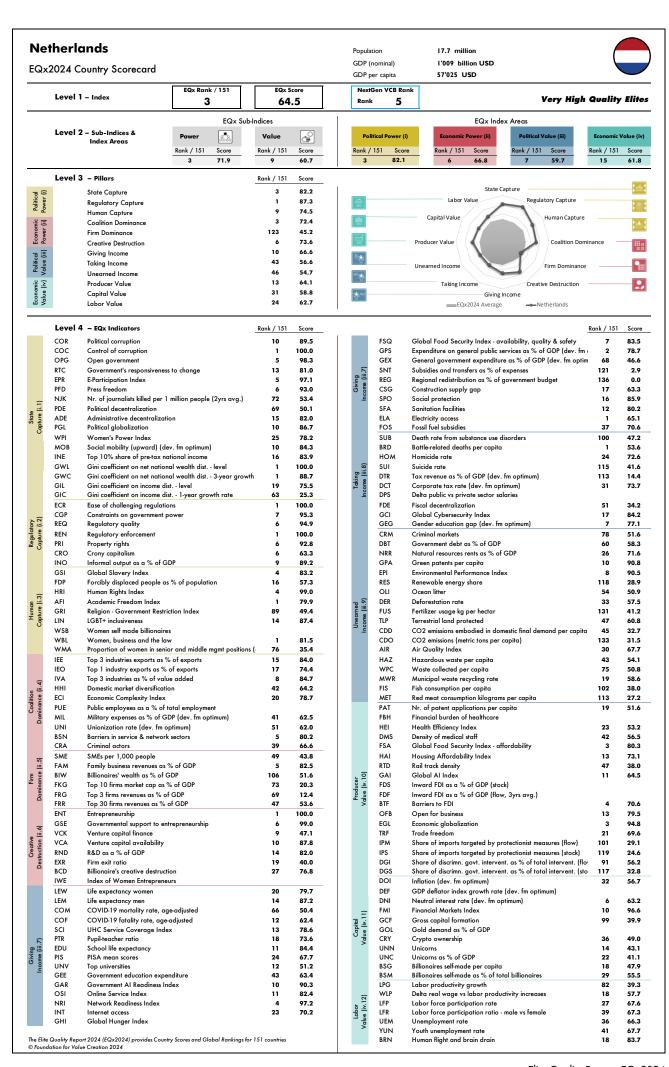


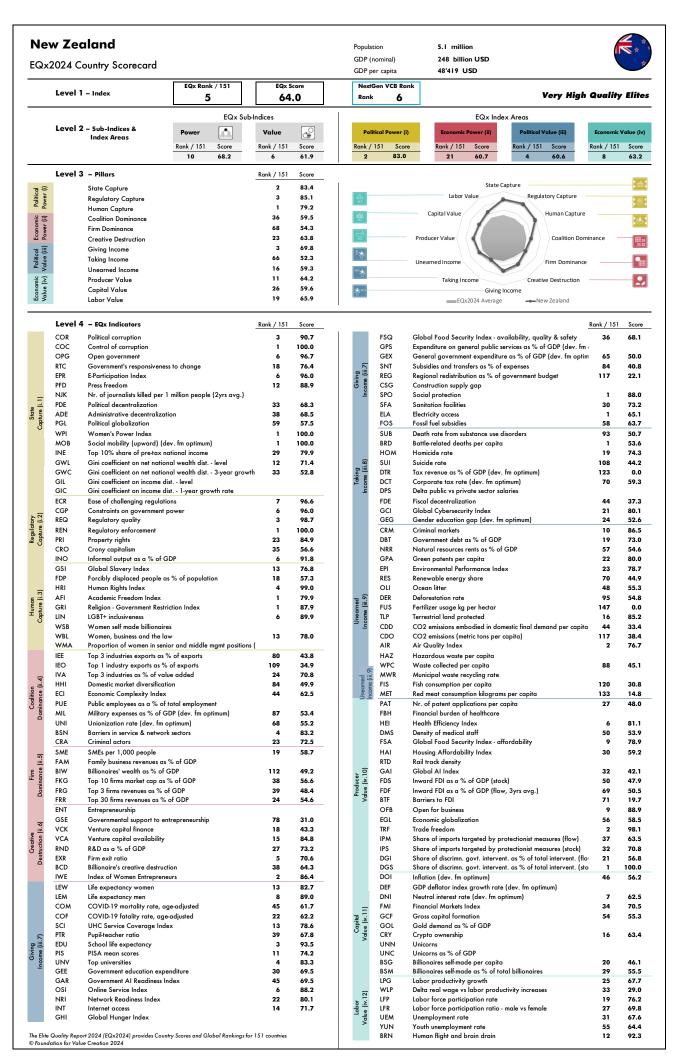


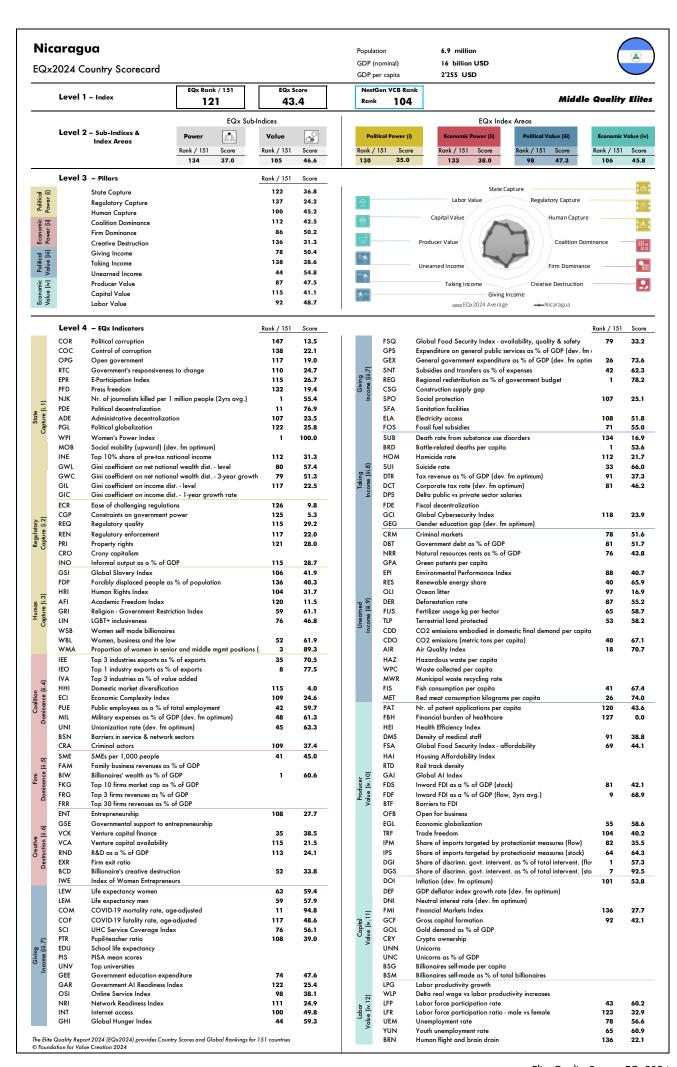


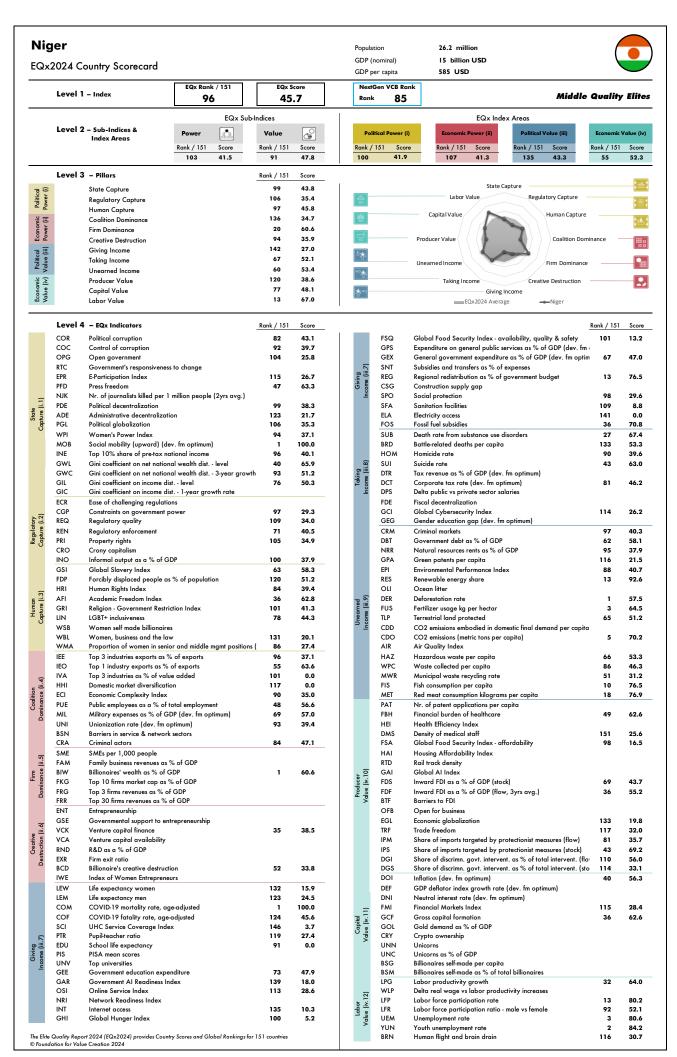


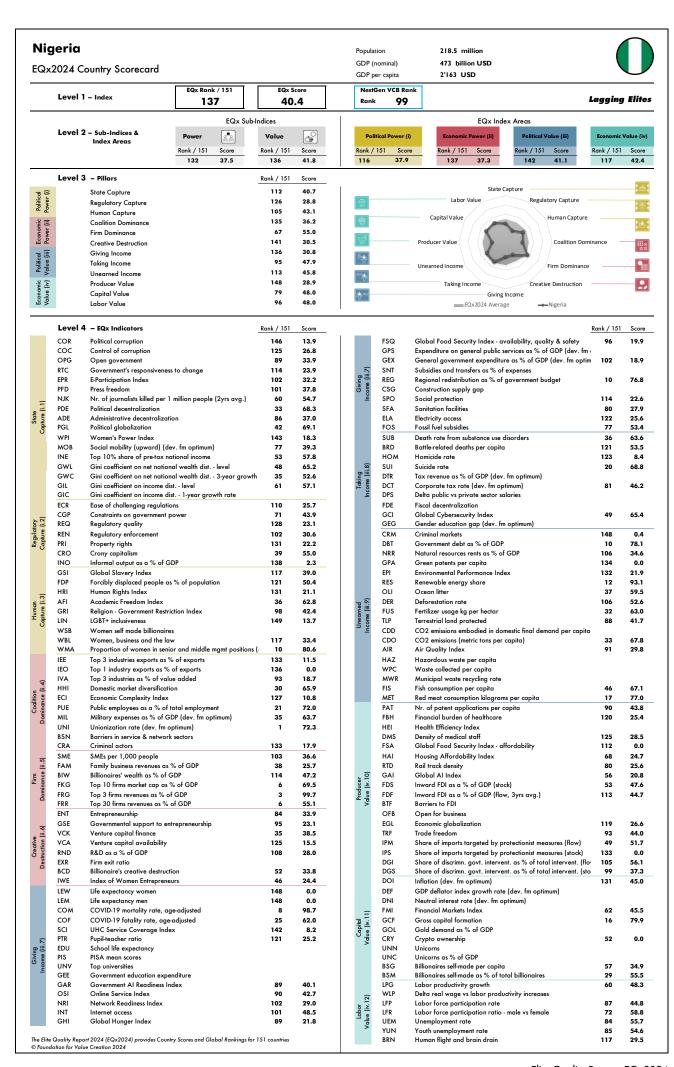


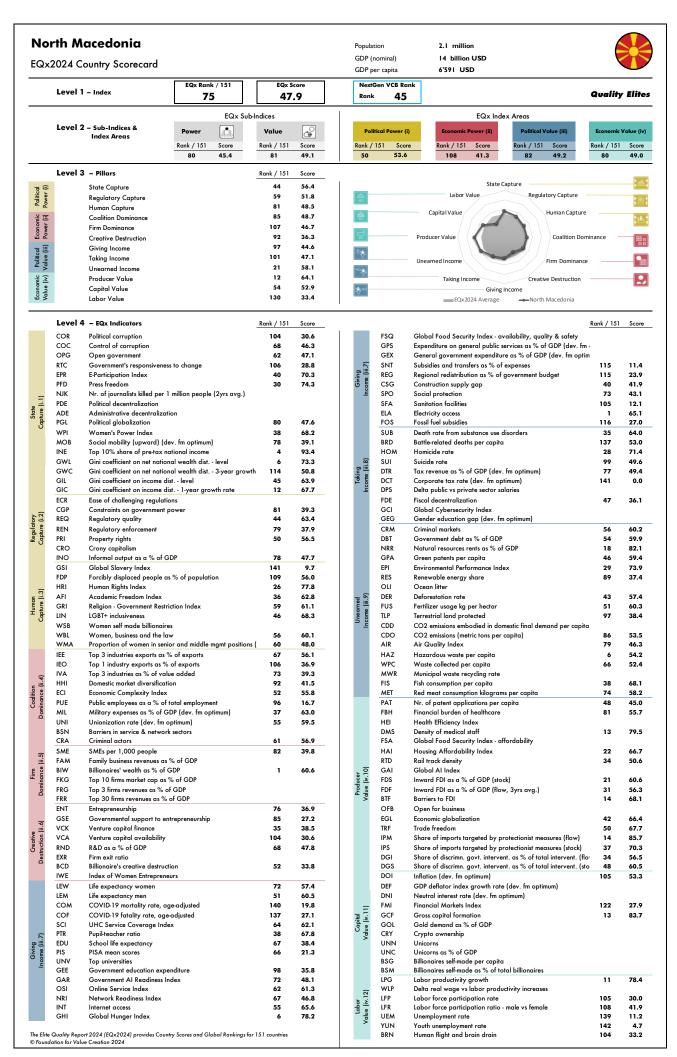


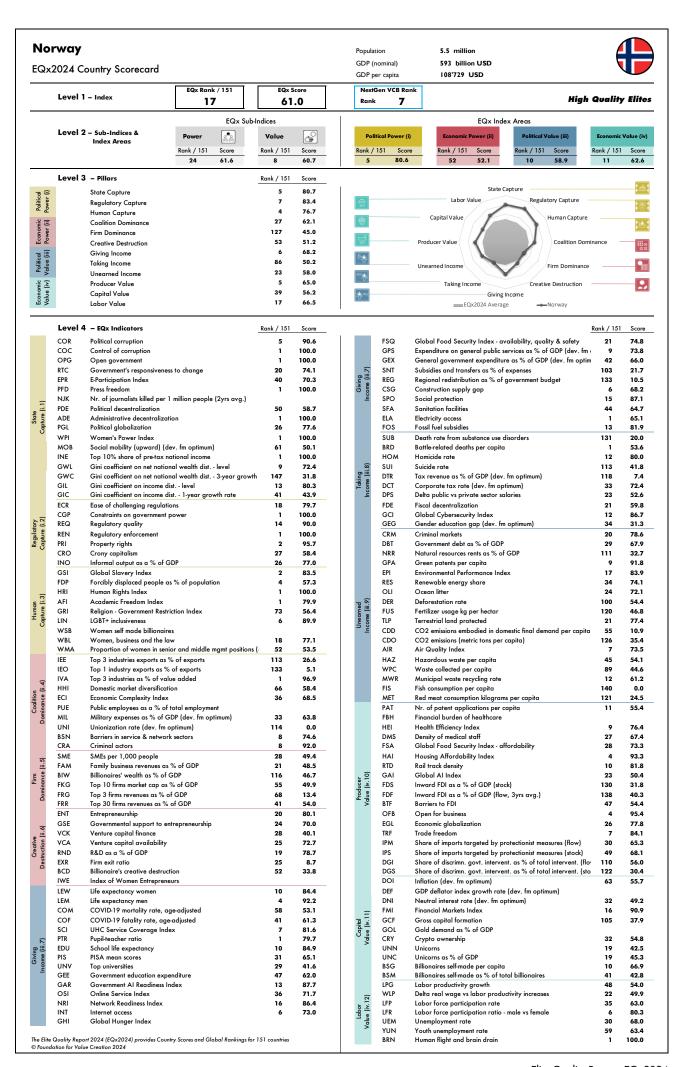


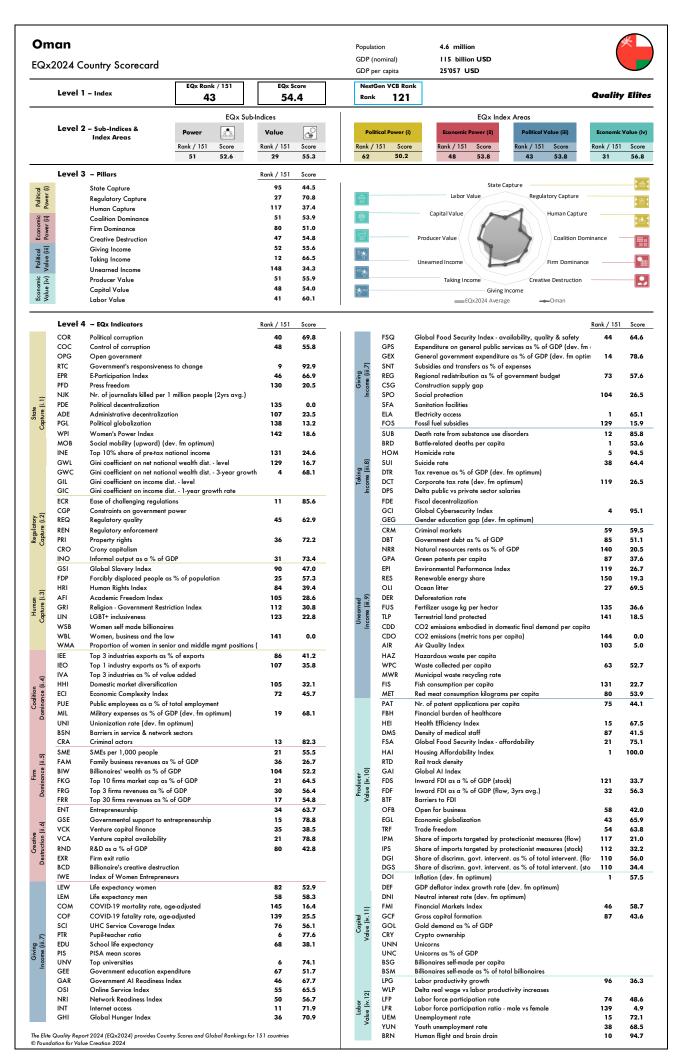


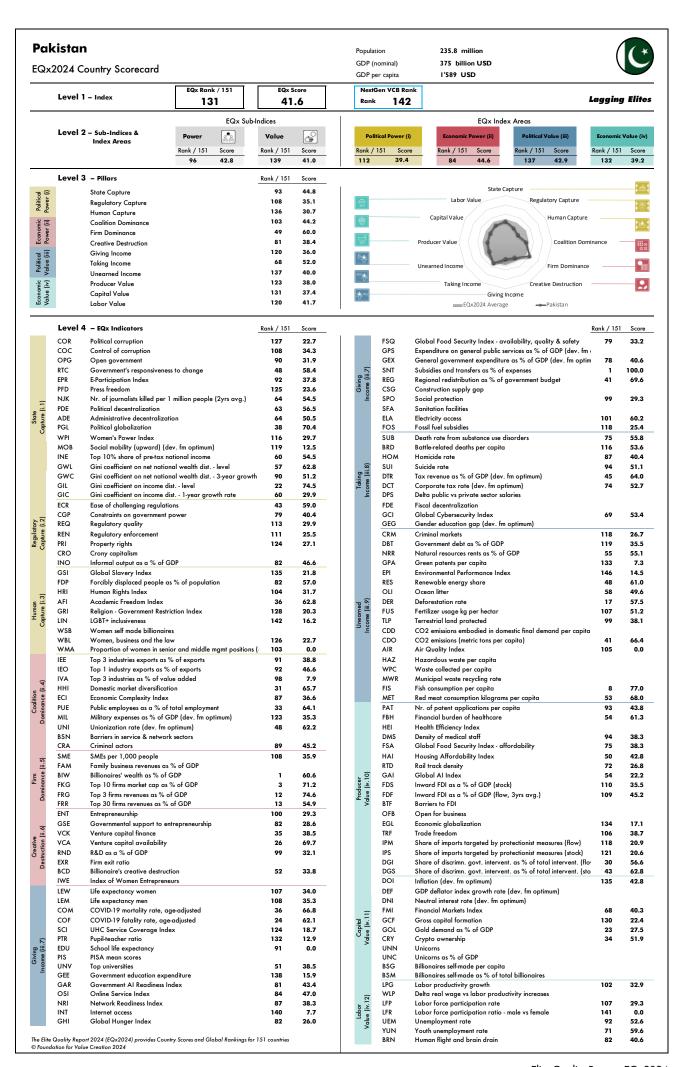


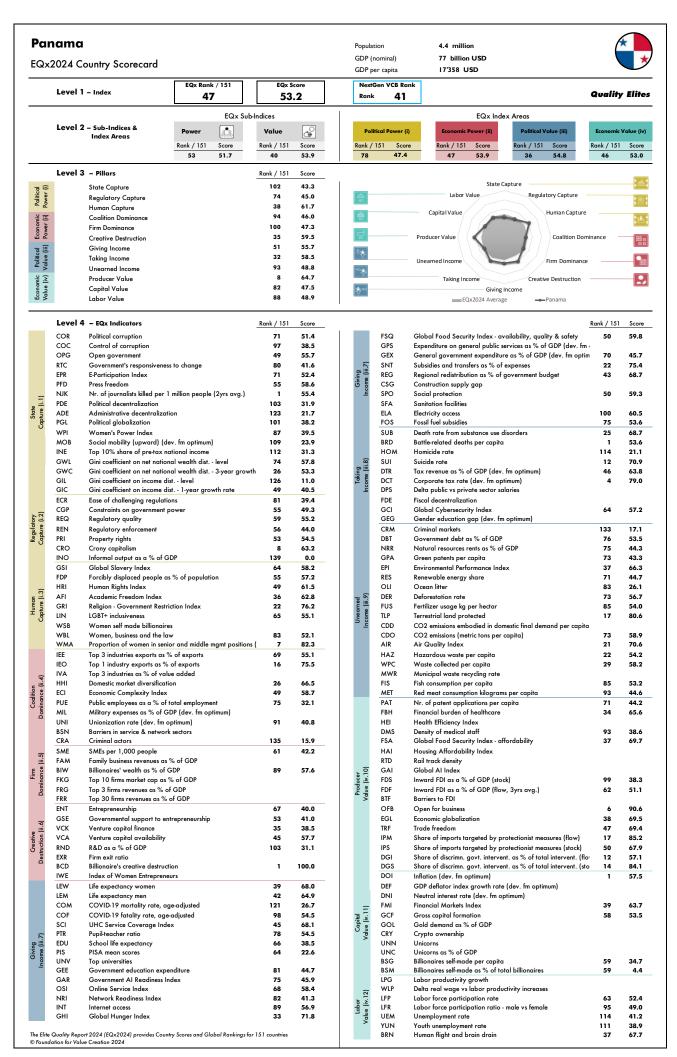


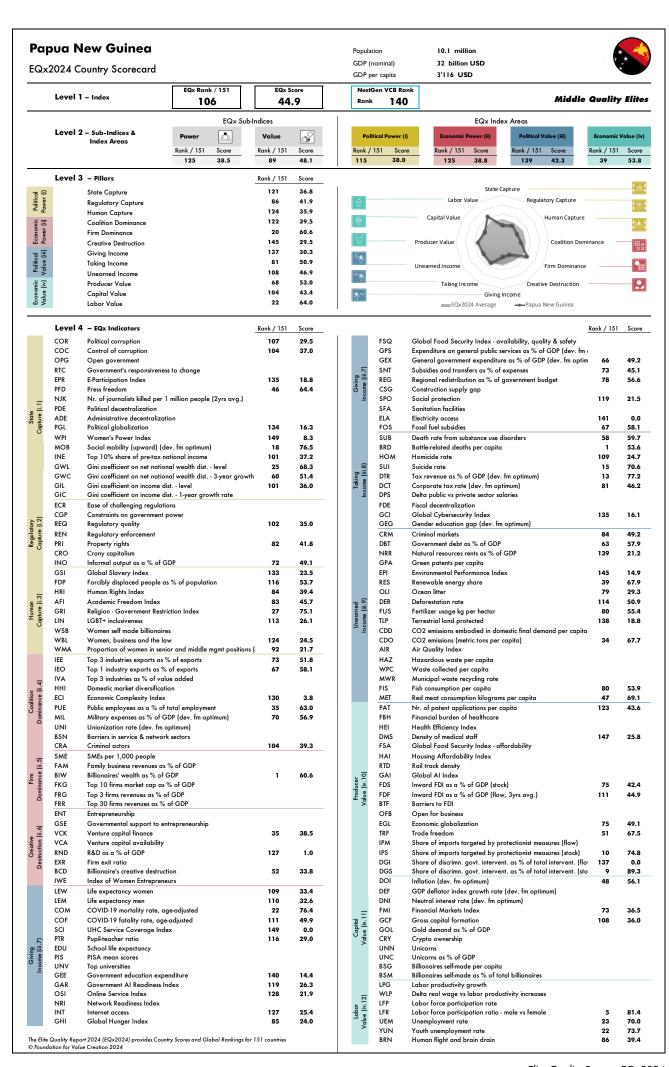


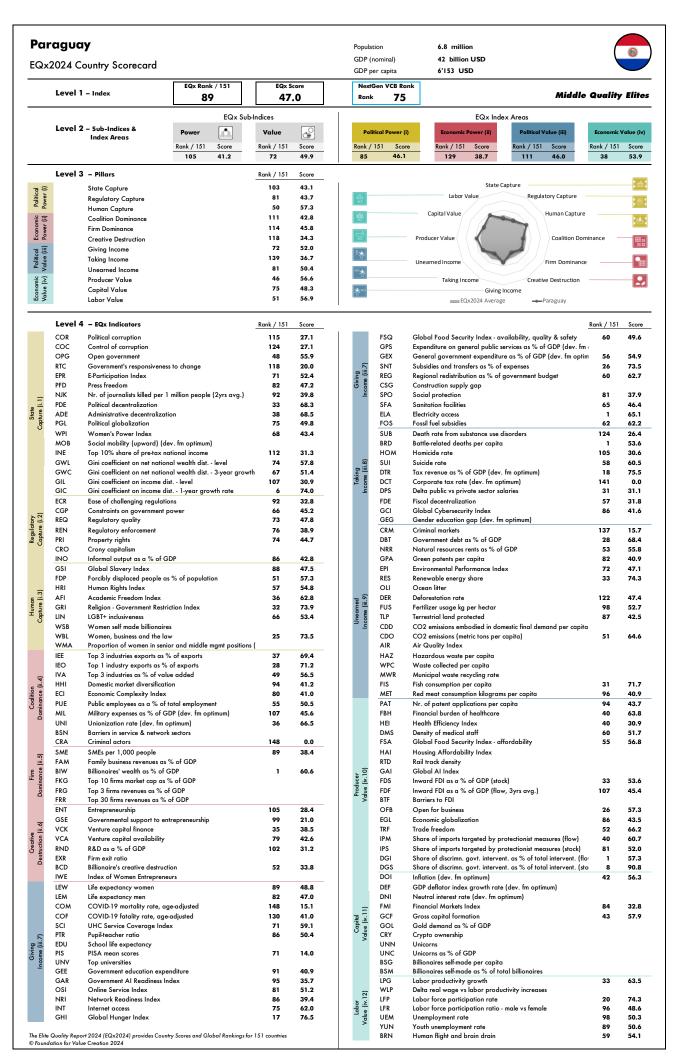


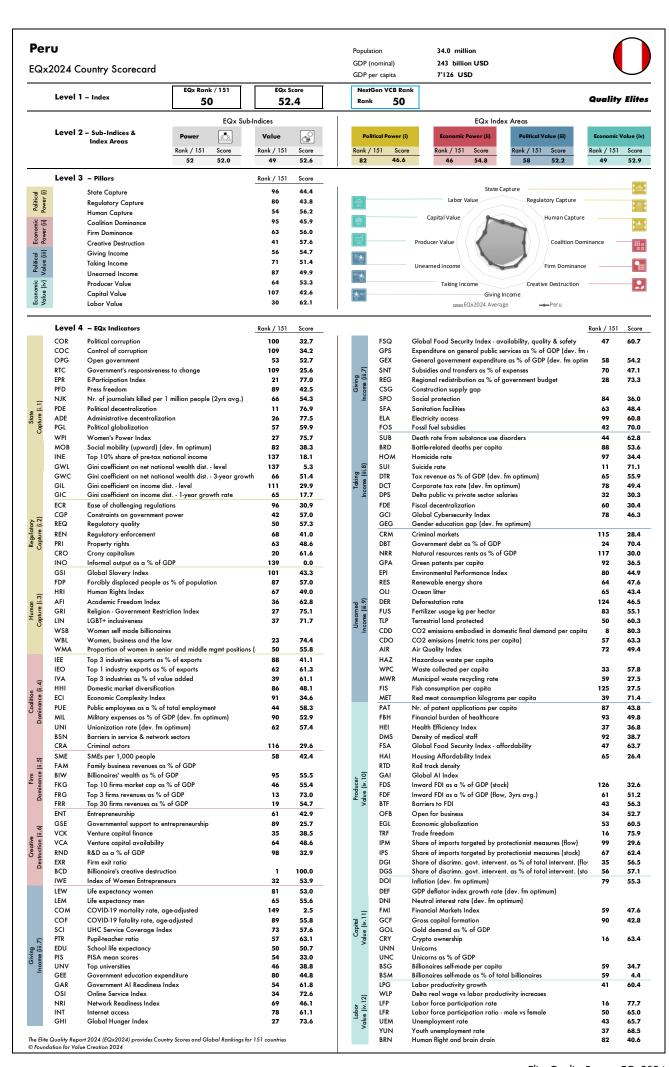


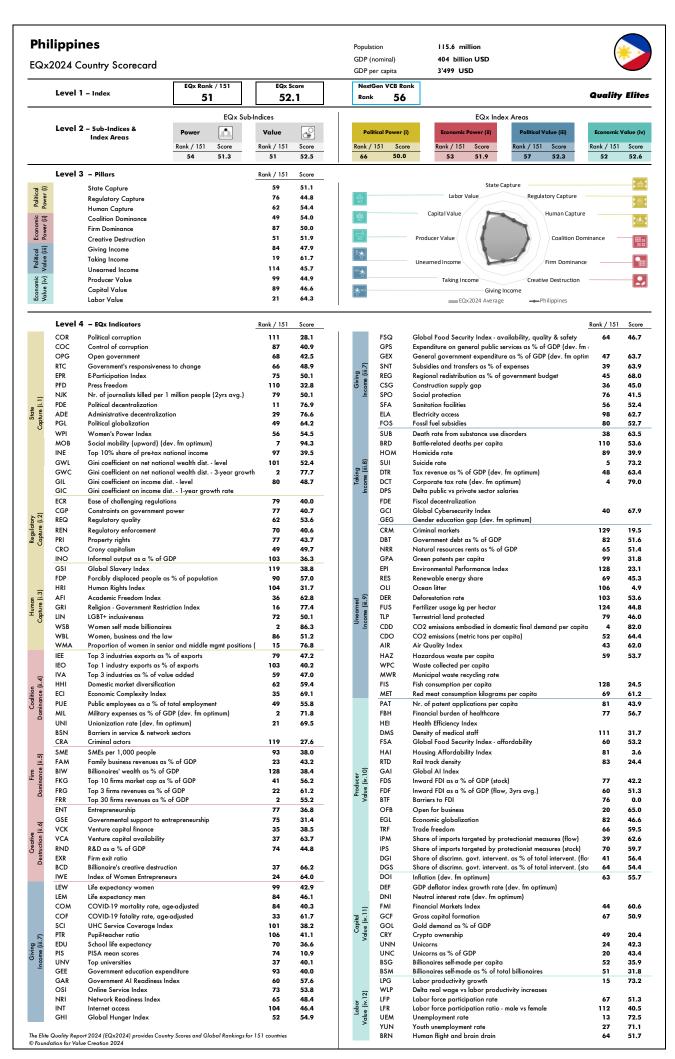


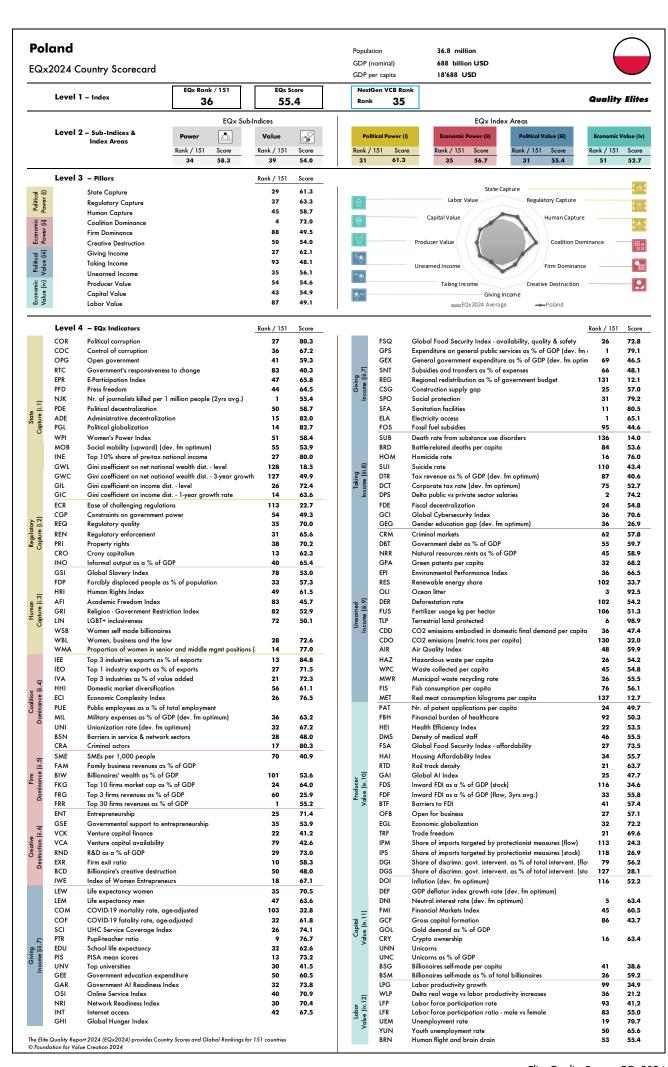


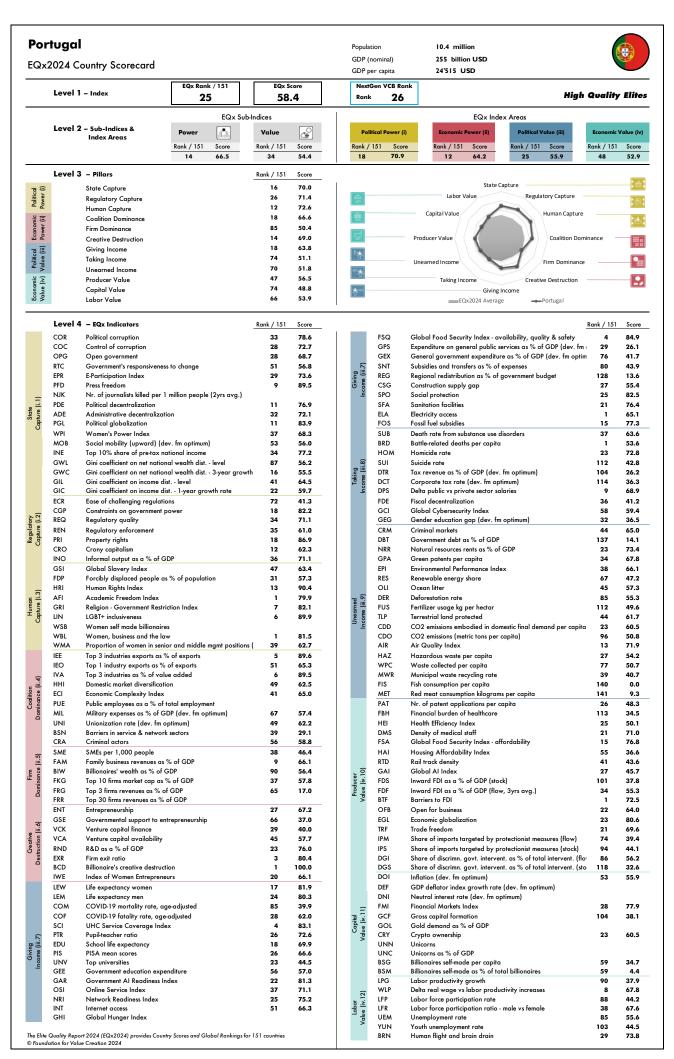


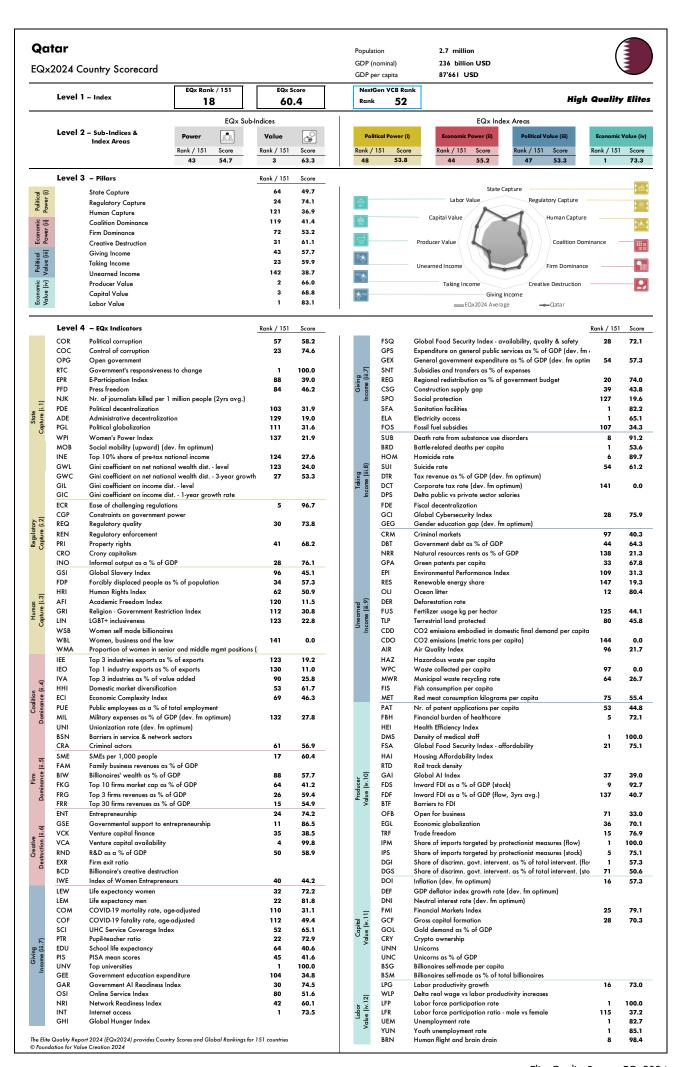


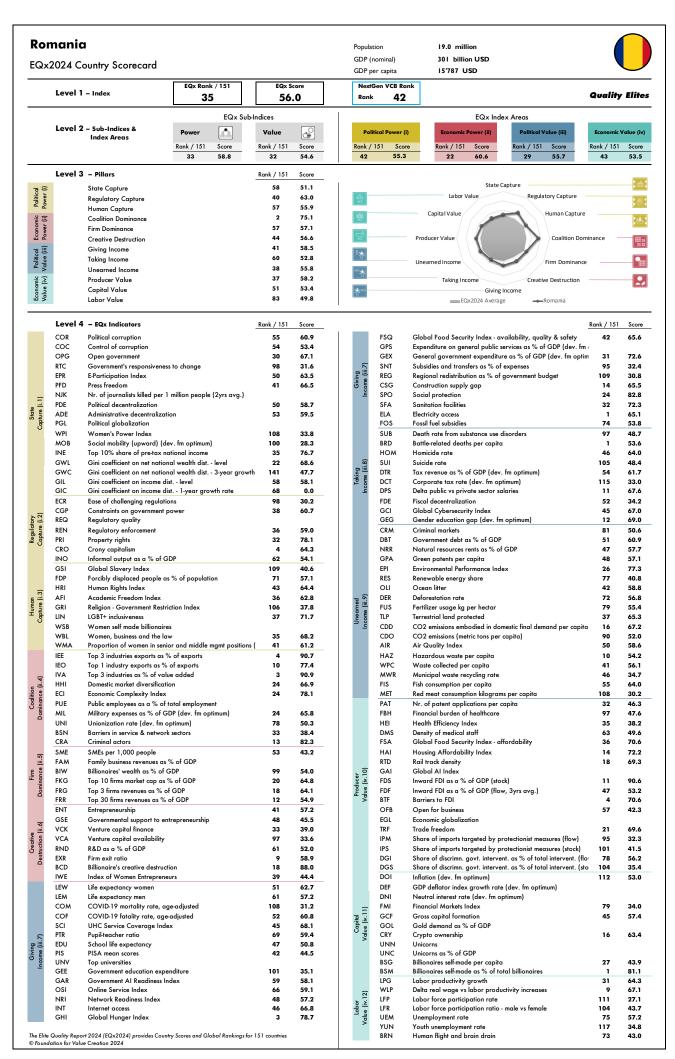


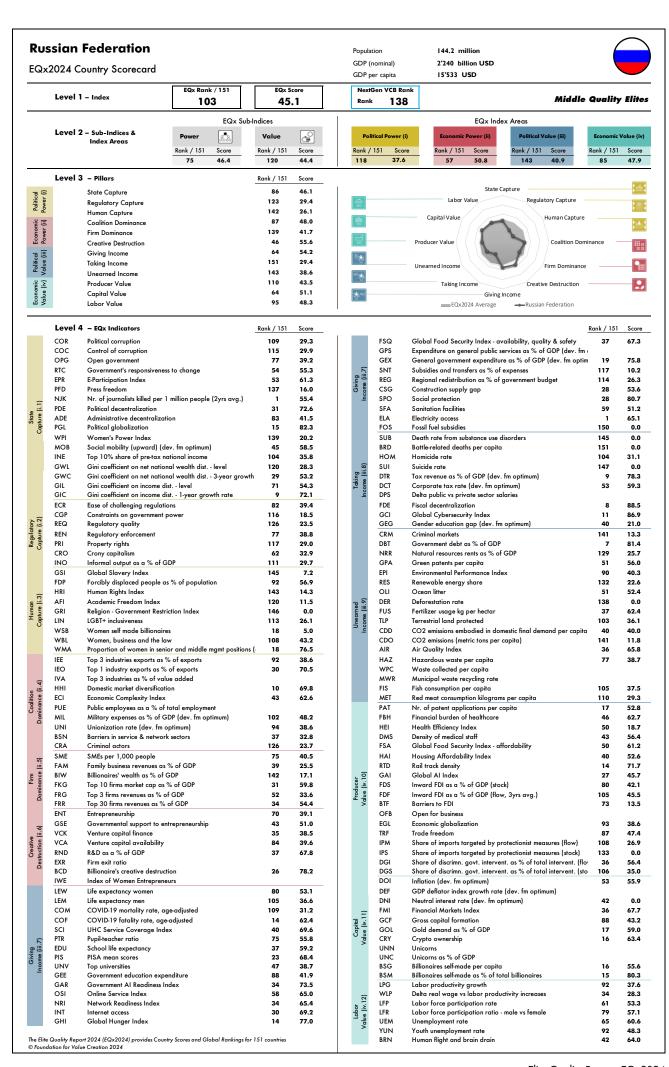


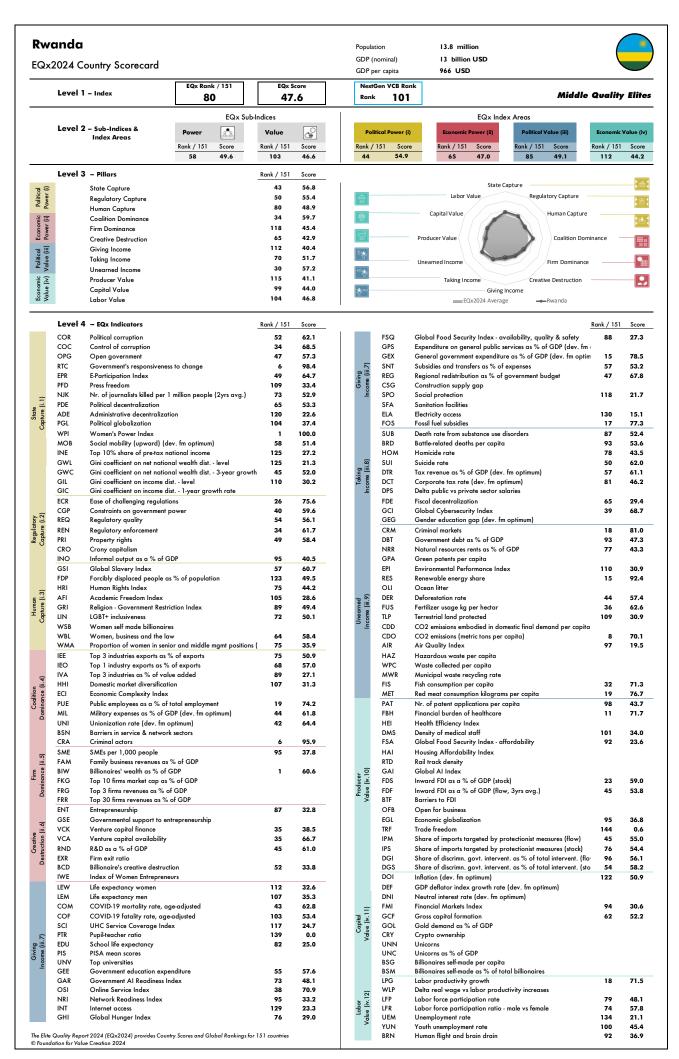


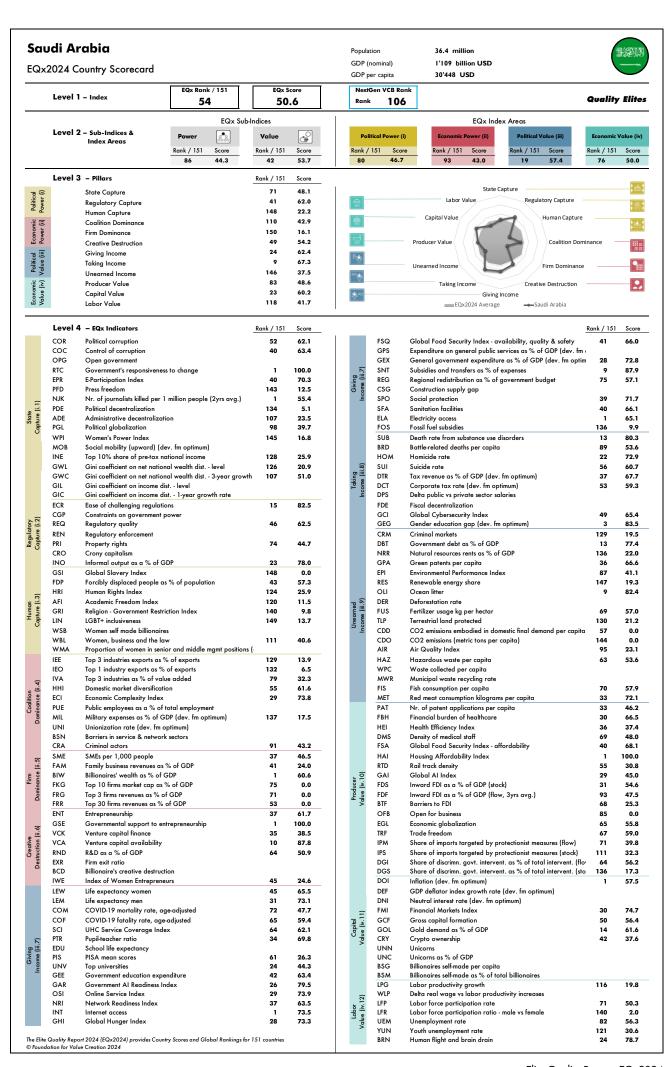


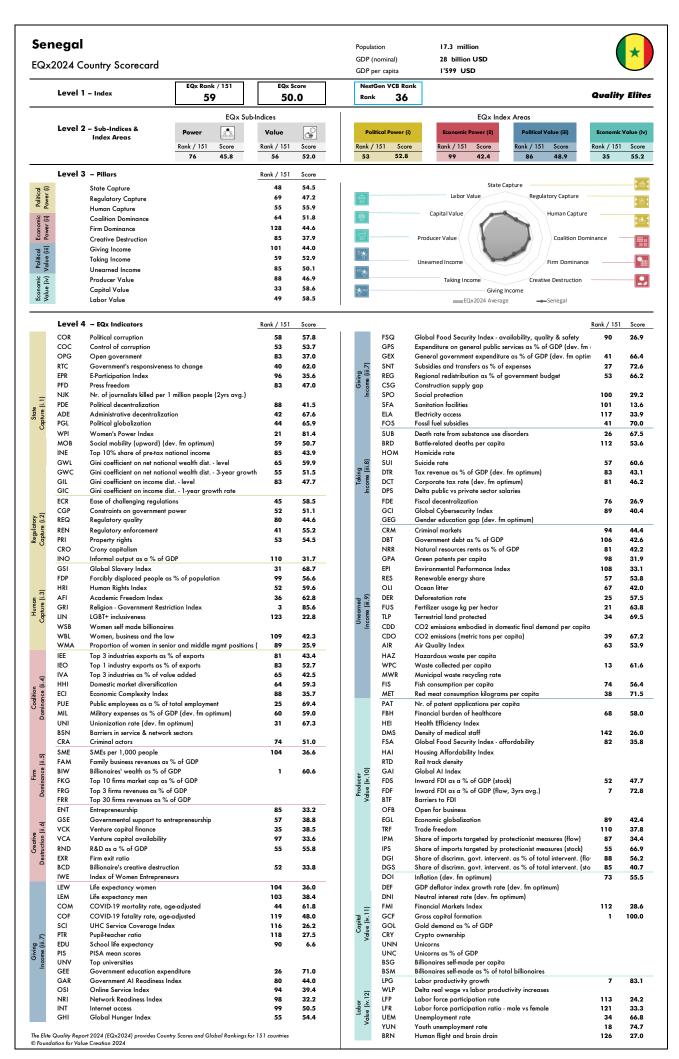


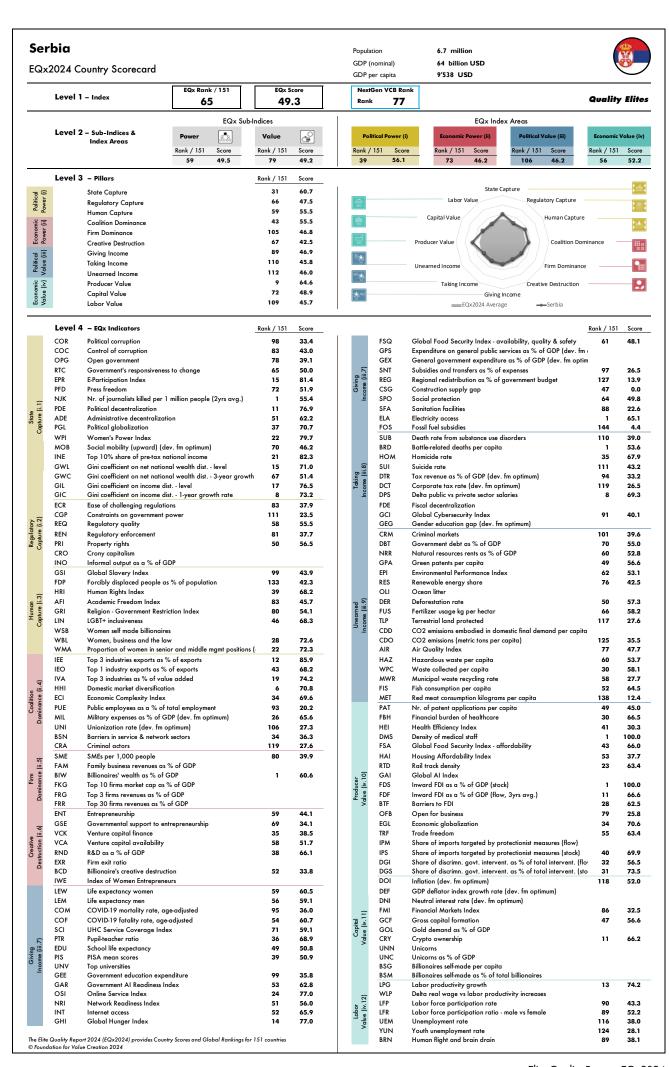


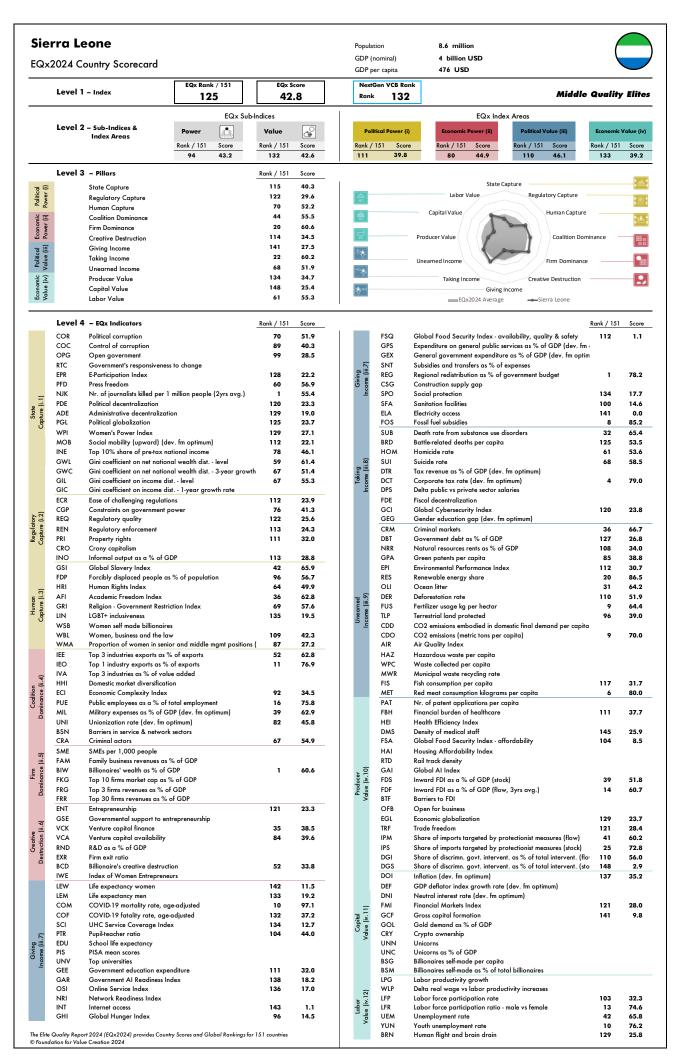


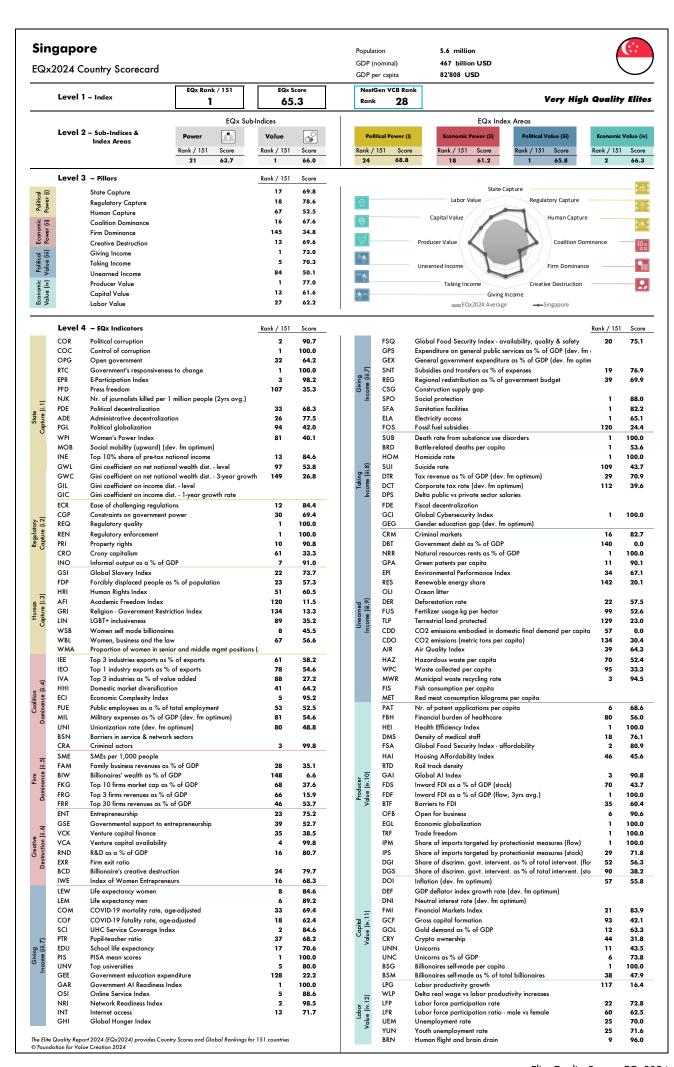


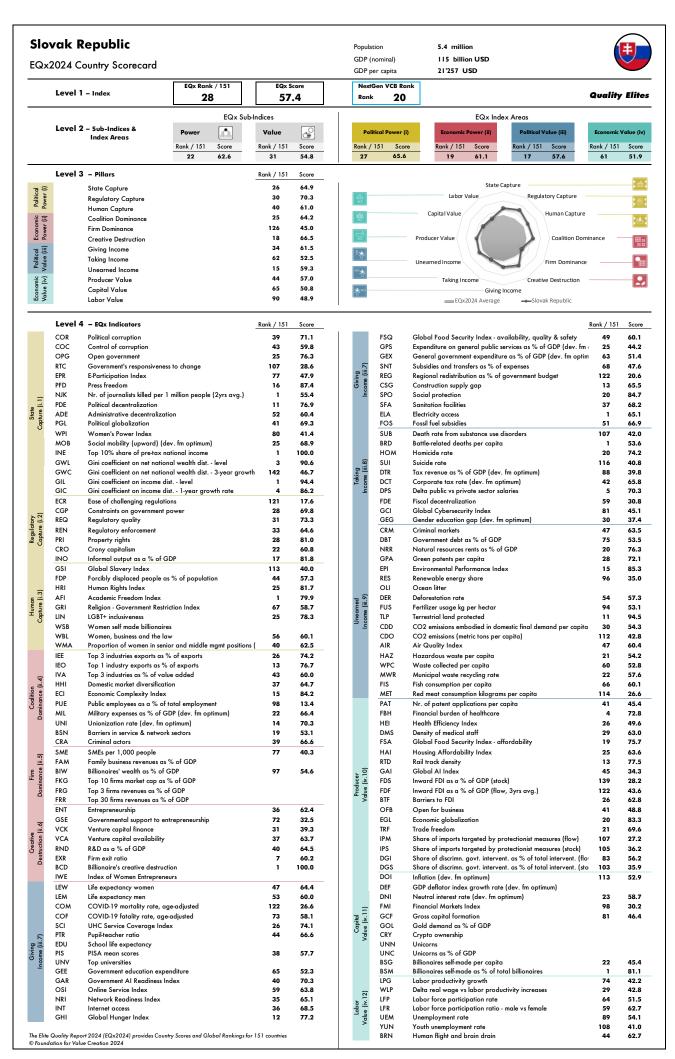


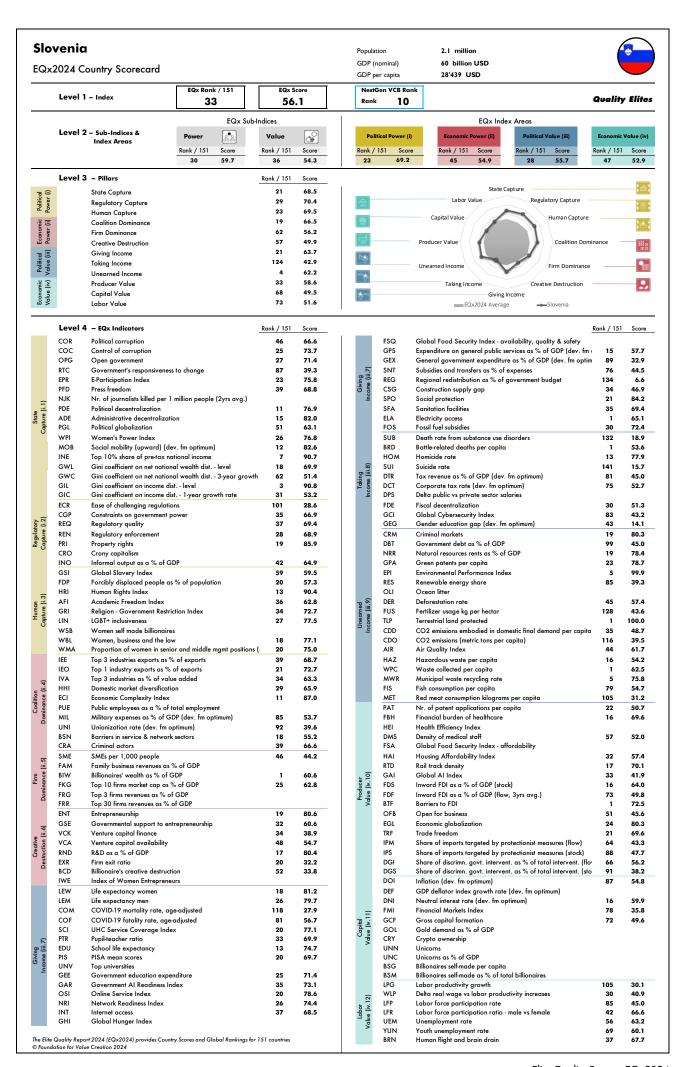


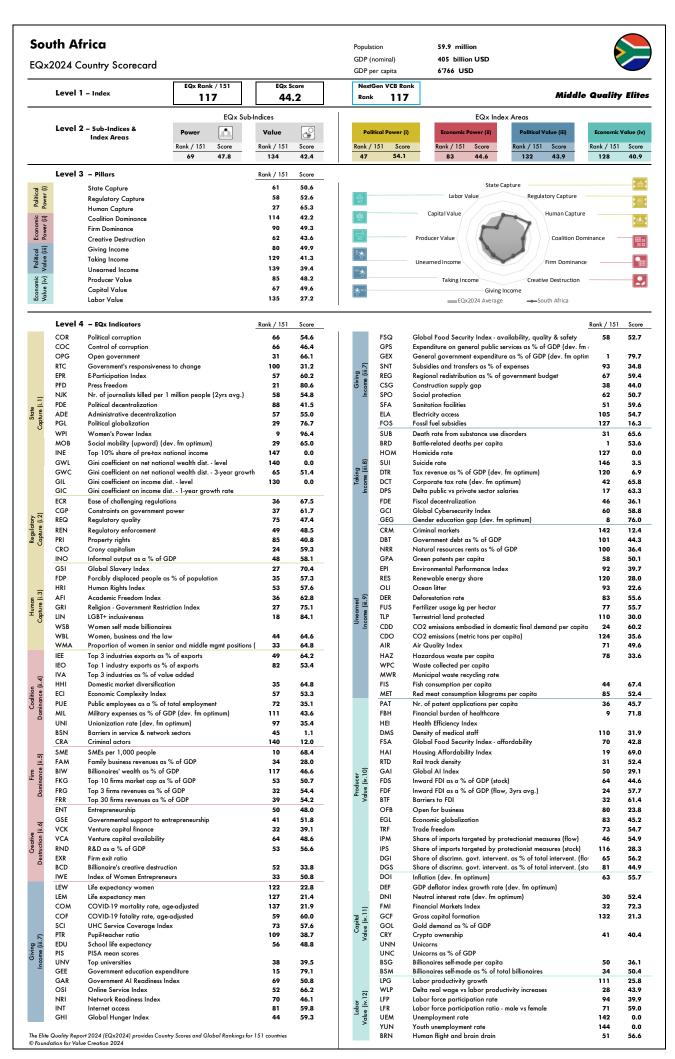


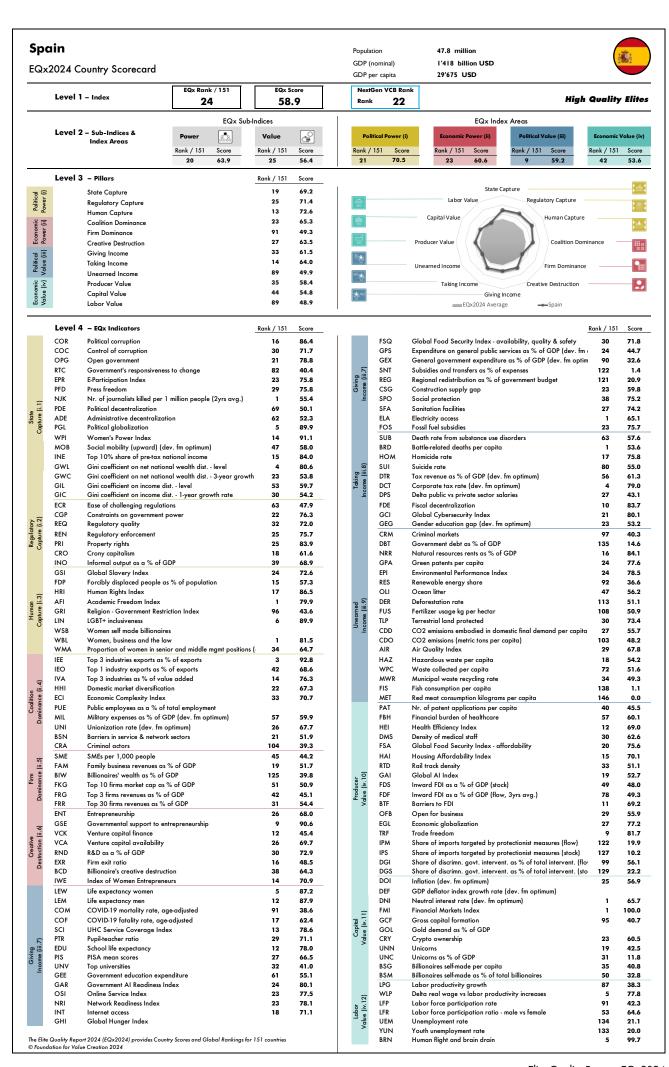


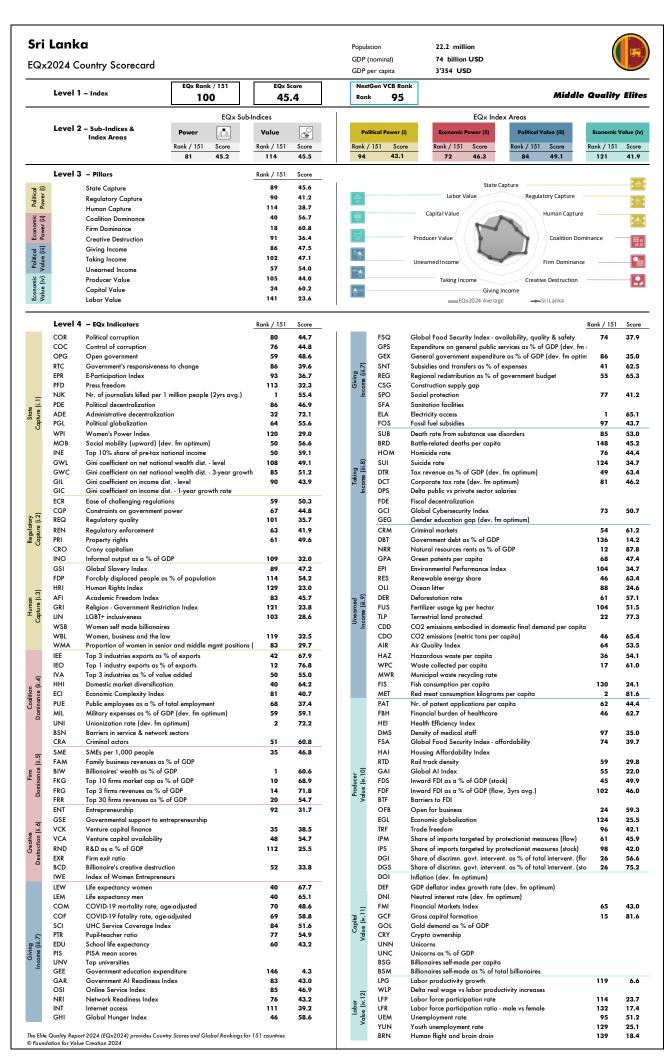


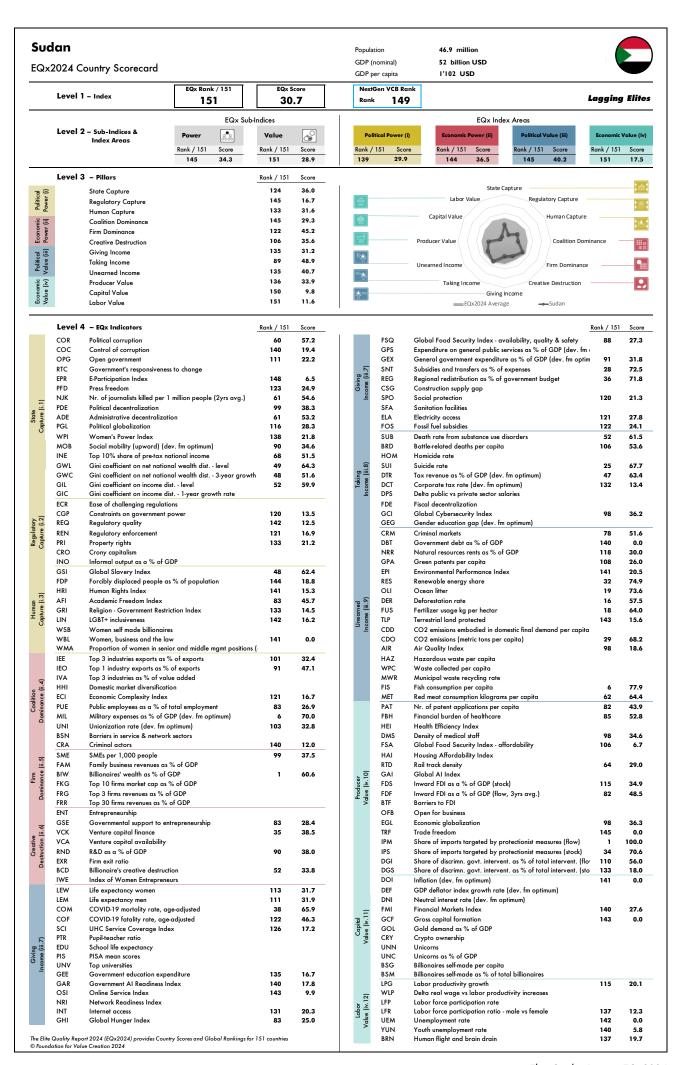


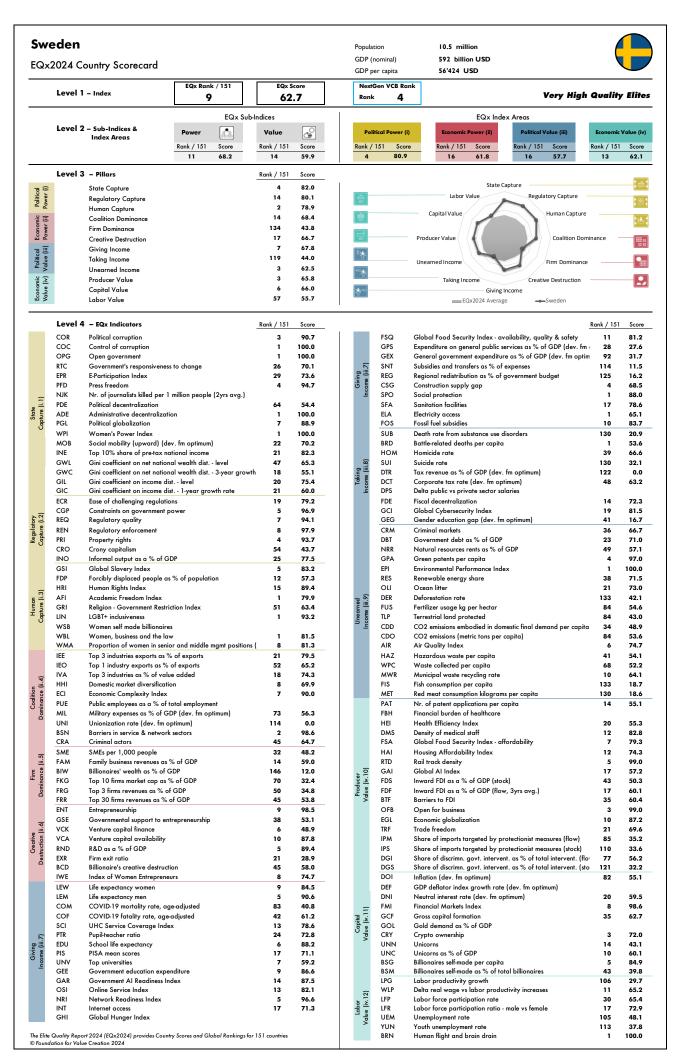


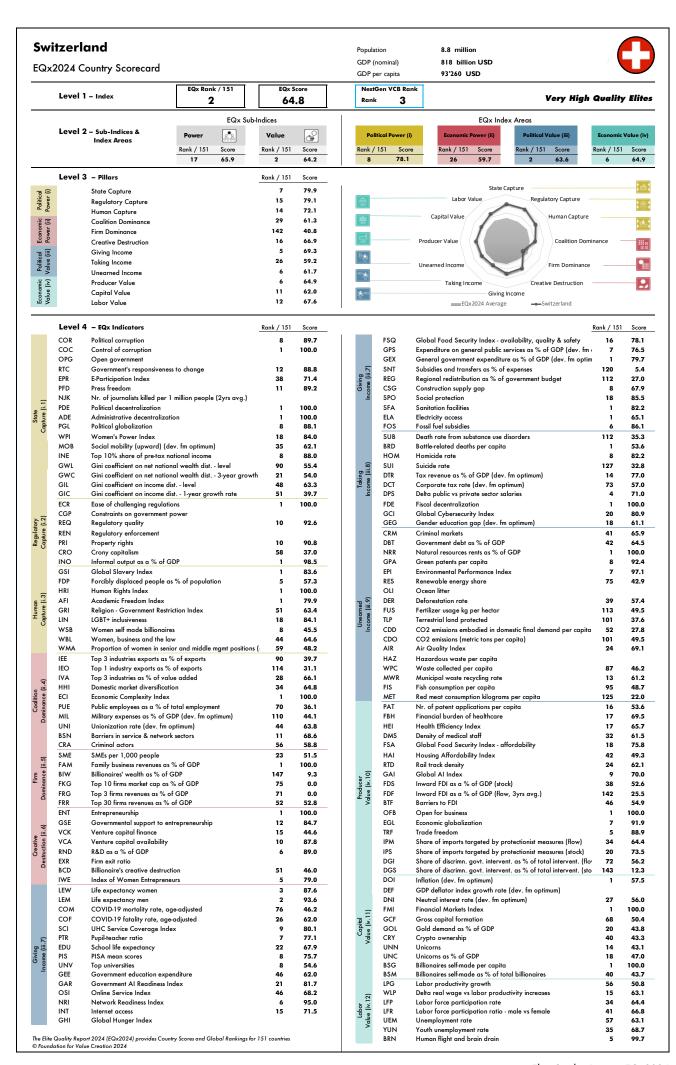


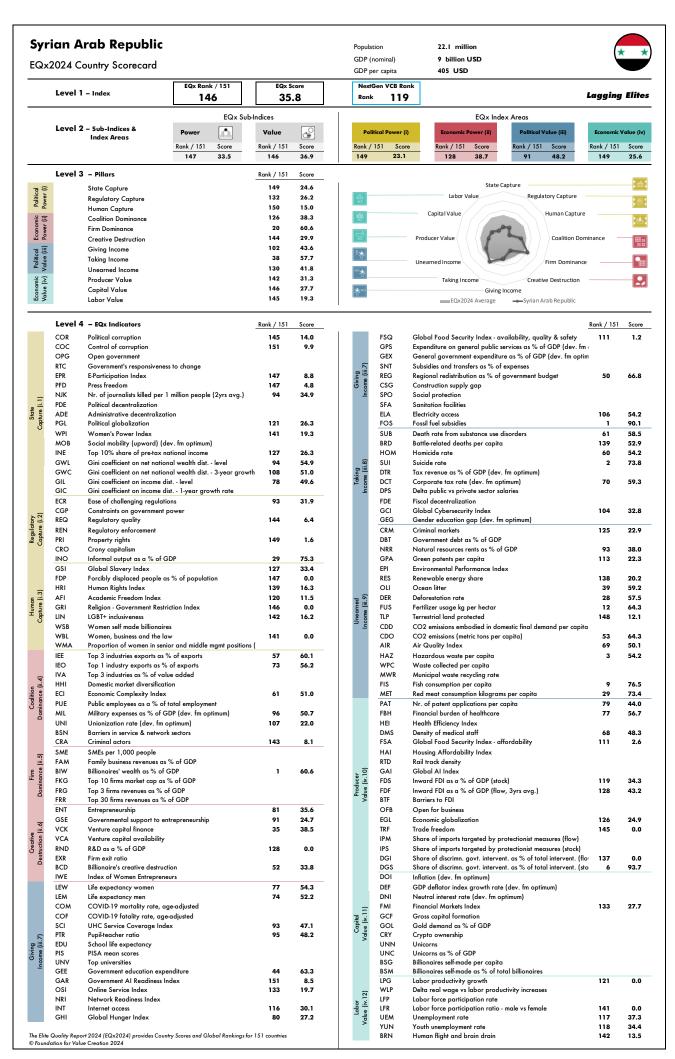


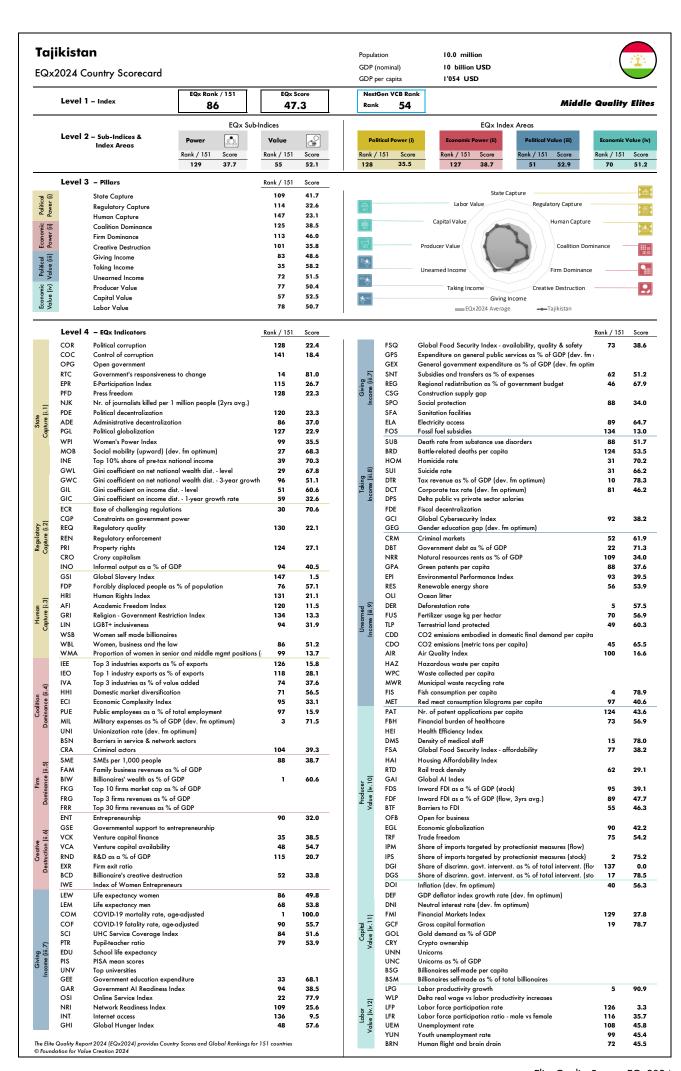


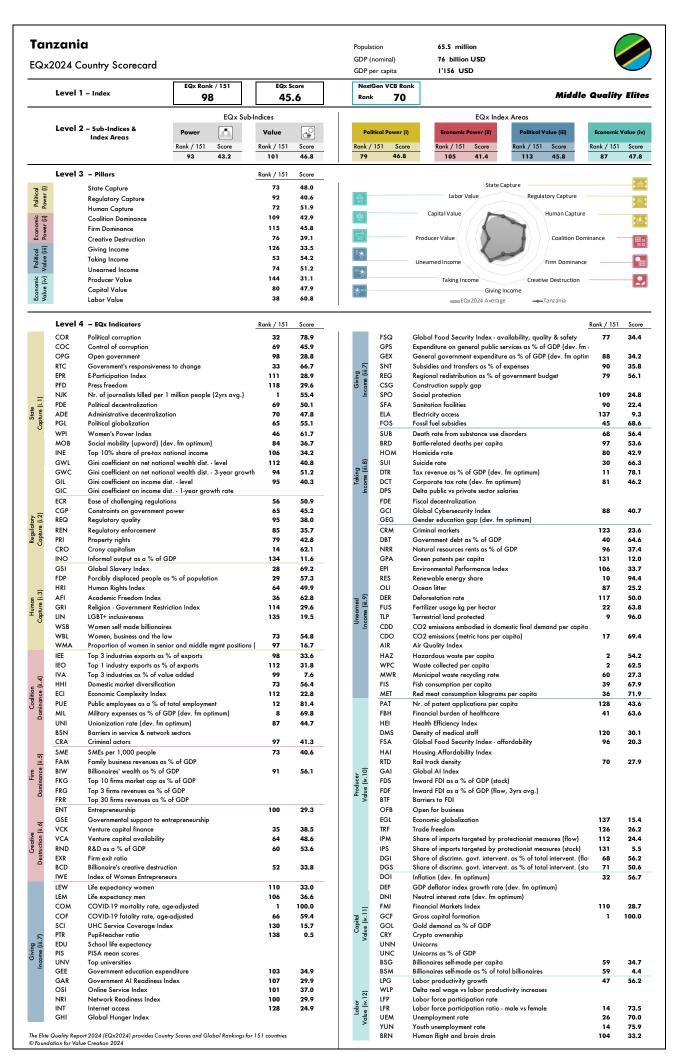


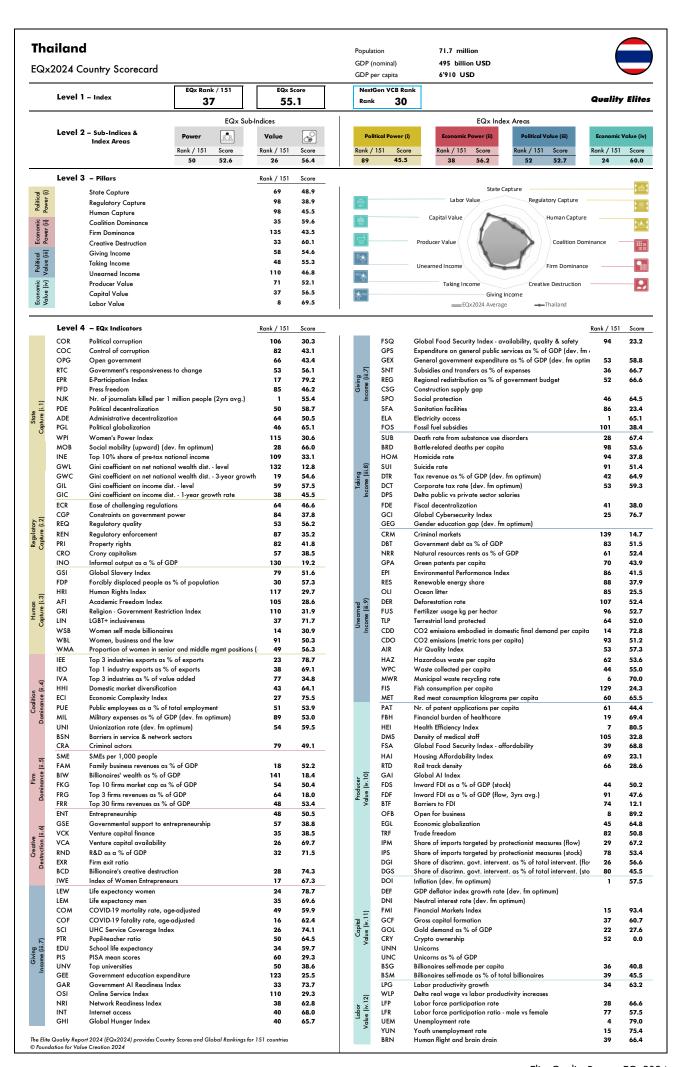


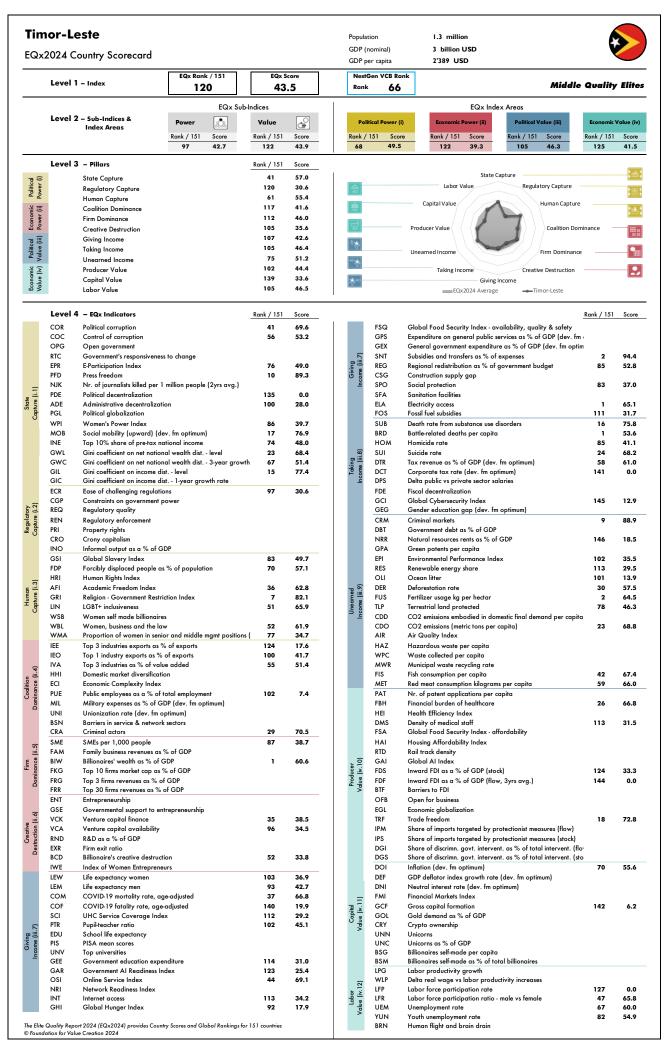


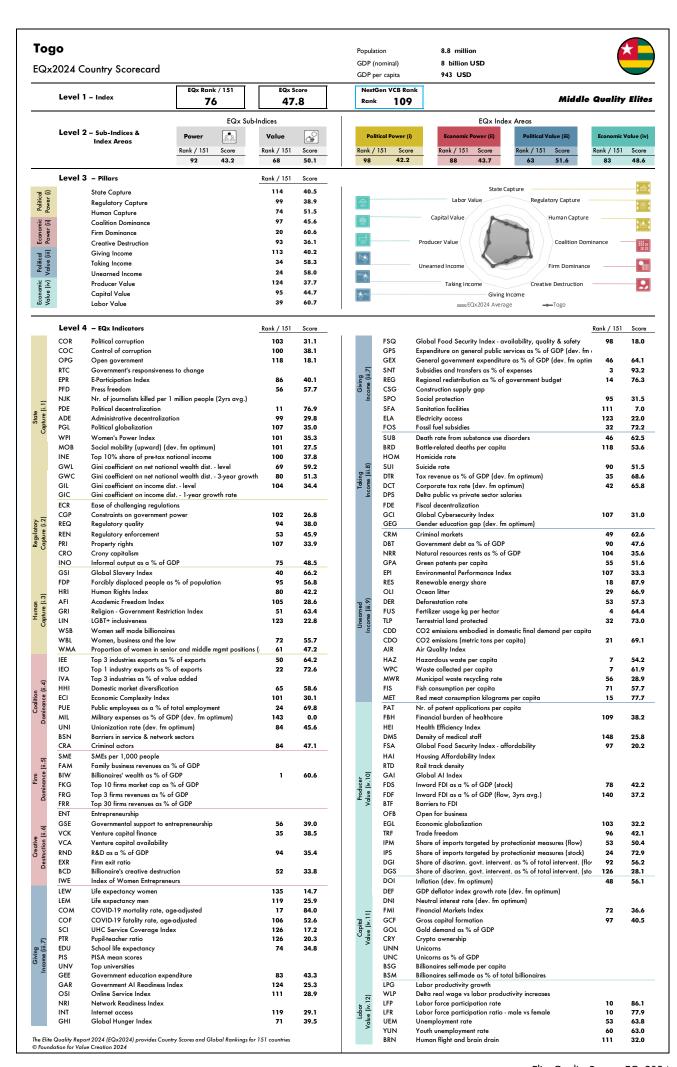


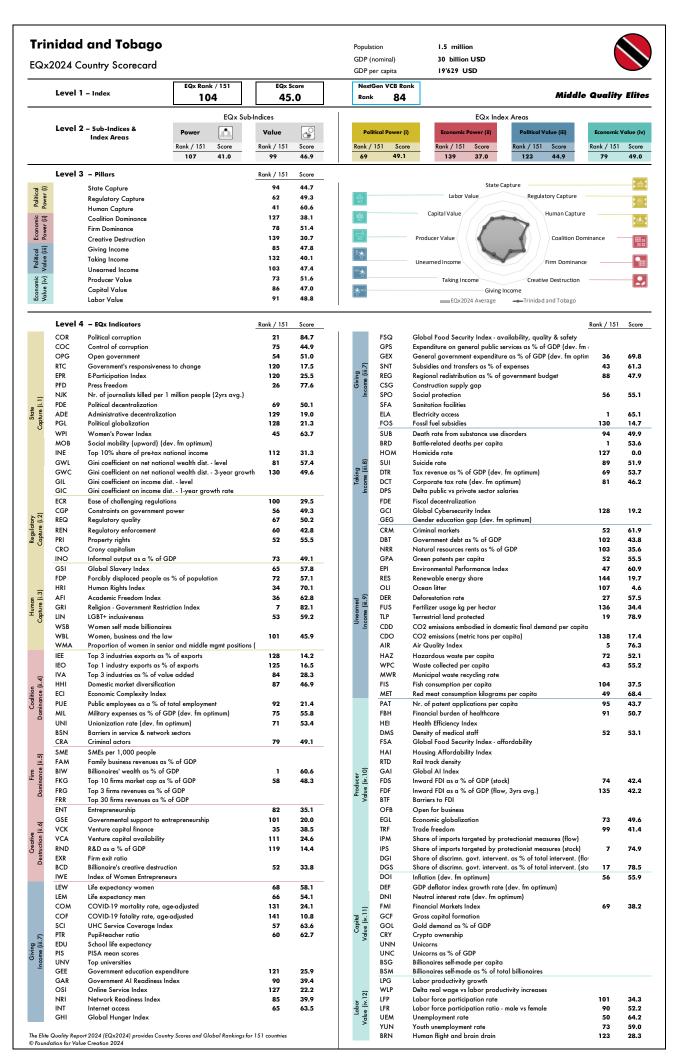


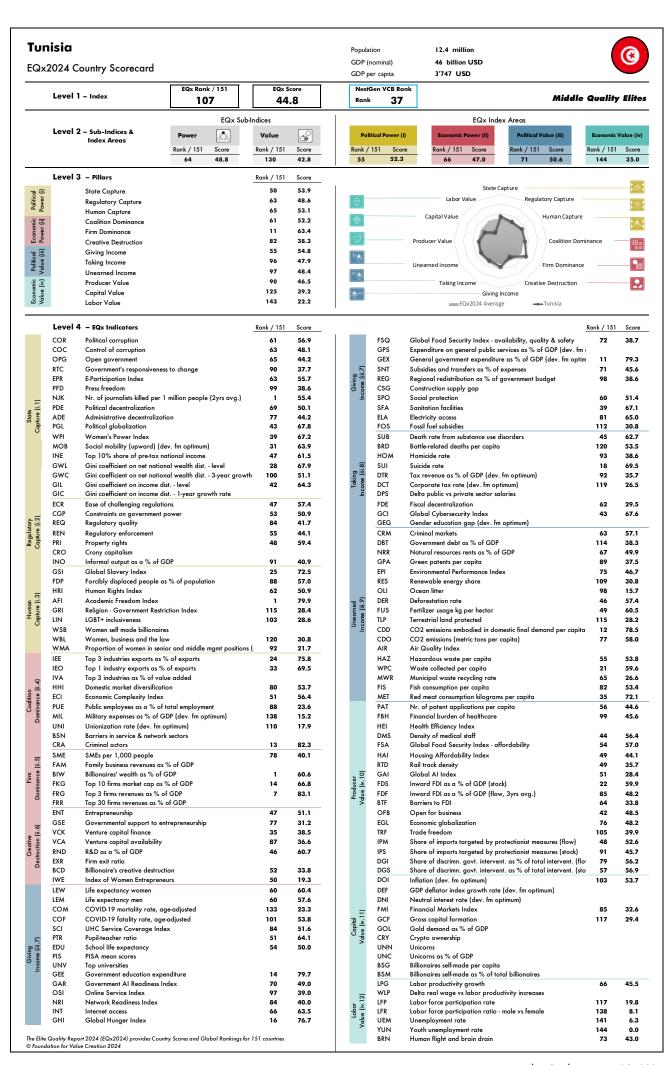


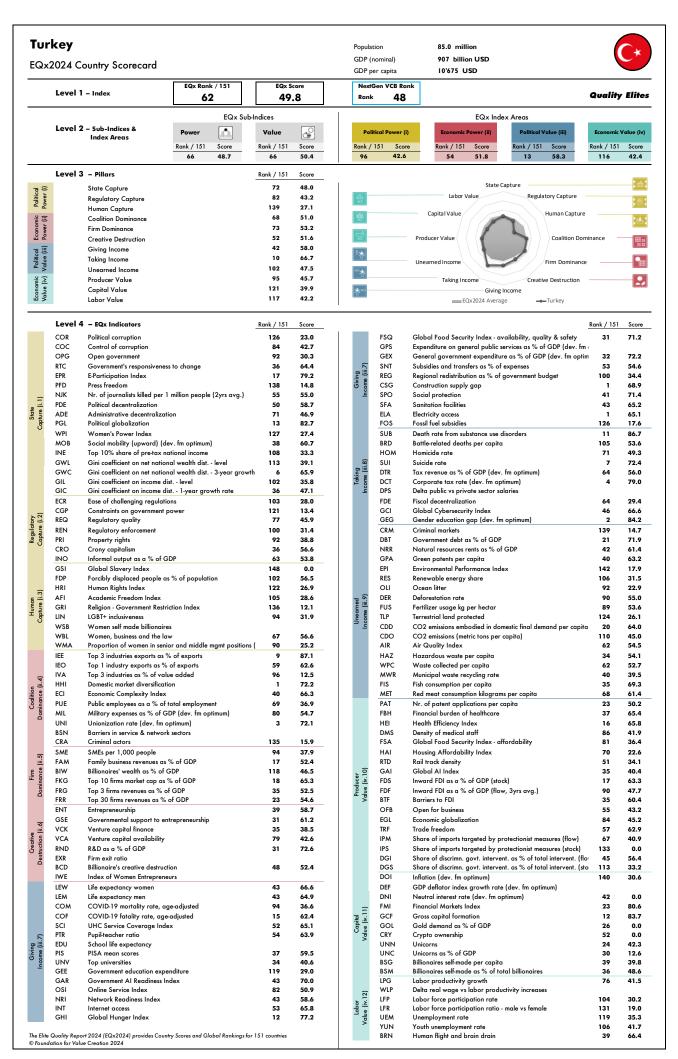


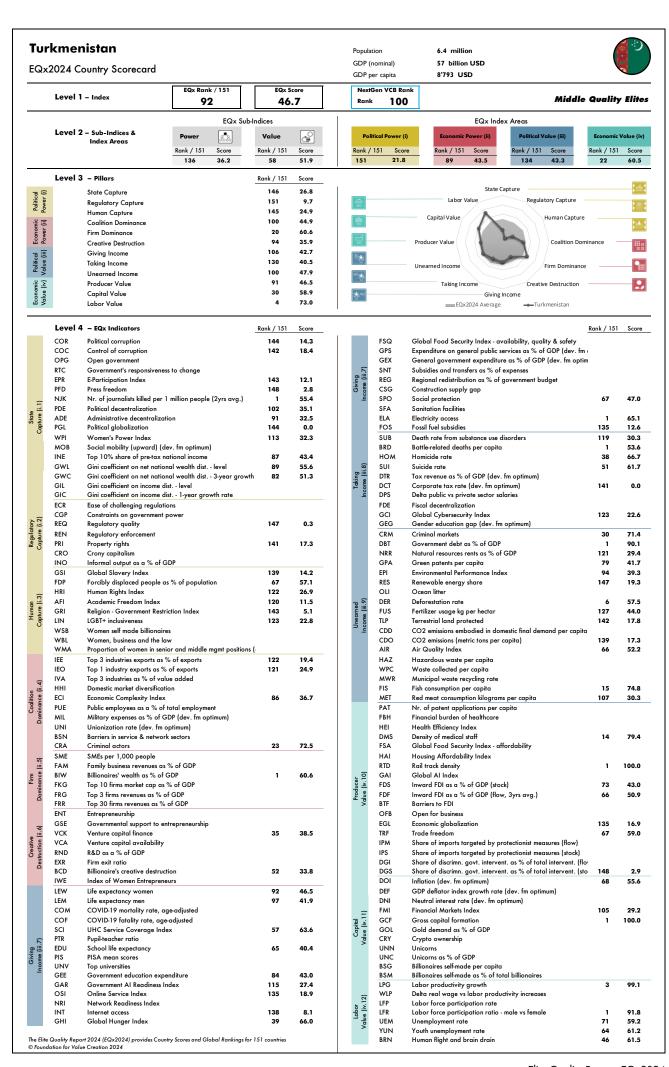


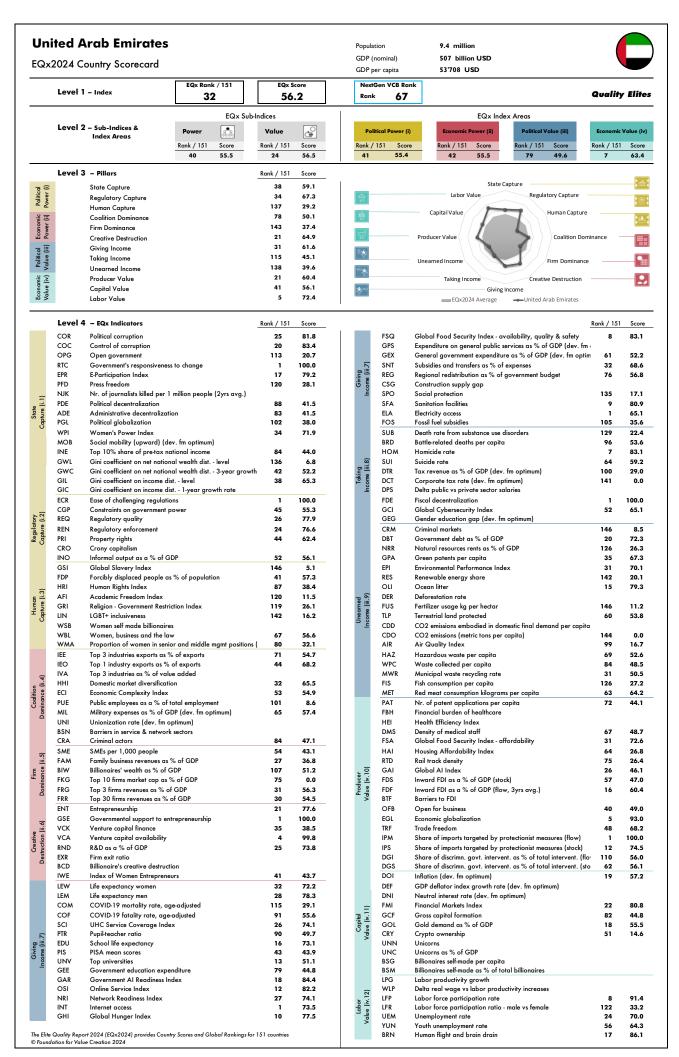


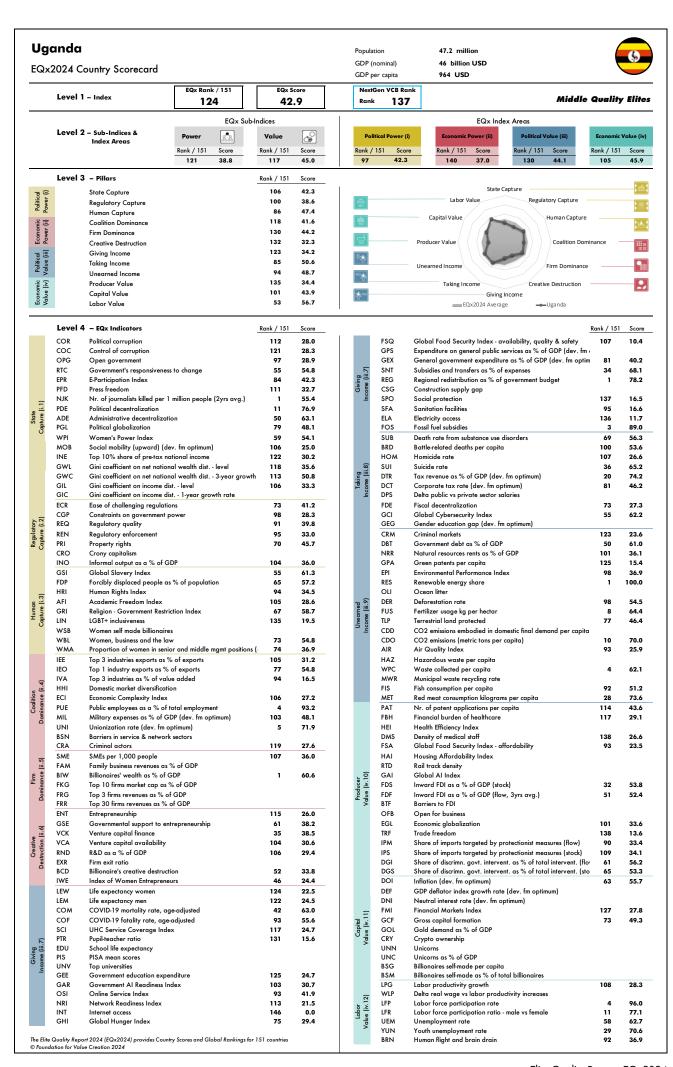


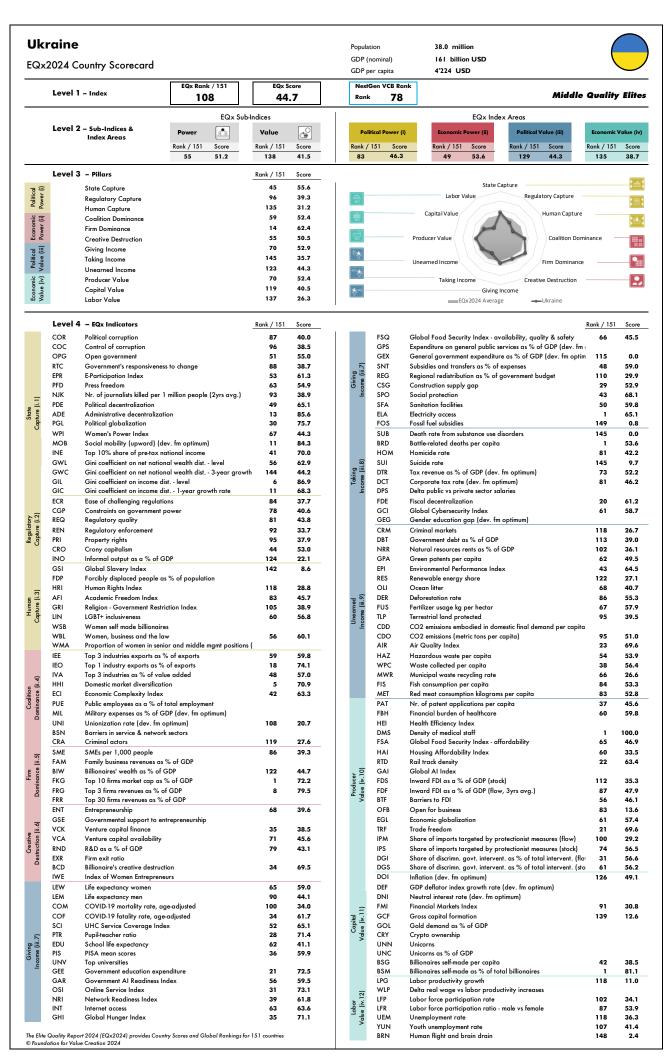


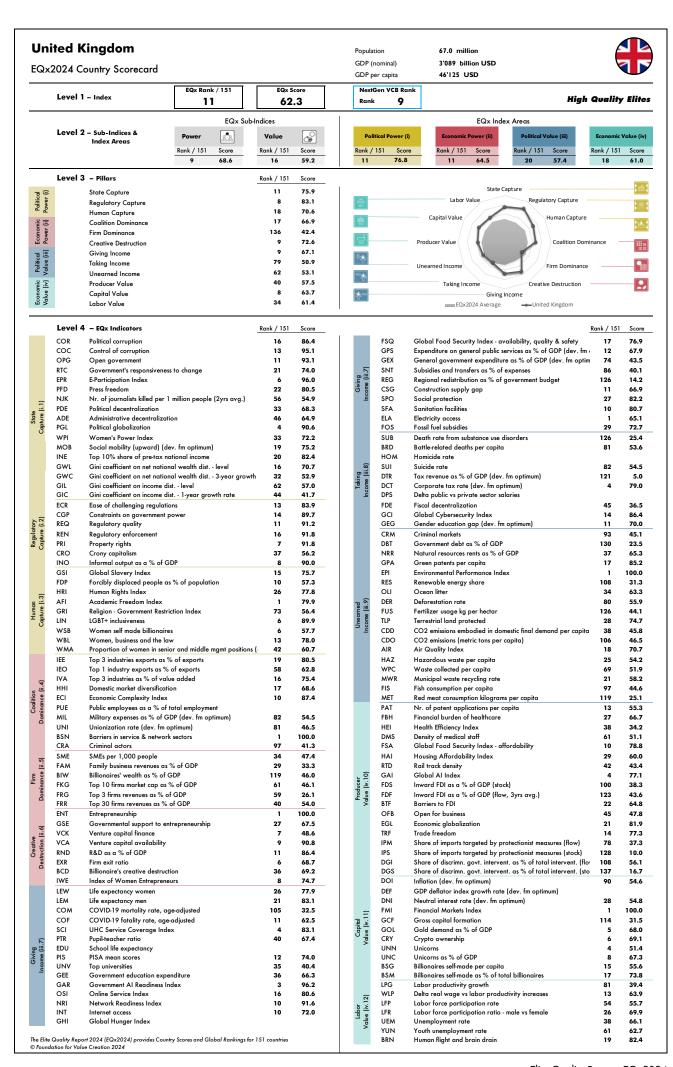


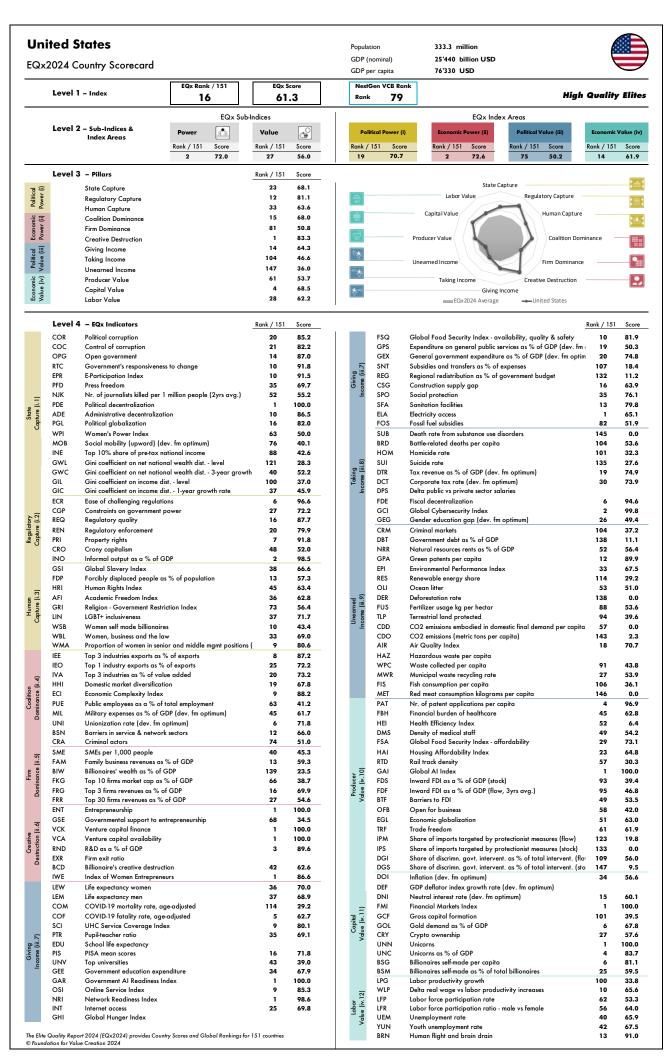


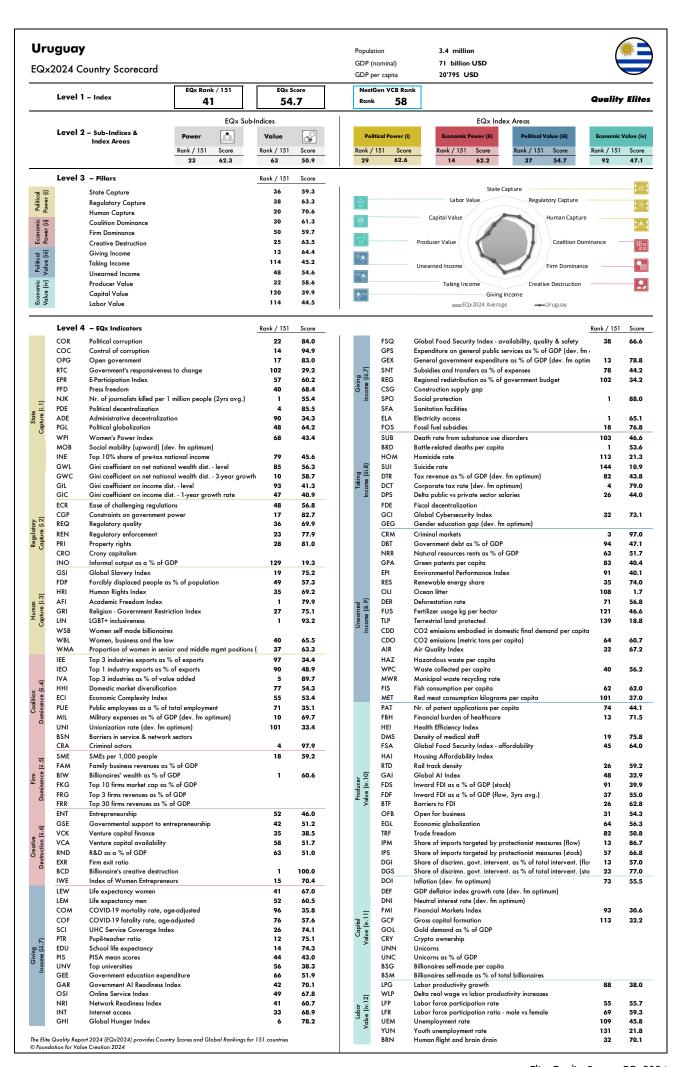


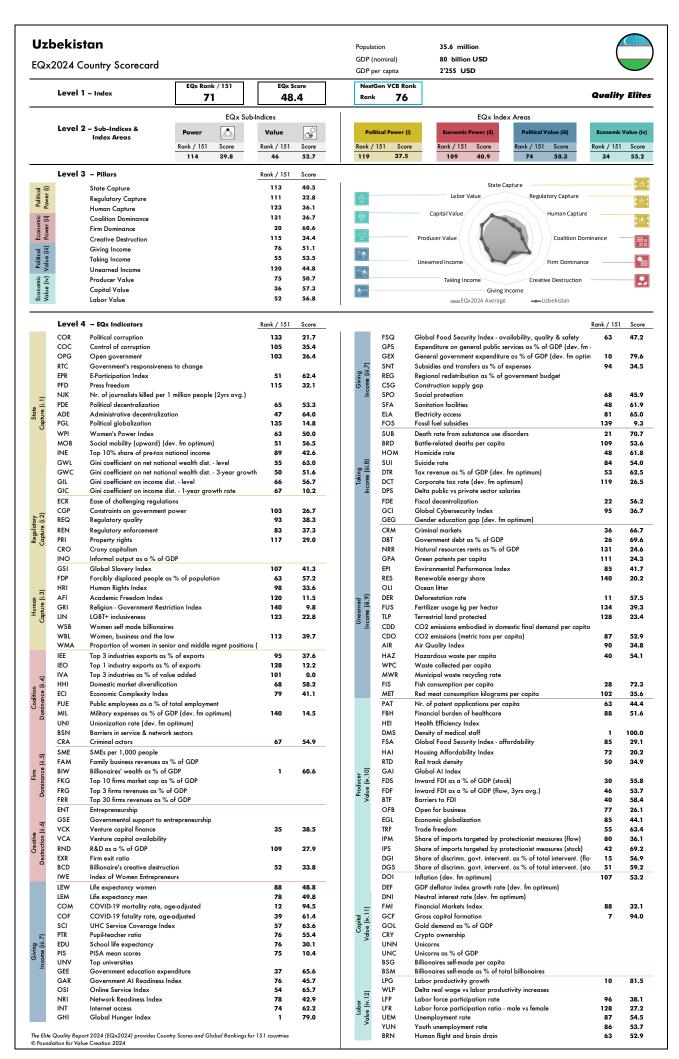


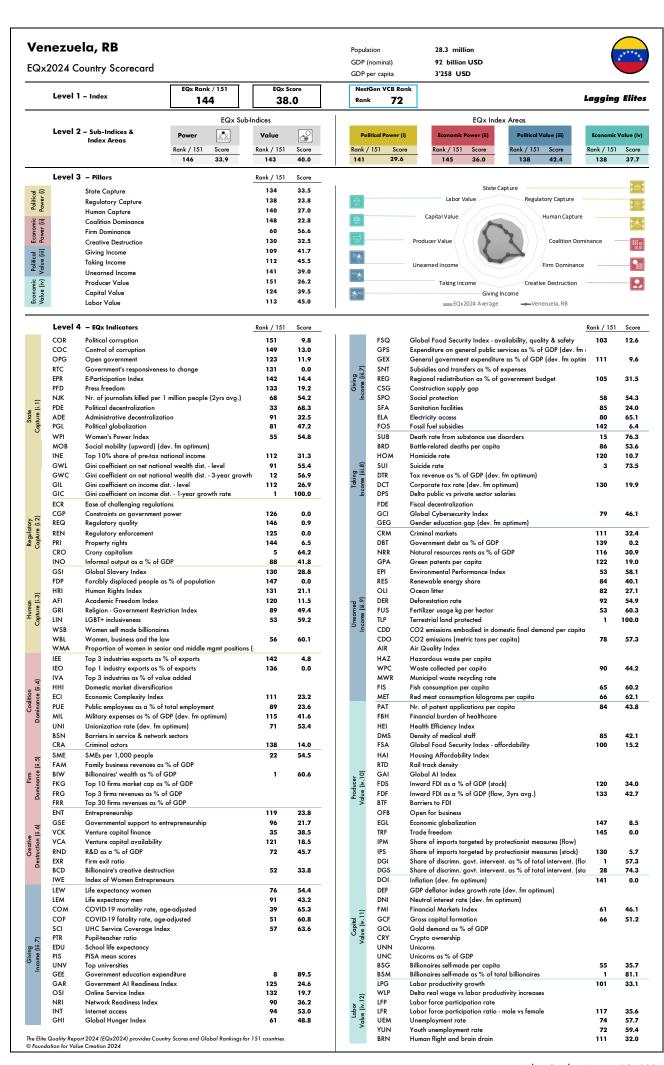


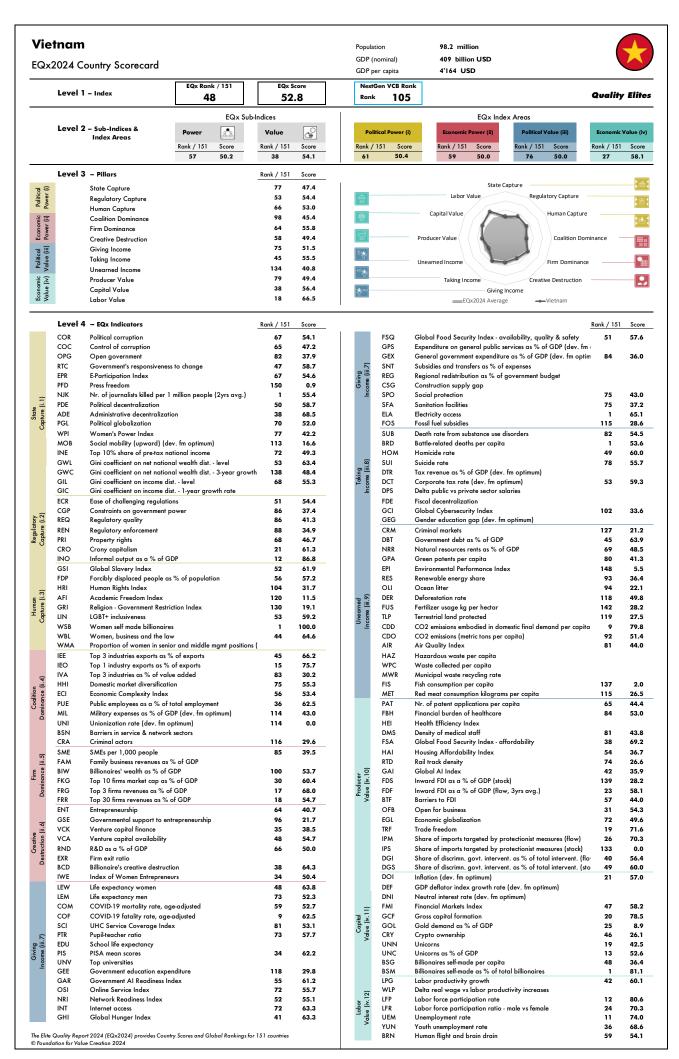


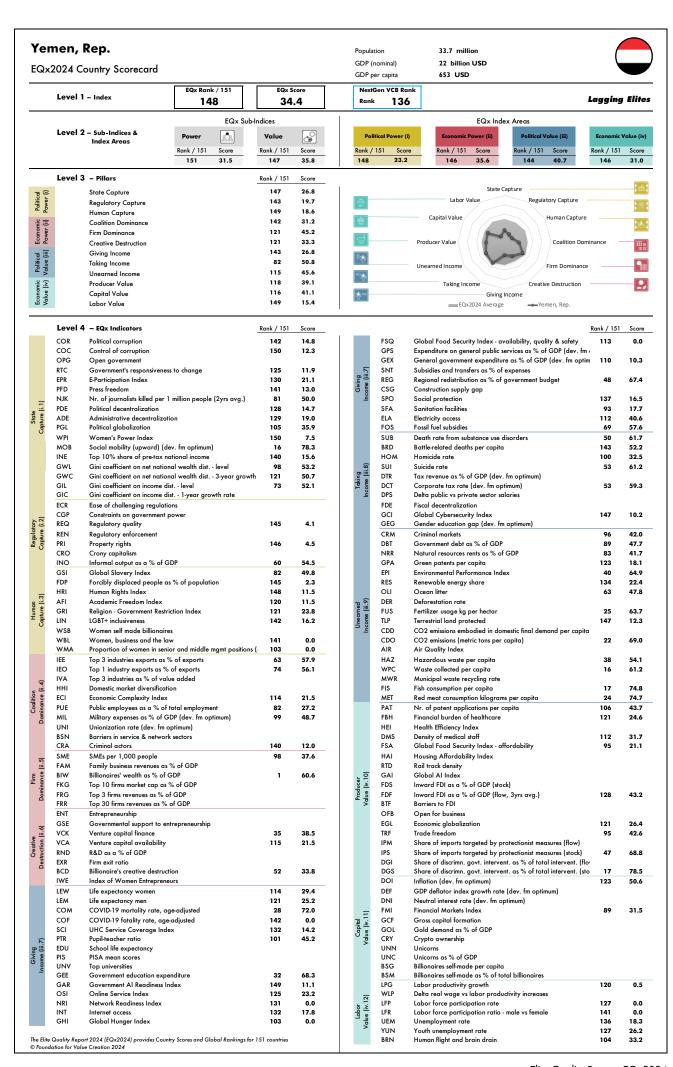


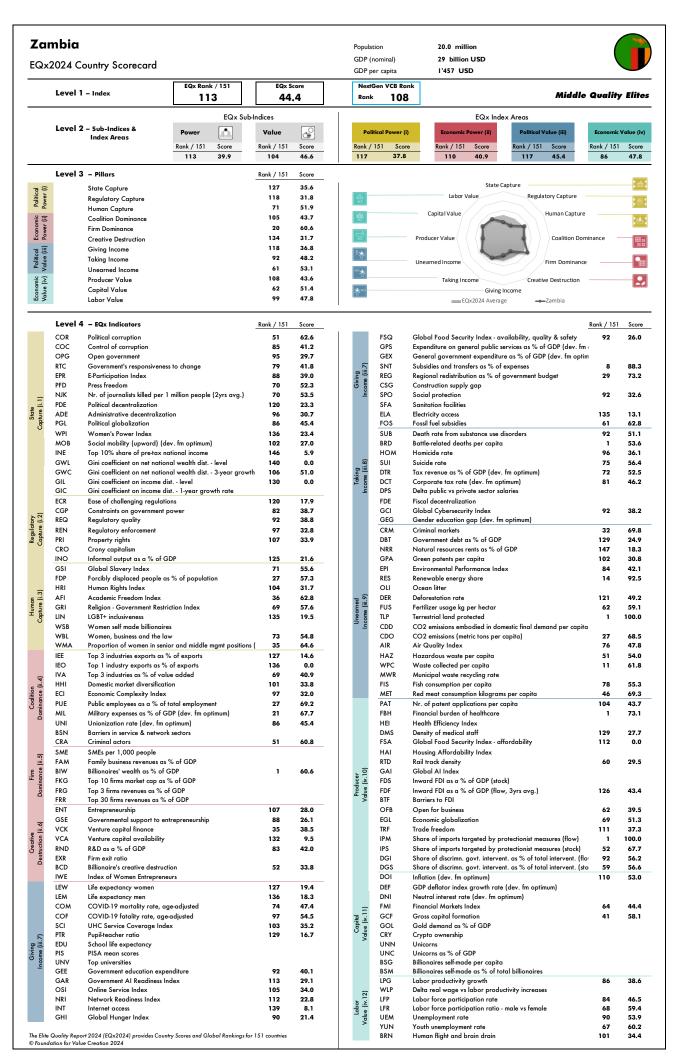


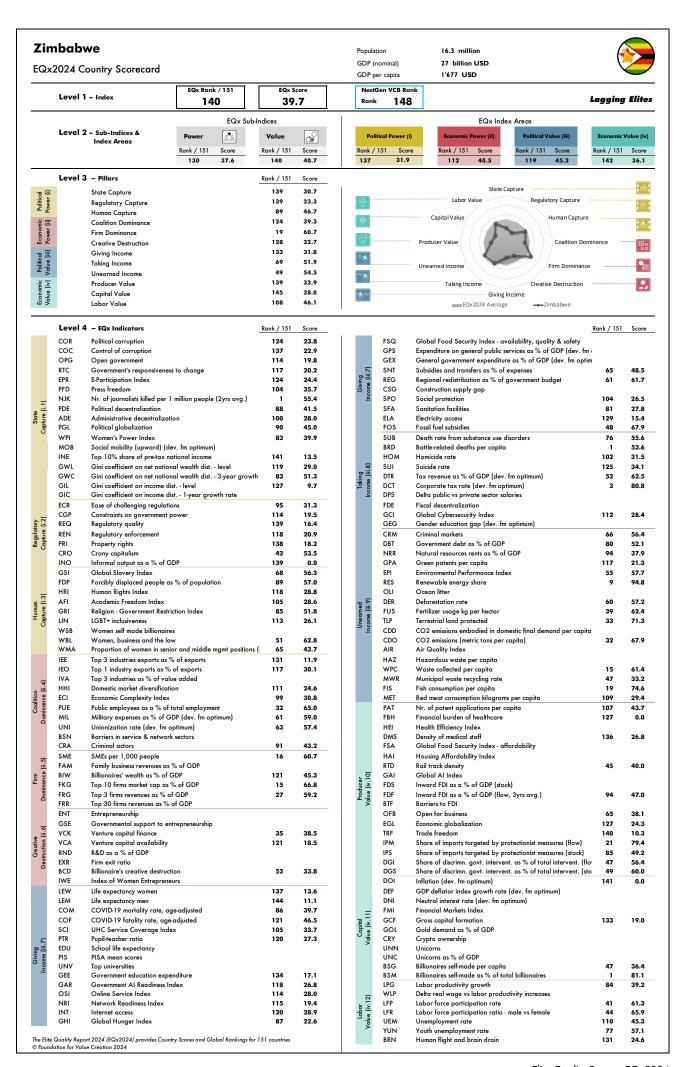












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7.2 Data Sources and Indicator References

in	dicator Name	Data Source Reference	EPR	E-Participation	i.1 • E-Participation Index (EPR), uses data from:
Sub-In	dex I: Power / Inc	dex Area (i): Political Power		Index	The UN, Department of Economic and Social Affairs, E-Government Development Knowledge Base
Pillar (i.	1): State Capture				[Dataset]
COR	Political corruption	i.1 • Political corruption (COR), uses data from: Varieties of Democracies (V-DEM)*			United Nations Department of Economic and Social Affairs. (2022). 2022 E-Government Development Index [Dataset]. Retrieved January
		[Dataset] Coppedge, M., Gerring, J., Knutsen, C. H.,			10, 2024, from: https://publicadministration. un.org/egovkb/Data-Center.
		Lindberg, S. I., Teorell, J., Altman, D., Bernhard, M., Cornell, A., Fish, M. S., Gastaldi, L., Gjerløw, H., Glynn, A., Good God, A., Grahn, S., Hicken, A., Kinzelbach, K., Krusell, J.,	PFD	Press freedom	i.1 • Press freedom (PFD), uses data from: Reporters Without Borders, World Press Freedom Index
		Marquardt, K. L., McMann, K., Mechkova, V., Medzihorsky, J., Natsika, N., Neundorf, A.,			[Dataset]
		Paxton, P., Pemstein, D., Pernes, J., Rydén, O., von Römer, J., Seim, B., Sigman, R., Skaaning, SE., Staton, J., Sundström, A., Tzelgov, E-, Wang, Y., Wig, T., Wilson, S. & Ziblatt, D. (2023). V-Dem [Country-Year/Country-Date]			Reporters Without Borders. (2023). World Press Freedom Index 2023 [Dataset]. Retrieved January 15, 2024, from: https://rsf.org/en/ index.
		Dataset v13. Varieties of Democracy (V-Dem) Project. Retrieved January 10, 2024, from: https://doi.org/10.23696/vdemds23.	NJK	Nr. of journalists killed per 1 million people (2yrs avg.)	i.1 • Nr. of journalists killed per 1 million people (2yrs avg.) (NJK), uses data from: The Committee to Protect Journalists
		[Related Paper]			[Dataset]
		Pemstein, D., Marquardt, K. L., Tzelgov, E., Wang, Y., Medzihorsky, J., Krusell, J., Miri, F. & von Römer., J. (2023). The V-Dem Measurement Model: Latent Variable Analysis for Cross-Na- tional and Cross-Temporal Expert-Coded Data.			Committee to Protect Journalists. (2024). Journalists Killed, Motive Confirmed or Unconfirmed. Retrieved January 11, 2024, from: https://cpj.org/data.
		V-Dem Working Paper No. 21. 8th edition. University of Gothenburg: Varieties of Democracy Institute.			[Dataset]
COC	Control of corruption	i.1 • Control of corruption (COC), uses data from: The World Bank, Worldwide Governance indicators (WGI)			The World Bank. (2024). <i>Population, total</i> [indicator ID: SP.POP.TOT]. Retrieved January 11, 2024, from: https://data.worldbank.org/indicator/SP.POP.TOTL.
		[Dataset]	PDE	Political decentralization	i.1 • Political decentralization (PDE), uses data from: Ivanyna & Shah (2014)*
		Worldwide Governance indicators. (2023). The Worldwide Governance indicators (WGI) Project			[Dataset]
		[Dataset]. Retrieved January 10, 2024, from: https://www.worldbank.org/en/publication/worldwide-governance-indicators.			Ivanyna, M. & Shah, A. (2014). How Close Is Your Government to Its People? Worldwide indicators on Localization and Decentralization
		[Related Paper] Kaufmann, D. & Kraay, A. (2023). Worldwide			[Dataset]. Harvard Dataverse, V2. Retrieved January 15, 2024, from: https://doi.org/10.7910/DVN/24566.
		Governance indicators, 2023 Update. Retrieved October 19, 2023, from: www.govindicators. org.			[Related paper]
OPG	Open government	i.1 • Open government (OPG), uses data from: The World Justice Project, Rule of Law Index			Ivanyna, M. & Shah, A. (2014). How Close Is Your Government to Its People? Worldwide indicators on Localization and Decentralization. Economics: The Open-Access, Open-Assessment
		[Dataset]			E-Journal, 8 (2014-3): 1–61. Retrieved January 15, 2024, from: http://dx.doi.org/10.5018/economics-ejournal.ja.2014-3.
		World Justice Project. (2023). Factor 3: Open Government. Retrieved January 1, 2024, from: https://worldjusticeproject.org/rule-of-law-in- dex/.	ADE	Administrative decentralization	i.1 • Administrative decentralization (ADE), uses data from: Ivanyna & Shah (2014)*
		[Related Report]			[Dataset]
		World Justice Project. (2023). WJP Rule of Law Index 2023. Retrieved March 16, 2024, from: https://worldjusticeproject.org/rule-of-law-in-dex/downloads/WJPIndex2023.pdf.			Ivanyna, M. & Shah, A. (2014). How Close Is Your Government to Its People? Worldwide indicators on Localization and Decentralization [Dataset]. Harvard Dataverse, V2. Retrieved January 15, 2024, from: https://doi. org/10.7910/DVN/24566.
RTC	Government's responsiveness to	i.1 • Government's responsiveness to change (GRC), uses data from: World Economic Forum, The Global Competitiveness Index			[Related Paper]
	change	[Report]			vanyna, M. & Shah, A. (2014). How Close Is
		World Economic Forum. (2020). Global Competitiveness Report 2020. Retrieved January 10, 2024, from: https://www3.weforum.org/ docs/WEF_TheGlobalCompetitivenessRe- port2020.pdf.			Your Government to Its People? Worldwide indicators on Localization and Decentralization. Economics: The Open-Access, Open-Assessment E-Journal, 8 (2014-3): 1-61. Retrieved January 15, 2024, from: http://dx.doi.org/10.5018/economics-ejournal.ja.2014-3.

PGL	Political globalization	i.1 • Political globalization (PGL), uses data from: ETHZ, The KOF Globalisation Index* [Dataset] The KOF Globalisation Index 2023. (2023). Indicator KOFPoGI (Political Globalisation). Retrieved January 11, 2024, from: https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html. [Related Paper]	GWC	Gini coefficient on net national wealth dist 3-year growth rate	i.1 • Gini coefficient on net national wealth dist 3-year growth rate (GWC), uses data from: The World Inequality Lab, World Inequality database (WID) [Dataset] The World Inequality Lab. (2024). World Inequality database [Dataset]. Indicator: Gini coefficient on net personal wealth. Retrieved January 11, 2024, from: https://wid.world/data/	
		Gygli, S., Haelg, F., Potrafke, N. & Sturm, JE. (2019): The KOF Globalisation Index - Revisited. Review of International Organizations, 14(3), 543-574. Retrieved January 11, 2024, from: https://doi.org/10.1007/s11558-019-09344-2 [Related Paper] Dreher, A. (2006). Does Globalization Affect Growth? Evidence from a new Index of Globalization. Applied Economics 38, 10:	GIL	Gini coefficient on income dist level	i.1 • Gini coefficient on income dist level (GIL), uses data from: The World Inequality Lab, World Inequality database (WID) [Dataset] World Bank, Poverty and Inequality Platform. (2024). World Inequality database [Dataset]. Our World in Data, 2024. Variable: Gini coefficient. Retrieved on January 11, 2024, from: https://ourworldindata.org/grapher/economic-inequality-gini-index?tab=chart.	
WPI	Women's Power Index	i.1 • Women's Power Index (WPI), uses data from: The Council of Foreign Relations (CFR) [Dataset] Council of Foreign Relations. (2024). Women's Power Index [Dataset]. Retrieved January 15, 2024, from: https://www.cfr.org/article/womens-power-index.	GIC	Gini coefficient on income dist 1-year growth rate	i.1 • Gini coefficient on income dist 1-year growth rate (GIC), uses data from: The World Inequality Lab, World Inequality database (WID) [Dataset] World Bank, Poverty and Inequality Platform. (2024). World Inequality database [Dataset]. Our World in Data, 2024. Variable: Gini coefficient. Retrieved on January 11, 2024, from: https://ourworldindata.org/grapher/economic-inequality-gini-index?tab=chart.	
MOB	Social mobility (upward) (dev. fm	i.1 • Social mobility (upward) (MOB), uses data from: The World Bank (Development Research Group), GDIM Database*	Pillar (i.	(i.2): Regulatory Capture		
	optimum)	[Dataset] GDIM. (2023). Global Database on Intergenerational Mobility. Development Research Group, World Bank. Washington, D.C.: World Bank Group. Database update from 2023 March. Indicator BHQ4_randomtiebreak. Retrieved January 11, 2024, from: https://www.worldbank.org/en/topic/poverty/brief/what-is-the-global-database-on-intergenerational-mobility-gdim. [Related Paper]	ECR	Ease of challenging regulations	i.2• Ease of challenging regulations (ECR), uses data from: The World Economic Forum (WEF), The Global Competitiveness Index [Dataset] World Economic Forum. (2019). The Global Competitiveness Report 2019. [Efficiency of legal framework in challenging regulations, scale 1-7) [Dataset]. Retrieved January 15, 2024, from: https://www.humanprogress.org/dataset/efficiency-of-legal-framework-in-challenging-regulations/.	
INE	Top 10% share of pre-tax national income	Van der Weide, R., Lakner, C., Mahler, D. G., Narayan, A., Ramasubbaiah, R. (2023). Intergenerational mobility around the world: A new database. <i>Journal of Development Economics, Vol 166</i> . https://doi.org/10.1016/j.jdeveco.2023.103167 i.1• Top 10% share of pre-tax national income (INE), uses data from: The World Inequality Lab, World Inequality database (WID) [Dataset] The World Inequality Lab. (2024). <i>World Inequality database [Dataset]</i> . Indicator: Pre-tax national income, Top 10% share. Retrieved January 11, 2024, from: https://wid.world/	CGP	Constraints on government power	i.2• Constraints on government power (CGP), uses data from: The World Justice Project, Rule of Law Index [Dataset] World Justice Project. (2023). Factor 3: Open Government. Retrieved December 11, 2023, from: https://worldjusticeproject.org/rule-of-law-index/. [Report] World Justice Project. (2023). WJP Rule of Law Index 2023. Factor 1: Constraints on government power. i.2• Regulatory quality (REQ), uses data from:	
GWL	Gini coefficient on net national wealth dist level	data/. i.1 • Gini coefficient on net national wealth dist level (GWL), uses data from: The World Inequality Lab, World Inequality database (WID) [Dataset] The World Inequality Lab. (2024). World Inequality database [Dataset]. Indicator: Gini coefficient on net personal wealth. Retrieved January 11, 2024, from: https://wid.world/ data/	r.L.v.	regulatory quality	I. 2º Regulatory quality (REQ), uses data from: The World Bank, Worldwide Governance indicators (WGI) [Dataset] Worldwide Governance indicators (2023). The Worldwide Governance indicators (WGI) Project [Dataset]. Dimension 'Regulatory Quality', Estimate. Retrieved December 11, 2023, from: http://info.worldbank.org/governance/wgi/. [Related Paper] Kaufmann, D. & Kraay, A. (2023). Worldwide Governance indicators, 2023 Update. Retrieved October 19, 2023, from: www.govindicators. org.	

REN	Regulatory enforcement	i.2• Regulatory enforcement (REN), uses data from: The World Justice Project, Rule of Law Index	HRI	Human Rights Index	i.3• Human Rights Index (HRI), uses data from: The Fund for Peace, <i>Fragile States Index</i> [Dataset]
		[Dataset] World Justice Project. (2023). WJP Rule of Law Index 2023. Retrieved January 15, 2024, from: https://worldjusticeproject.org/rule-of-law-in-			The Fund for Peace. (n.d.). Fragile States Index. P3 Human Rights [Dataset]. Retrieved December 30, 2023, from: https://www.theglobalecono- my.com/rankings/human_rights_rule_law_in-
PRI	Property rights	i.2• Property rights (PRI), uses data from: The Heritage Foundation, Index of Economic Freedom (IEF)	AFI	Academic Freedom Index	dex/. i.3 • Academic Freedom Index (AFI) uses data from: Varieties of Democracies (V-DEM), Academic Freedom Index*
		[Dataset]			[Dataset]
		The Heritage Foundation. (2022). Index of Economic Freedom (Property Rights Index). Retrieved December 16, 2023, from: https://www.theglobaleconomy.com/rankings/herit_property_rights/.			Coppedge, M., Gerring, J., Knutsen, C. H., Lindberg, S. L., Teorell, J., Altman, D., Bernhard, M., Cornell, A., Fish, M. S., Gastaldi, L., Gjerløw, H., Glynn, A., Good God, A., Grahn, S., Hicken, A., Kinzelbach, K., Krusell, J.,
CRO	Crony capitalism	i.2• Crony capitalism (CRO), uses data from: Forbes [World's Billionaires List] & The World Bank [GDP data]			Marquardt, K. L., McMann, K., Mechkova, V., Medzihorsky, J., Natsika, N., Neundorf, A., Paxton, P., Pemstein, D., Pernes, J., Rydén, O., von Römer, J., Seim, B., Sigman, R., Skaaning,
		[Dataset]			SE., Staton, J., Sundström, A., Tzelgov, E-, Wang, Y., Wig, T., Wilson, S. & Ziblatt, D.
		Forbes. (2023). Forbes Billionaires List 2023 [Dataset]. Retrieved January 1, 2024, from: https://www.forbes.com/billionaires/.			(2023). V-Dem [Country-Year/Country-Date] Dataset v13. Varieties of Democracy (V-Dem) Project. Retrieved January 10, 2024, from: https://doi.org/10.23696/vdemds23.
		[Dataset]			[Related Paper]
		The World Bank. (n.d.). GDP (current US\$) [indicator ID: NY.GDP.MKTP.CD]. Retrieved January 17, 2024, from: https://data. worldbank.org/indicator/NY.GDP.MKTP.CD.			Pemstein, D., Marquardt, K. L., Tzelgov, E., Wang, Y., Medzihorsky, J., Krusell, J., Miri, F. & von Römer., J. (2023). The V-Dem Measurement Model: Latent Variable Analysis for Cross-Na-
INO	Informal output as a % of GDP	i.2• Informal output as a % of GDP (INO), uses data from: The <i>World Bank Informality</i> Database*			tional and Cross-Temporal Expert-Coded Data. V-Dem Working Paper No. 21. 8th edition. University of Gothenburg: Varieties of Democracy Institute.
		[Dataset]			[Report]
		The World Bank. (2022). World Bank Informality Database. Retrieved January 25, 2024, from: https://www.worldbank.org/en/research/brief/informal-economy-database.			Kinzelbach, K., Lindberg, S. I., Pelke, L. & Spannagel, J. (2022). <i>Academic Freedom Index</i> 2022 Update. FAU Erlangen-Nürnberg and V-Dem Institute. DOI: 10.25593/opus4-
		[Related Paper]			fau-18612.
		Elgin, C., Kose, M.A., Ohnsorge, F. & Yu, S. (2021). <i>Understanding Informality</i> . CERP Discussion Paper 16497, Centre for Economic Policy Research, London.			[Related Paper] Spannagel, J., Kinzelbach, K. (2022). The Academic Freedom Index and Its indicators: Introduction to new global time-series V-Dem
Pillar (i.	3): Human Capture				data. Retrieved December 15, 2022, from: https://doi.org/10.1007/s11135-022-01544-
GSI	Global Slavery Index	i.3• Global Slavery Index (GSI), uses data from: The Minderoo Foundation's Walk Free Initiative	GRI	Religion - Government	i.3• Religion - Government Restriction Index (GRI), uses data from: Pew Research Center,
		[Report]		Restriction Index	Government Restrictions Index (GRI)*
		The Minderoo Foundation. (2023). <i>The Global Slavery Index 2023</i> . Retrieved January 15, 2024, from: https://www.walkfree.org/global-slavery-index/downloads/.			Pew Research Center, November 2022, "How COVID-19 Restrictions Affected Religious
FDP	Forcibly displaced population as % of population	i.3• Forcibly displaced population as % of population (FDP), uses data from: UNHCR, Refugee Population Statistics Database (for forcibly displaced populations) & The World Bank (Population data)	LIN	LGBT+ inclusive- ness	Groups Around the World in 2020". i.3* LGBT+ inclusiveness (LIN), uses data from: The Franklin & Marshall Global Barometer of Gay Rights*
		[Dataset]			[Dataset]
		UNHCR. (n.d.). Refugee Population Statistics Database. Forcibly displaced population as % of population [Dataset]. Retrieved December 30, 2023, from: https://www.unhcr.org/ refugee-statistics/download/?url=pW9yAD.			Dicklitch-Nelson, S., Berwood, Y. & Thompson Buckland, S. (2023). F&M Global Barometer of Gay Rights and Global Barometer of Transgender Rights. Retrieved January 15, 2024, from: https://www.fandmglobalbarome- ters.org/results/.
		[Dataset]	WSB	Women self-made billionaires	i.3• Women self-made billionaires (WSB), uses data from: Forbes, World's Billionaires List
		The World Bank. (n.d.). Population, total [indicator ID: SP.POP.TOT]. Retrieved September 16, 2022, from: https://data.worldbank.org/		Simonali 63	[Dataset]
		indicator/SP.POP.TÖTL.			Forbes. (2023). Forbes Billionaires List 2023 [Dataset]. Retrieved January 1, 2024, from: https://www.forbes.com/billionaires/

WBL	Women, business and the law	i.3 • Women, business and the law (WBL), uses data from: The World Bank, Women, Business and the Law* [Dataset] The World Bank. (2023). Women, Business and the Law Data for 1971-2023 [Dataset]. Retrieved January 23, 2024, from: https://wbl.worldbank.org/en/wbl-data	ECI	Economic Complexity Index	ii.4• Economic Complexity Index (ECI), uses data from: The Observatory of Economic Complexity (OEC), Economic Complexity Index [Dataset] The Observatory of Economic Complexity (OEC). (n.d.). Economic Complexity Ranking of Countries (1998-2021) [Dataset]. Retrieved January 15, 2024, from: https://oec.world/en/rankings/eci/hs6/hs968tab=ranking.
		[Report] World Bank. (2023). Women, Business and the Law 2023. Washington, DC: World Bank. Retrieved January 23, 2024, from: https://doi.org/10.1596/978-1-4648-1944-5.	PUE	Public employees as a % of total employment	ii.4• Public employees as a % of total employment (PUE), uses data from: International Labour Organization, ILOSTAT Database [Dataset]
WMA	Proportion of women in senior and middle mgmt positions (dev. fm optimum)	i.3 • Proportion of women in senior and middle mgmt positions (WMA), uses data from: The International Labour Organization, ILOSTAT Database [Dataset]			International Labour Organization (ILO). (2021). ILOSTAT Database: Employment by sex and institutional sector (thousands) I Annual. Indicator code: PSE_TPSE_GOV_NB_A [Dataset]. Retrieved January 15, 2024, from: https://ilostat.ilo.org/data/
	International Labour Organization (ILO). (2021). ILOSTAT Database, SDG indicator 5.5.2 - Proportion of women in senior and middle management positions (%) I Annual. Indicator code: SDG_0552_NOC_RT_A [Dataset]. Retrieved January 23, 2024, from: https://ilostat.ilo.org/data/	as % of GDP (dev.	ii.4• Military expenses as % of GDP (MIL), uses data from: Stockholm International Peace Research Institute (SIPRI), Military Expenditure Database		
	dex I: Power / Inc	dex Area (ii): Economic Power			Stockholm International Peace Research Institute (SIPRI). (n.d.). SIPRI Military Expenditure Database [Dataset]. Retrieved December 31, 2023, from: https://www.sipri.org/databases/milex
IEE	Top 3 industries exports as % of exports	ii.4• Top 3 industries exports as % of exports (IEE), uses data from: United Nations, Comtrade Database (exports)	UNI	Unionization rate (dev. fm optimum)	ii.4• Unionization rate (UNI), uses data from: International Labour Organization, ILOSTAT Database
		[Dataset]			[Dataset]
		United Nations, Department of Economic and Social Affairs, Trade Statistics. (2024). UN Comtrade Database (2024) [Dataset]. Annual goods exports, total and 2-digit BEC (Rev.4) commodities. Retrieved January 11, 2024, from: https://comtradeplus.un.org/			International Labour Organization (ILO). (2022). ILOSTAT Database: Industrial Relations Data (IRdata). Trade union density rate (%) Annual. Indicator code: ILR_TUMT_NOC_RT_A [Dataset]. Retrieved January \(\bar{1}\), 2024, from: https://ilostat.ilo.org/topics/industrial-relations/
IEO	Top 1 industry exports as % of exports	ii.4• Top 1 industry exports as % of exports (IEO), uses data from: United Nations, Comtrade Database (exports)	BSN	Barriers in service & network sectors	ii.4• Barriers in service & network sectors (BSN), uses data from: OECD Product Market Regulation Statistics
		[Dataset]			[Dataset]
		United Nations, Department of Economic and Social Affairs, Trade Statistics. (2024). UN Comtrade Database (2024) [Dataset]. Annual goods exports, total and 2-digit BEC (Rev.4)			OECD. (2021). Indicators of Product Market Regulation [Dataset]. Retrieved December 21, 2021, from: https://www.oecd.org/economy/ reform/indicators-of-productmarketregulation/.
IVA	Top 3 industries as % of value added	commodities. Retrieved January 11, 2024, from: https://comtradeplus.un.org/ ii.4• Top 3 industries as % of value added (IVA), uses data from: United Nations Statistics Division	CRA	Criminal actors	ii.4° Criminal actors (CRA), uses data from: The Global Initiative against Transnational Organized Crime, Organized Crime Index
	% of value daded	(Economic Statistics Branch), National Accounts Estimates of Main Aggregates			[Report]
		[Dataset] United Nations Statistics Division (Economic			The Global Initiative against Transnational Organized Crime. (2023). Organized Crime Index 2023. Retrieved January 10, 2024, from: https://ocindex.net/downloads.
		Statistics Branch). (n.d.). National Accounts Estimates of Main Aggregates Gross Value Added by Kind of Economic Activity at current	Pillar (i	Pillar (ii.5): Firm Dominance	
		prices - U.S. dollars [Dataset]. Retrieved December 15, 2023, from: http://data.un.org/ Data.aspx?q=industries&d=SNA&f=group_	SME	SMEs per 1,000 people	ii.5• SMEs per 1,000 people (SME), uses data from: SME Finance Forum, MSME Economic indicators
HHI	Domestic market diversification	code%3a204 ii.4 • Domestic market diversification (HHI), uses data from: The World Bank's World Integrated Trade Solutions [Dataset]			[Dataset] SME Finance Forum. (2019). MSME Economic indicators Database 2019 [Dataset]. Retrieved May 13, 2021, from: https://www.smefinanceforum.org/data-sites/msme-country-indicators.
		The World Bank, World Integrated Trade Solutions (n.d.). HH Market Concentration Index by Country 1988-2020 [Dataset]. Retrieved January 19, 2024, from https://wits.worldbank.org/CountryProfile/en/country/by-country/startyear/ltst/endyear/ltst/indicator/HH-MKT-CNCNTRTN-NDX.			

FAM	Family business revenues as % of GDP	ii.5• Family business revenues as % of GDP (FAM), uses data from: Global Family Business Index* [Dataset] Zellweger, T., Klein, M., Robertsson, H., & Weber, W. (2000).	GSE	Governmental support to entrepreneurship	ii.6• Governmental support to entrepreneurship (GSE), uses data from: Global Entrepreneurship Monitor (GEM), Government Support and Policies' sub-indicator of the Entrepreneurial Framework Conditions
		W. (2023). Global Family Business Index. CFB-HSG. Retrieved February 22, 2023, from: http://familybusinessindex.com/.			Global Entrepreneurship Monitor. (n.d.). Entrepreneurial Framework Conditions. Indicator: Government Support and Policies [Dataset]. Retrieved December 11, 2022, from: https://www.gemconsortium.org/data/key-nes.
		The World Bank. (n.d.). GDP (current US\$) [indicator ID: NY.GDP.MKTP.CD]. Retrieved January 14, 2024, from: https://data. worldbank.org/indicator/NY.GDP.MKTP.CD.	VCK	Venture capital finance	ii.6• Venture capital finance (VCK), uses data from: Refinitiv Eikon
		[Related info]			[Dataset] OECD. (2023). Venture Capital Investments (Market Statistics). Retrieved January 29, 2024,
		The Global Family Business Index is comprised of the largest 500 family firms in the world. It provides impressive evidence of the Economic Power and relevance of family firms. The index is	VCA	Venture capital	from: https://data-explorer.oecd.org/ ii.6• Venture capital availability (VCA), uses data from: World Economic Forum (WEF), The Global
		compiled by the Center for Family Business at the University of St.Gallen, Switzerland, in cooperation with EY's Global Family Business Center of Excellence (Zellweger, Klein,		availability	Competitiveness Index [Dataset]
		Robertsson, & Weber, 2023).			World Economic Forum. (2020). World Economic
BIW	Billionaires' wealth as % of GDP	ii.5• Billionaires' wealth as % of GDP (BIW), uses data from: Forbes (World's Billionaires List), The World Bank (GDP data)			Forum Global Competitiveness Index: Venture capital availability, 1-7 (best) [Dataset]. Retrieved January 26, 2024, from: https://prosperitydata360.worldbank.org/en/home
		[Dataset] Forbes. (2023). Forbes Billionaires List 2023 [Dataset]. Retrieved January 1, 2024, from: https://www.forbes.com/billionaires/.	RND	R&D as a % of GDP	ii.6• R&D as a % of GDP (RND), uses data from: The UNESCO Institute for Statistics, Global Database on Research and Experimental Development (R&D)
		[Dataset]			[Dataset]
		The World Bank. (n.d.). GDP (current US\$) [indicator ID: NY.GDP.MKTP.CD]. Retrieved January 14, 2024, from: https://data. worldbank.org/indicator/NY.GDP.MKTP.CD.			The World Bank. (n.d.). Research and development expenditure (% of GDP) [indicator ID: GB.XP D.RSDV.GD.ZS]. Retrieved January 15, 2024, from: https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS
FKG	Top 10 firms market cap as % of GDP	ii.5• Top 10 firms market cap as % of GDP (FKG), uses data from: Refinitiv Eikon [Dataset]	EXR	Firm exit ratio	ii.6• Firm exit ratio (EXR), uses data from: OECD, Structural and Demographic Business Statistics (SDBS), Business Demography indicators (ISIC Rev. 4)
		Eikon. (2024). Company-based Data: Revenue, Profit, Market Capitalization [Dataset - 2023 data]. Retrieved January 10, 2024, from: https://eikon.thomsonreuters.com/index.html.			[Dataset] OECD. (2022). Structural and Demographic
FRG	Top 3 firms revenues as % of GDP	ii.5• Top 3 firms revenues as % of GDP (FRG), uses data from: Refinitiv Eikon			Business Statistics (SDBS), Business Demography indicators: Death rate of enterprises [Dataset]. Retrieved December 31, 2022, from: https://stats.oecd.org/Index.aspx?QueryId=70734.
		[Dataset] Eikon. (2024). Company-based Data: Revenue, Profit, Market Capitalization [Dataset – 2023	BCD	Billionaire's creative destruction	ii.6 • Billionaire's creative destruction (BCD), uses data from: Forbes, World's Billionaires List
FRR	Top 30 firms	data]. Retrieved January 12, 2024, from: https://eikon.thomsonreuters.com/index.html.			[Dataset] Forbes. (2023). Forbes Billionaires List 2023 [Dataset]. Retrieved January 1, 2024, from:
TKK	revenues as % of GDP	uses data from: Refinitiv Eikon		Index of Women	https://www.forbes.com/billionaires/ ii.6 • Index of Women Entrepreneurs (IWE), uses
		[Dataset]	.,,,	Entrepreneurs	data from: Mastercard, Index of Women Entrepreneurs
		Eikon. (2024). Company-based Data: Revenue, Profit, Market Capitalization [Dataset - 2023 data]. Retrieved January 12, 2024, from: https://eikon.thomsonreuters.com/index.html.			[Dataset] Mastercard. (2022). The Mastercard Index of
Pillar (ii	.6): Creative Destruction	n			Women Entrepreneurs 2022 Report [Dataset]. Retrieved January 10, 2023, from:
ENT	Entrepreneurship	ii.6• Entrepreneurship (ENT), uses data from: The Global Entrepreneurship and Development Institute (GEDI), Global Entrepreneurship & Development Index			https://www.mastercard.com/news/media/ phwevxcc/the-mastercard-index-of-women-entre- preneurs.pdf.
		[Report]			
		Ács, Z. J., Lloyd, A., & Szerb L. (n.d.). Global Entrepreneurship Index 2018. Retrieved May 13, 2021, from: https://thegedi.org/wp-content/ uploads/dlm_uploads/2017/11/GEI-2018-1. pdf.			

Sub-Ind	ex II: Value / Ind	lex Area (iii): Political Value	PTR	Pupil-teacher ratio	iii.7• Pupil-teacher ratio (PTR), uses data from: The World Bank
Pillar (iii.7	7): Giving Income				[Dataset]
LEW	Life expectancy women	iii.7• Life expectancy women (LEW), uses data from: United Nations, Department of Economic and Social Affairs*			The World Bank, UNESCO Institute for Statistics (n.d.). Pupil-teacher ratio, primary [Dataset]. Retrieved January 19, 2023, from https://data.worldbank.org/indicator/SE.PRM.ENRL.
		[Dataset]			TC.ZS
		United Nations, Department of Economic and Social Affairs, Population Division. (2022). World Population Prospects 2022, Online Edition. File POP/DB/WPP/Rev.2022/GEN/F01/Rev.1. Estimate of 'Female Life Expectancy at Birth (years)'. Retrieved January 11, 2024,	EDU	School life expectancy	iii.7• School life expectancy (EDU), uses data from: UNESCO Institute for Statistics [Dataset]
LEM	Life expectancy	from: https://population.un.org/wpp/ Download/Standard/MostUsed/ iii.7 • Life expectancy men (LEM), uses data			UNESCO Institute for Statistics (n.d.). School life expectancy by level of education [Dataset]. Retrieved January 24, 2024, from: http://data.uis.unesco.org.
LL/VI	men	from: United Nations, Department of Economic and Social Affairs*	PIS	PISA mean scores	iii.7• PISA mean scores (PIS), uses data from: OECD PISA Results
		[Dataset]			[Dataset]
		United Nations, Department of Economic and Social Affairs, Population Division. (2022). World Population Prospects 2022, Online Edition. File POP/DB/WPP/Rev.2022/GEN/F01/Rev.1. Estimate of 'Female Life Expectancy at Birth (years)'. Retrieved January 11, 2024,			OECD. (2022). PISA 2022 Results (Volume I) - What Students Know and Can Do [Dataset]. Retrieved January 24, 2024, from: https://www.oecd-ilibrary.org/education/pisa-2022-technical-report_01820d6d-en.
		from: https://population.un.org/wpp/ Download/Standard/MostUsed/	UNV	Top universities	iii.7• Top universities (UNV), uses data from: QS World University Rankings
COM	COVID-19 mortality rate,	iii.7• COVID-19 mortality rate, age-adjusted (COM), uses data from: Johns Hopkins			[Dataset]
	age-adjusted	University, Coronavirus Resource Center (COVID-19 deaths and cases) via Our World in Data, University of Oxford & The World Bank (Population Data)			QS World University Rankings. (2024). QS World University Rankings 2024. Retrieved January 24, 2024, from: https://www.qs.com/reports-whitepapers/qs-world-university-
		[Dataset]			rankings-2024-results-table-excel/.
		Our World in Data, University of Oxford. (n.d.). Covid-19 Data [Dataset]. Retrieved January 15, 2024, from: https://github.com/	GEE	Government education expenditure	iii.7• Government education expenditure (GEE), uses data from: The World Bank [Dataset]
		owid/covid-19-data/tree/master/public/data [Dataset] The World Bank. (n.d.). Population ages 65 and above (% of total population) [indicator ID:			The World Bank, UNESCO Institute for Statistics (n.d.). Government expenditure on education, total (% of GDP) [Dataset]. Retrieved January 19, 2023, from https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS.
COF	COVID 10	SP.POP.65UP.TO.ZS]. Retrieved January 15, 2024, from: https://data.worldbank.org/indicator/SP.POP.65UP.TO.ZS	GAR	Government Al Readiness Index	iii.7• Government Al Readiness Index (GAR), uses data from: Oxford Insights' Government Al Readiness Index 2023
COF	COVID-19 fatality rate, age-adjusted	iii.7• COVID-19 fatality rate, age-adjusted (COF) uses data from: Johns Hopkins University, Coronavirus Resource Center			[Dataset]
	age-aajosiea	(COVID-19 deaths and cases) via Our World in Data, University of Oxford & The World Bank (Population Data)			Oxford Insights. (2023). Government AI Readiness Index 2023 (Total score). Retrieved January 25, 2024 from: https://oxfordinsights.
		[Dataset]		com/wp-content/uploads/2023/12/2	com/wp-content/uploads/2023/12/2023- Government-Al-Readiness-Index-2.pdf.
		Our World in Data, University of Oxford.			
		(n.d.). Covid-19 Data [Dataset]. Retrieved January 15, 2024, from: https://github.com/ owid/covid-19-data/tree/master/public/data.	OSI	Online Service Index	iii.7• Online Service Index (OSI), uses data from: The UN, Department of Economic and
		[Dataset]			Social Affairs, E-Government Development Knowledge Base
		The World Bank. (n.d.). Population ages 65 and above (% of total population) [indicator ID: SP.POP.65UP.TO.ZS]. Retrieved January 15,			[Dataset]
SCI	UHC Service	2024, from: https://data.worldbank.org/indicator/SP.POP.65UP.TO.ZS. iii.7 • UHC Service Coverage Index (SCI), uses			United Nations Department of Economic and Social Affairs. (2022). 2022 E-Government Development Index [Dataset]. Retrieved January 12, 2023, from: https://publicadministration.
	Coverage Index	data from: The World Bank and the World Health Organization's Global Health Observatory Data Repository	NRI	Network Readiness Index	un.org/egovkb/Data-Center. iii.7 • Network Readiness Index (NRI), uses data from: Portulans Institute, Network Readiness
		[Dataset]			Index (NRI)
		The World Bank, World Health Organization, Global Health Observatory Data Repository (n.d.). <i>UHC Service Coverage Index [Dataset]</i> . Retrieved January 15, 2024, from https://data.worldbank.org/indicator/SH.UHC.SRVS.CV.XD			[Dataset] Portulans Institute. (2023). Network Readiness Index 2023: Benchmarking the Future of the Network Economy [Dataset]. Retrieved January 15, 2024, from: https://networkreadinessindex.org/

INT	Internet access	iii.7• Internet access (INT), uses data from: The	SPO	Social protection	iii.7• Social protection (SPO), uses data from:	
	merrier decess	World Bank, International Telecommunications Union (ITU)	010	occidi protection	International Labour Organization, ILOSTAT, SDG Labour Market indicators (ILOSDG)	
		[Dataset]			[Dataset]	
		The World Bank (n.d.). Individuals using the internet (% of population) [indicator ID: IT.NET. USER.ZS] [Dataset]. Retrieved January 26, 2024, from https://data.worldbank.org/indicator/IT.NET.USER.ZS			International Labour Organization, ILOSTAT, SDG Labour Market indicators (ILOSDG). (2023). SDG indicator 1.3.1 – Proportion of population covered by social protection floors/systems (%) Annual [Code: SDG_0131_SEX_SOC_RT_A] [Dataset]. Retrieved Decembe	
GHI	Global Hunger Index	iii.7• Global Hunger Index (GHI), uses data from: The Global Hunger Index			23, 2023, from: https://ilostat.ilo.org/data/.	
		[Dataset] Global Hunger Index. (2023). 2023 Global	SFA	Sanitation facilities	iii. 7 • Sanitation facilities (SFA), uses data from: World Health Organization (WHO)/UNICEF, Joint Monitoring Programme for Water Supply, Sanitation and Hygiene	
		Hunger Index: The Power of Youth in Shaping Food Systems. Retrieved February 14, 2024, from: https://www.globalhungerindex.org/de/ download/all.html			[Dataset] World Health Organization (WHO)/UNICEF,	
FSQ	Global Food Security Index - availability, quality & safety	iii.7• Global Food Security Index - availability, quality & safety (FSQ), uses data from: The Economist Intelligence Unit, Global Food Security Index (GFSI)			Joint Monitoring Programme for Water Supply, Sanitation and Hygiene. (2023). Estimates for drinking water, sanitation and hygiene services by country (2000-2022) [Dataset]. Retrieved September 23, 2023, from: https://washdata. org/data/downloads#WLD.	
		[Dataset]			[Related Article]	
		The Economist Intelligence Unit. (2022). Global Food Security Index [Dataset]. Retrieved November 26, 2022, from: https://impact.economist.com/sustainability/project/food-security-index/download-the-index			WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene. (n.d.). Sanitation. Retrieved December 23, 2023, from: https://washdata.org/monitoring/sanitation.	
GPS	Expenditure on general public services as % of GDP (dev. fm optimum)	general public services as % of GDP (dev. fm optimum) (GPS), uses data from: OECD, The Classification of the Functions of government (COFOG)*	ELA	Electricity access	iii.7• Electricity access (ELA), uses data from: The World Bank, World Development indicators (WDI)	
	оринонт	[Dataset]			[Dataset]	
		OECD (2023), General government spending (indicator). doi: 10.1787/a31cbf4d-en (Accessed on December 20, 2023)			The World Bank, World Development indicator (WDI). (2023). Access to electricity (% of population) [EG.EIC.ACCS.ZS] [Dataset].	
GEX	General government expenditure as % of GDP (dev.	iii.7• General government expenditure as % of GDP (dev. fm optimum) (GEX), uses data from: The International Monetary Fund (IMF)			Retrieved December 23, 2023, from: https://databank.worldbank.org/source/world-development-indicators/Series/EG.ELC.ACCS. ZS.	
	fm optimum)	[Dataset]			[Related Report]	
		International Monetary Fund. (2022). Government expenditure, percent of GDP (% of GDP). [Dataset]. Retrieved January 1, 2024, from: https://www.imf.org/external/datamapper/exp@FPP/USA/FRA/JPN/GBR/SWE/ESP/ITA/ZAF/IND.			IEA, IRENA, UNSD, World Bank, & WHO. (2023). Tracking SDG 7: The Energy Progress Report 2023. World Bank. Retrieved December 23, 2023, from: https://mc-cd8320d4-36a1-40ac-83cc-3389-cdn-endpoint.azureedge.net/-/media/Files/IRENA/Agency/Publication/2023/Jun/Tracking_SDG7_energy_progress_2023.pdf?rev=f937758f92a74ab7ac48ff5e 8842780a.	
SNT	Subsidies and transfers as % of expenses	iii.7• Subsidies and transfers as % of GDP (SNT), uses data from: The International Monetary Fund (IMF), Government Finance Statistics (GFS) (Retrieved from the World Bank)				
		[Dataset]	FOS	Fossil fuel subsidies	iii.7• Fossil fuel subsidies (FOS), uses data from: The International Monetary Fund (IMF), Climate Change Dashboard	
		The World Bank, Government Finance Statistics (GFS) (2023). Subsidies and other transfers (% of expense) [Dataset]. Retrieved January 11, 2024, from: https://data.worldbank.org/indicator/GC.XPN.TRFT.ZS.		[Dataset] The International Monetary Fund (IMF	[Dataset] The International Monetary Fund (IMF), Climate Change Dashboard. (2023). Fossil Fuel	
REG	Regional redistribution as % of government budget	iii.7• Regional redistribution as % of government budget (REG), uses data from: The Fraser Institute*			Subsidies [Dataset]. Retrieved December 23, 2023 from: https://climatedata.imf.org/datasets/d48cfd2124954fb0900cef95f2db2724_0/	
	200901	[Dataset]			explore.	
		Gwartney, J., Lawson, R., Hall, J., & Murphy, R. (2022). Economic Freedom Dataset, published in <i>Economic Freedom of the World: 2022 Annual Report</i> . Fraser Institute. Retrieved January 10, 2024, from: www.fraserinstitute. org/economic-freedom/dataset.			Parry, I. W. H., Black, S., & Vernon, N. Still Not Getting Energy Prices Right: A Cand Country Update of Fossil Fuel Subsil Retrieved September 23, 2023, from: htt	[Related Paper] Parry, I. W. H., Black, S., & Vernon, N. (2021). Still Not Getting Energy Prices Right: A Global and Country Update of Fossil Fuel Subsidies. Retrieved September 23, 2023, from: https://www.imf.org/en/Publications/WP/
CSG	Construction supply gap	iii.7• Construction supply gap (CSG), uses data from: Swiss Forecast Construction Supply Gap			Issues/2021/09/23/Still-Not-Getting-Energy- Prices-Right-A-Global-and-Country-Update-of- Fossil-Fuel-Subsidies-466004.	
		[Dataset] Swiss Forecast. (2022). Swiss Forecast 2022 Construction Supply Gap data [Proprietary data]. Available upon request.				

Pillar (iii.8)	: Taking Income		DPS	Delta public vs	iii.8• Delta public vs private sector salaries
SUB	Death rate from substance use disorders	iii.8 Death rate from substance use disorders (SUB), uses data from: Institute for Health Metrics and Evaluation (IHME), Global Burden of Disease Collaborative Network* [Dataset] Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019		private sector salaries	[DPS], uses data from: The World Bank [Dataset] The World Bank, Worldwide Bureaucracy indicators (WWBI). (2023). Public sector wage premium (compared to all private employees) [Dataset]. Retrieved January 10, 2024, from: https://datacatalog.worldbank.org/dataset/worldwide-bureaucracy-indicators.
BRD	Battle-related deaths per	(GBD 2019) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2019. Retrieved January 11, 2024, from: https://ghdx.healthdata.org/gbd-2019. iii.8* Battle-related deaths per capita (BRD), uses data from: Uppsala Conflict Data Program	FDE	Fiscal decentralization	iii.8 • Fiscal decentralization (FDE), uses data from: The International Monetary Fund (IMF) [Dataset] The International Monetary Fund (IMF). (n.d.).
	capita	[Dataset] The World Bank, Uppsala Conflict Data Program. (2022). Battle-related deaths (number of people) [Dataset]. Retrieved January 17, 2024, from: https://data.worldbank.org/indicator/VC.BTL.DETH. [Related Paper]			Fiscal Decentralization [Dataset]. Retrieved January 16, 2024, from: https://data.imf.org/?sk=1C28EBFB-62B3-4B0C-AED3-048EEEBB684F. [Related Paper] Lledó, V., Ncuti, C., Kabanda, M., Hu, C., & Xiang, Y. (2018). The IMF fiscal decentralization dataset: a primer. International Monetary Fund, Washington.
		Pettersson, T, Davis, S., Deniz, A., Engström, G., Hawach, N., Högbladh, S., Sollenberg, M., & Öberg, M. (2021). Organized violence 1989-2020, with a special emphasis on Syria. <i>Journal of Peace Research 58</i> (4), 809-825. https://doi. org/10.1177/00223433211026126.	GCI	Global Cybersecurity Index	iii.8 • Global Cybersecurity Index (GCI), uses data from: International Telecommunication Union (ITU), The Global Cybersecurity Index (GCI) [Dataset] International Telecommunication Union (ITU).
НОМ	Homicide rate	iii.8 • Homicide rate (HOM), uses data from: The United Nations Office on Drugs and Crime (UNODC)			[2024]. Global Cybersecurity Index 2020. Retrieved January 10, 2024, from: https://www.itu.int/epublications/publication/global-cybersecurityindex-2020/en/.
		United Nations Office on Drugs and Crime. (2023). Global Study on Homicide [Dataset]. Retrieved January 11, 2024 from: https://dataunodc.un.org/dp-intentional-homicidevictims.	GEG	Gender education gap (dev. fm optimum)	iii.8 • Gender education gap (dev. fm optimum) (GEG), uses data from: OECD* [Dataset] OECD (2024), Adult education level (indicator). doi: 10.1787/36bce3fe-en (Accessed on 25
SUI	Suicide rate	iii.8• Suicide rate (SUI), uses data from: The World Health Organization (WHO)	Pillar III ON	: Unearned Income	January 2024).
DTR	Tax revenue as % of GDP (dev.	[Dataset] World Health Organization (WHO), (n.d.). Suicide mortality rate (per 100,000 population) [Dataset]. Retrieved January 14, 2024, from: https://data.who.int/indicators/i/16BBF41 iii.8* Tax revenue as % of GDP (dev. fm optimum) (DTR), uses data from: The	CRM	Criminal markets	iii.9• Criminal markets (CRM), uses data from: The Organized Crime Index [Dataset] The Global Initiative against Transnational Organized Crime. (2023). Organized Crime
	fm optimum)	International Monetary Fund (IMF), Government Finance Statistics (GFS), OECD GDP Estimates (Retrieved from the World Bank) [Dataset] The World Bank, Government Finance Statistics (GFS) (2023). Tax revenue (% of GDP) [Dataset]. Retrieved January 11, 2024, from: https://data.worldbank.org/indicator/GC. TAX.TOTL.GD.ZS	DBT	Government debt as % of GDP	Index 2023. Retrieved January 10, 2024, from: https://ocindex.net/downloads. iii.9 • Government debt as % of GDP (DBT), uses data from: The Global Economy [Dataset] TheGlobalEconomy.com. (n.d.). Government debt by country, around the world [Dataset]. Retrieved January 17, 2024, from: https://www.theglobaleconomy.com/rankings/government_debt/.
DCT	Corporate tax rate (dev. fm optimum)	iii.8 • Corporate tax rate (dev. fm optimum) (DCT), uses data from: Tax foundation (Corporate Tax Rates around the World) [Dataset] Enache, C. (2023). Corporate Tax Rates around the World, 2023 [Dataset]. Retrieved January 16, 2024, from: https://taxfoundation.org/corporate-tax-rates-by-country-2023/	NRR	Natural resources rents as % of GDP	iii.9 Natural resources rents as % of GDP (NRR), uses data from: The World Bank [Dataset] The World Bank, The Changing Wealth of Nations. (n.d.). Total natural resources rents (% of GDP) [Dataset]. Retrieved January 15, 2024, from: https://data.worldbank.org/indicator/NY.GDP.TOTL.RT.ZS. [Related Paper] The World Bank. (2011). The changing wealth of nations: Measuring sustainable development in the new millennium. Washington, DC: World Bank.

GPA	Green patents per capita	iii.9• Green patents per capita (GPA), uses data from: OECD	CDD	CO2 emissions embodied in domestic final	iii.9• CO2 emissions embodied in domestic final demand per capita (CDD), uses data from: OECD, Trade in Embodied CO2 Database
		[Dataset]		demand per capita	(TECO2)
		OECD, Intellectual Property Database. (2023). Innovation in environmental-related technologies [Dataset]. Retrieved January 16, 2024, from: https://stats.oecd.org/Index. aspx?Queryld=65286#.			[Dataset] OECD, Trade in Embodied CO2 Database (TECO2). (2022). Carbon dioxide emissions embodied in international trade (2021 ed.)
EPI	Environmental Performance Index	iii.9• Environmental Performance Index (EPI), uses data from: Yale Center for Environmental Law & Policy, Environmental Performance index			[Dataset]. Retrieved February 12, 2024, from: https://stats.oecd.org/Index.aspx?DataSetCode=IO_GHG_2021.
		(EPI)* [Dataset]	CDO	CO2 emissions (metric tons per capita)	iii.9• CO2 emissions (metric tons per capita) (CDO), uses data from: Climate Watch Historical Country Greenhouse Gas (GHG) Emissions (Retrieved from The World Bank)
		Yale Center for Environmental Law & Policy, Environmental Performance index (EPI). (2022).			[Dataset]
		2022 EPI Results [Dataset]. Retrieved January 16, 2024, from: https://epi.yale.edu/ epi-results/2022/component/epi.			The World Bank, Climate Watch Historical GHG Emissions (1990-2020). (2022). CO2
		[Related Report]			emissions (metric tons per capita) [Dataset]. Retrieved January 15, 2024, from: https://data.worldbank.org/indicator/EN.ATM.CO2E. PC.
		Wolf, M. J, Emerson, J. W., Esty, D. C., de Sherbinin, A., Wendling, Z. A., et al. (2022). 2022 Environmental Performance Index. New Haven, CT: Yale Center for Environmental Law	AIR	Air Quality Index	iii.9• Air Quality Index (AIR), uses data from: iQAir
DEC.	D 11	& Policy. epi.yale.edu.			[Dataset]
RES	Renewable energy share	iii.9• Renewable energy share (RES), uses data from: United Nations, Department of Economic and Social Affairs [Dataset]			iQAir. (2023). World's most polluted countries & regions (historical data 2018-2023). Retrieved January 22, 2024, from: https:// www.igair.com/us/world-most-polluted-
		United Nations, Department of Economic and Social Affairs, Sustainable Development Goals. (2023). Indicator 7.2.1: Renewable energy share in the total final energy consumption	HAZ	Hazardous waste per capita	countries. iii.9• Hazardous waste per capita (HAZ), uses data from: United Nations Statistics Division (UNSD)
		[Dataset]. Retrieved September 18, 2023, from: https://unstats.un.org/sdgs/dataportal/ SDMXMetadataPage?7.2.1-EG_FEC_RNEW.			[Dataset]
OLI	Ocean litter	iii.9 • Ocean litter (OLI), uses data from: United Nations, Department of Economic and Social Affairs			United Nations Statistics Division (UNSD), Environment indicators. (n.d.). Hazardous waste generated per capita [Dataset]. Retrieved January 11, 2024, from https://unstats.un. org/unsd/envstats/qindicators.cshtml.
		[Dataset] United Nations, Department of Economic and	WPC	Waste collected per capita	iii.9• Waste collected per capita (WPC), uses data from: United Nations Statistics Division (UNSD) & The World Bank
		Social Affairs, Sustainable Development Goals. (2023). Indicator 14.1.1: (a) Index of coastal eutrophication; and (b) plastic debris density			[Dataset]
DED	D. ([Dataset]. Retrieved September 18, 2023, from: https://unstats.un.org/sdgs/dataportal/SDMXMetadataPage?14.1.1-EN_MAR_BEALIT_OV.			United Nations Statistics Division (UNSD), Economic indicators. (n.d.). Municipal waste collected [Dataset]. Retrieved January 11, 2024, from: https://unstats.un.org/unsd/
DER	Deforestation rate	iii.9• Deforestation rate (DER), uses data from: Global Forest Watch			envstats/qindicators.cshtml. [Dataset]
		[Dataset]			The World Bank. (2022). Population, total
		Forest Monitoring, Land Use & Deforestation Trends. (n.d.). Global Forest Watch. Retrieved January 10, 2024, from: https://www. globallorestwatch.org/.			[Dataset]. Retrieved January 11, 2024, from: https://data.worldbank.org/indicator/SP.POP. TOTL.
FUS	Fertilizer usage kg per hectar	iii.9• Fertilizer usage kg per hectar (FUS), uses data from: The World Bank, Food and Agriculture Organization	MWR	Municipal waste recycling rate	iii.9• Municipal waste recycling rate (MWR), uses data from: United Nations Statistics Division (UNSD)
		[Dataset]			[Dataset]
		The World Bank, Food and Agriculture Organization. (n.d.). Fertilizer consumption (kilograms per hectar of arable land) [Dataset]. Retrieved January 22, 2024, from https://data.worldbank.org/indicator/AG.CON.FERT. ZS			United Nations Statistics Division (UNSD), Economic indicators. (n.d.), Percentage of municipal waste collected which is recycled [Dataset]. Retrieved January 11, 2024, from: https://unstats.un.org/unsd/envstats/ qindicators.cshtml.
TLP	Terrestrial land protected	iii.9• Terrestrial land protected (TLP), uses data from: United Nations Statistics Division (UNSD)			
		[Dataset]			
		United Nations Statistics Division (UNSD), Environmental indicators. (n.d.). Terrestrial protected areas [Dataset]. Retrieved January 22, 2024, from https://unstats.un.org/unsd/ envstats/qindicators.cshtml.			

FIS	Fishing consumption per capita	iii. 9 Fishing consumption per capita (FIS), uses data from: United Nations Statistic Division (UNSD), Food and Agricultural Organization (FAO) & Our World in Data.	DMS	Density of medical staff	iv.10• Density of medical staff (DMS), uses data from: World Health Organization's (WHO) Global Health Workforce Statistics, OECD (Retrieved from The World Bank) [Dataset]
		United Nations Statistic Division (UNSD), Food and Agriculture Organization (FAO). (2023). Food Balance Sheets [Dataset]. Retrieved January 22, 2024, from: https://www.fao.org/faostat/en/#data/FBS.			The World Bank, World Health Organization's (WHO) Global Health Workforce Statistics, OECD. (n.d.). <i>Physicians (per 1,000 people) (Dataset)</i> . Retrieved January 25, 2024, from: https://data.worldbank.org/indicator/SH.MED. PHYS.ZS.
		[Related Article]			[Dataset]
		Ritchie, H., & Roser, M. (2021). Fish and Overfishing. Our World in Data. Retrieved January 22, 2024, from: https:// ourworldindata.org/fish-and-overfishing.			The World Bank, World Health Organization's (WHO) Global Health Workforce Statistics, OECD. (n.d.). Nurses and midwives (per 1,000 people) [Dataset]. Retrieved January 25, 2024,
MET	Red meat consumption kilograms per capita	iii.9• Red meat consumption kilograms per capita (MET), uses data from: United Nations Statistic Division (UNSD), Food and Agricultural Organization (FAO) & Our World in Data	FSA	Global Food	from: https://data.worldbank.org/indicator/ SH.MED.NUMW.P3. iv.10• Global Food Security Index - affordability
		[Dataset]		Security Index - affordability	(FSA), uses data from: Economist Impact, Global Food Security Index (GFSI)
		United Nations Statistic Division (UNSD), Food and Agriculture Organization (FAO). (2023).			[Dataset & Related Report]
		Food Balance Sheets [Dataset]. Retrieved January 11, 2024, from: https://www.fao.org/faostat/en/#data/FBS.			Economist Impact, Global Food Security Index (GFSI). (2022). Global Food Security Index 2022 [Dataset]. Retrieved November 26, 2022, from: https://impact.economist.com/sustainability/project/food-security-index/
		[Related Article]			download-the-index.
		Ritchie, H., Rosado, P., & Roser, M. (2023). Meat and Dairy Production. Our World in Data. Retrieved January 11, 2024, from: https://ourworldindata.org/meat-production.	HAI	Housing Affordability Index	iv.10• Housing Affordability Index (HAI), uses data from: Swiss Forecast Affordable Housing Index
Sub-Ir	dex II: Value / Ind	ex Area (iv): Economic Value			[Dataset]
	v.10): Producer Rent				Swiss Forecast (2022). Swiss Forecast Affordable Housing Index [Proprietary data]. Available upon request.
PAT	Nr. of patent applications per capita	iv. 10 • Nr. of patent applications per capita (PAT), uses data from: The World Intellectual Property Organization (WIPO) Patent Report (Retrieved from The World Bank)	RTD	Rail track density	iv.10• Rail track density (RTD), uses data from: The World Bank, World Development indicators (WDI), International Union of Railways (UIC) & The World Bank
		[Dataset]			[Dataset]
		The World Bank, The World Intellectual Property Organization (WIPO) Patent Report. (n.d.). Patent applications, residents [Dataset]. [Dataset] Retrieved January 16, 2024, from: https://data. worldbank.org/indicator/IP.PAT.RESD.			The World Bank, World Development indicators (WDI), International Union of Railways (UIC). (2024). Rail lines (total route-km) (IS.RRS.TOTL. KM) [Dataset]. Retrieved February 15, 2024, from: https://databank.worldbank.org/reports.
FBH	Financial burden of healthcare	iv.10• Financial burden of healthcare (FBH), uses data from: World Health Organization (WHO) Global Health Observatory (Retrieved			aspx?source=2&series=IS.RRS.TOTL. KM&country=.
		from The World Bank)			[Dataset]
		[Dataset] The World Bank, World Health Organization (WHO) Global Health Observatory. (2023).			The World Bank. (2022). <i>Population, total</i> [<i>Dataset]</i> . Retrieved January 11, 2024, from: https://data.worldbank.org/indicator/SP.POP. TOTL.
		Proportion of population spending more than 25% of household consumption or income on out-of-pocket health care expenditure (%)	GAI	Global AI Index	iv.10• Global Al Index (GAI), uses data from: Tortoise
		[Dataset]. Retrieved January 16, 2024, from: https://data.worldbank.org/indicator/SH.UHC. OOPC.25.ZS.			[Dataset]
HEI	Health Efficiency Index	iv.10• Health Efficiency Index (HEI), uses data from: Bloomberg			Tortoise. (2023). The Global AI Index [Dataset]. Retrieved January 25, 2024, from: https://www.tortoisemedia.com/intelligence/global-ai#data.
		[Article] Miller, L. J., & Lu, W. (2020). Asia Trounces U.S. in Health-Efficiency Index Amid Pandemic.	FDS	Inward FDI as a % of GDP (stock)	iv.10• Inward FDI as a % of GDP (stock) (FDI), uses data from: United Nations Conference on Trade and Development (UNCTAD) Statistics
		Bloomberg Online. Retrieved January 17, 2024, from: https://www.bloomberg.com/news/			[Dataset]
		articles/2020-12-18/asia-trounces-u-s-in- health-efficiency-index-amid-pandemic			United Nations Conference on Trade and Development (UNCTAD) Stat. (2023). Foreign direct investment: Inward and outward flows and stock, annual [Dataset]. Retrieved January 2, 2024, from: https://unctadstat.unctad.org/datacentre/dataviewer/US.FdiFlowsStock.

FDF	Inward FDI as a % of GDP (flow, 3yrs avg.)	iv.10• Inward FDI as a % of GDP (flow, 3yrs avg.) (FDF), uses data from: United Nations Conference on Trade and Development (UNCTAD) Statistics	IPS	Share of imports targeted by protectionist measures (stock)	iv.10• Share of imports targeted by protectionist measures (stock) (IPS), uses data from: SIAW Institute, University of St.Gallen, The Global Trade Alert*
		[Dataset]			[Related paper]
		United Nations Conference on Trade and Development (UNCTAD) Stat. (2023). Foreign direct investment: Inward and outward flows and			Simon J. Evenett and Johannes Fritz (2020). The Global Trade Alert database handbook. Manuscript, 21 October 2022.
		stock, annual [Dataset]. Retrieved January 16, 2024, from: https://unctadstat.unctad.org/datacentre/dataviewer/US.FdiFlowsStock.	DGI	Share of discrimn. govt. intervent. as % of total intervent.	iv.10• Share of discrimn. govt. intervent. as % of total intervent. (flow) (DGI), uses data from: SIAW Institute, University of St.Gallen, The
BTF	Barriers to FDI	iv.10• Barriers to FDI (BTF), uses data from: OECD, FDI Regulatory Restrictiveness Index (FDI Index)		(flow)	Global Trade Alert* [Related paper]
		[Dataset]			Simon J. Evenett and Johannes Fritz (2020). The Global Trade Alert database handbook.
		OECD, FDI Regulatory Restrictiveness Index (FDI Index). (n.d.). OECD FDI Regulatory Restrictiveness Index [Dataset]. Retrieved January 2, 2024, from: https://stats.oecd.org/Index.aspx?datasetcode=FDIINDEX.	DGS	Share of discrimn. govt. intervent. as % of total intervent.	Manuscript, 21 October 2022. iv.10• Share of discrimn. govt. intervent. as % of total intervent. (stock) (DGS), uses data from: SIAW Institute, University of St.Gallen, The
OFB	Open for business	iv.10• Open for Business (OFB), uses data from: U.S. News & World Report LP		(stock)	Global Trade Alert* [Related paper]
		[Dataset]			Simon J. Evenett and Johannes Fritz (2020). The Global Trade Alert database handbook.
		U.S. News & World Report LP. (2023). Best Countries 2023: Global rankings, international			Manuscript, 21 October 2022.
		news and data insights [Dataset]. Retrieved January 15, 2024, from: https://www.usnews.		v.11): Capital Rent	
EGL	E	com/media/best-countries/2023-overall-rankings.pdf.	DOI	Inflation (dev. fm optimum)	iv.11 • Inflation (dev. fm optimum) (DOI), uses data from: International Monetary Fund (IMF), World Economic Outlook
EGL	Economic globalization	iv.10• Economic globalization (EGL), uses data from: ETHZ, The KOF Globalisation Index*			[Dataset]
		[Dataset]			International Monetary Fund (IMF), World Economic Outlook. (2023). Inflation rate,
		Gygli, Savina, Florian Haelg, Niklas Potrafke and Jan-Egbert Sturm (2019): The KOF Globalisation Index –	DEF		average consumer prices, Annual percent change [Dataset]. Retrieved February 12, 2024, from: https://www.imf.org/external/ datamapper/PCPIPCH@WEO/
		Revisited, Review of			WEOWORLD?year=2023.
		International Organizations, 14(3), 543-574 https://doi.org/10.1007/s11558-019-09344-		GDP deflator index growth rate (dev. fm optimum)	iv.11 • GDP deflator index growth rate (dev. fm optimum) (DEF), uses data from: International Monetary Fund (IMF), World Economic Outlook
		2.			[Dataset]
		[Related Paper]			International Monetary Fund (IMF), World
		Dreher, Axel (2006): Does Globalization Affect Growth? Evidence			Economic Outlook. (2023). Inflation rate, average consumer prices, Annual percent change [Dataset]. Retrieved January 12, 2024,
		from a new Index of Globalization, Applied Economics 38, 10:			from: https://www.imf.org/external/datamapper/PCPIPCH@WEO/WEOWORLD?year=2023.
TRF	Trade freedom	1091-1110. iv.10• Trade freedom (TRF), uses data from: The Heritage Foundation, Index of Economic Freedom (IEF)	DNI	Neutral interest rate (dev. fm optimum)	iv.11 • Neutral interest rate (dev. fm optimum) (DNI), uses data from: OECD (Money Supply Data) & World Bank, National Accounts Data (GDP growth)*
		[Dataset]			[Dataset]
		The Heritage Foundation, Index of Economic Freedom (IEF). (2023). Indicator: Trade Freedom			OECD. (2022). Narrow money (M1) (indicator).
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		[Related Report]			[Dataset]
		The Heritage Foundation, Index of Economic Freedom (IEF). (2023). 2024 Index of Economic Freedom. Retrieved January 15, 2024, from			The World Bank. (n.d.). GDP growth (annual %) [indicator ID:
		https://www.heritage.org/index/.			NY.GDP.MKTP. KD.ZG]. Retrieved January 1, 2024, from:
IPM	Share of imports targeted by protectionist measures (flow)	iv.10• Share of imports targeted by protectionist measures (flow) (IPM), uses data from: SIAW Institute, University of St.Gallen, The Global Trade Alert*			https://data.worldbank.org/ indicator/NY.GDP. MKTP.KD.ZG.
		[Related paper]			
		Simon J. Evenett and Johannes Fritz (2020). The Global Trade Alert database handbook. Manuscript, 21 October 2022.			
	1	<u> </u>			

FMI	Financial Markets Index	iv.11 • Financial Markets Index (FMI), uses data from: International Monetary Fund (IMF) Strategy, Policy, and Review Department, Financial Development Index Database [Dataset] International Monetary Fund (IMF) Strategy, Policy, and Review Department, Financial Development Index Database. (2023). Financial Development (FD) Index, Financial Markets (FM) Index. Retrieved January 12, 2024, from: https://data.imf.org/?sk=18032e80-b36c-43b1-ac26-493c5b1cd33b.	BSG	made per capita uses data from: Forbes & The World [Dataset] Forbes. (2023). Forbes World's Bit The Richest in 2023 [Dataset]. Ret January 1, 2024, from: https://w.com/billionaires/. [Dataset]	Forbes. (2023). Forbes World's Billionaires List, The Richest in 2023 [Dataset]. Retrieved January 1, 2024, from: https://www.forbes.com/billionaires/. [Dataset] The World Bank. (2022). Population, total
GCF	Gross capital formation Gold demand as %	iv.11 • Gross capital formation (GCF) uses data from: World Bank national accounts data, OECD National Accounts data files (Retrieved from The World Bank) [Dataset] The World Bank, World Bank national accounts data, OECD National Accounts data files. (n.d.). Gross capital formation (% of GDP) [Dataset]. Retrieved January 12, 2024, from https://data.worldbank.org/indicator/NE.GDI.TOTI.ZS.	BSM	Billionaires self-made as % of total billionaires	[Dataset]. Retrieved January 11, 2024, from: https://data.worldbank.org/indicator/SP.POP. TOTL. iv.11 • Billionaires self-made as % of total billionaires (BSM), uses data from: Forbes [Dataset] Forbes. (2023). Forbes World's Billionaires List, The Richest in 2023 [Dataset]. Retrieved January 1, 2024, from: https://www.forbes.com/billionaires/.
GOL	of GDP	iv.11• Gold demand as % of GDP (GOL), uses data from: World Gold Council	Pillar (ix	.12): Labor Rent	com, simonarcs, .
		[Dataset]		·	: 12-1
CRY	Crypto ownership	World Gold Council. (2024). Historical demand and supply [Dataset]. Retrieved February 12, 2024, from: https://www.gold.org/goldhub/data/gold-demand-by-country. iv.11 • Crypto ownership (CRY), uses data from:	LPG	Labor productivity growth	iv.12• Labor productivity growth (LPG), uses data from: The Conference Board, Total Economy Database™ [Dataset] The Conference Board, Total Economy Database™ - Data [Dataset]. Retrieved January 16, 2024,
G.I.I	Стурге етпететр	Statista [Dataset]			from: https://www.conference-board.org/data/ economydatabase/total-economy-database- productivity.
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UNN	Unicorns	iv.11 • Unicorns (UNN), uses data from: Hurun Research Institute [Dataset] Hurun Research Institute. (2023). Hurun Global			[Dataset]. Retrieved January 1 6, 2024, from: https://data.oecd.org/lprdty/labour-compensation-per-hour-worked.htm#indicator-chart. [Dataset]
LINC	Unicorno so % of	Unicorn Index 2023 Retrieved February 8, 2024, from: https://www.hurun.net/en-US/Info/Detail?num=3OEJNGKGFPDS.			OECD, GDP per capita and productivity growth. (2024). GDP per hour worked [Dataset]. Retrieved January 16, 2024, from: https://data.oecd.org/lprdty/labour-compensation-per-hour-
UNC	Unicorns as % of GDP	iv.11 • Unicorns as % of GDP (UNC), uses data from: The Hurun Research Institute & World Bank	LFP	Labor force	oecd.org/lprdty/labour-compensation-per-hour- worked.htm#indicator-chart. v.12• Labor force participation rate (LFP), uses
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7.3 Contributor Citations and Recognition

The analyses and interpretations of the EQx Scores and Rankings for countries and regions, as well as for indicators, Barometers and indicator Families presented in Chapter 4, represent the valuable work of contributors from around the world. The EQx team wishes to recognize and thank all of the contributors whose names and contributions are listed below. The suggested citation for each contribution is also presented.

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7.4 Artistic Acknowledgments

Paintings credit

Joaquim Chancho generously gave permission to display his artwork to enhance the EQx2024 aesthetic experience. The details on the paintings included in the Report are described below:

Page 15: Joaquim Chancho. Painting 958. 2007. Oil on canvas. 90x90 cm. Private Collection, Spain

Page 26: Joaquim Chancho. Painting 609. 2004. Oil on canvas. 32x32 cm

Page 36: Joaquim Chancho. Painting 610. 2004. Oil on canvas. 25x25 cm

Page 51: Joaquim Chancho. Painting 623. 2004. Oil on canvas. 32x32 cm

Page 67: Joaquim Chancho. Painting 616. 2004. Oil on canvas. 35x35 cm

Page 111: Joaquim Chancho. Painting 619. 2004. Oil on canvas. 35x35 cm

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Page 115: Joaquim Chancho. Painting 622. 2004. Oil on canvas. 32x32 cm

Page 131: Joaquim Chancho. Painting 617. 2004. Oil on canvas. 35x35 cm

Page 173: Joaquim Chancho. Painting 08.14. 2008. Oil on canvas. 150x150 cm. Private Collection, China

Joaquim Chancho (born Spain, 1943) is a Professor at the Faculty of Fine Arts, University of Barcelona, where he also lives. He has staged a hundred individual exhibitions of his work across Europe, Asia and the Americas and has also participated in many domestic and international art fairs. His work is included in the collections of a diverse range of institutions and museums.

For details visit: www.joaquimchancho.com

Pictures credit

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Editorial disclaimer

All of the contributions to the EQx2024 are the responsibility of the authors, who were granted full editorial freedom and selected the indicators, Pillars, Sub-Indices and Index Areas that they wished to focus on in their analyses of Elite Quality.

Style note

All the original terms used in the EQx2024 such as 'Elite Quality' or 'enlightened elites' use single quotation marks when first introduced. Thereafter the quotation marks will disappear, but the term might, on occasion be rendered in italics. Terms that depict a component of the EQx2024 are capitalized. For example, 'Power Sub-Index', 'Economic Dimension', 'Political Value Index Area', 'Creative Destruction Pillar' or 'indicator'. When we refer to individual Pillars, they are followed by their specific Pillar Code: for example, 'Creative Destruction (ii.6)'. Individual indicators are referred to in italics and are followed by their indicator Code in brackets: for example, 'Crony capitalism (CRO, i.2)'. All references to indices in the EQx2024 are italicized: for example, 'Environmental Performance Index'. Terms that represent proprietary frameworks such as: 'State of Elites' or 'Index Area' are capitalized. Citations in the EQx2024 follow the APA 6th edition guidelines wherever possible.

Forthcoming: EQx2025



The Elite Quality Report 2025: The Sustainable Value Creation of Nations, will be the sixth annual EQx report and is planned for release in the Spring of 2025. The EQx2025 will continue to cover 151 countries and provide the international comparative scores of national elite systems to create the leading political economy measurement index. The 146 indicators used for the EQx2024, reflecting Value Creation and Value Extraction phenomena in the political economy and society at large, will be re-assessed for the EQx2025, while new indicator candidates will also be considered for inclusion. In addition, the Panel-EQx (PEQx) dataset, launched in 2023 and utilized in research, will be further enhanced to evaluate the historical performance of Elite Quality for countries across the globe.

Conceptually, sustainability at the firm level parallels sustainability in the political economy, as measured by the EQx. The EQx2025 will leverage the insights from the micro-level 'Sustainable Value Creation of Firms' report that is planned for the end of 2024. Firm-level Sustainable Value Creation is the beginning of the transmission chain that leads to Elite Quality at the macro-level and affects economic and human development outcomes.

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The relationship between the Foundation for Value Creation (FVC) and the Elite Quality Index® (EQx):

The Foundation for Value Creation (FVC or 'Foundation') is a Switzerland-based, non-profit foundation, supervised by the Swiss Federal Supervisory Board for Foundations (Eidgenössische Stiftungsaufsicht, ESA). The Foundation's vision and its purpose (Stiftungssweck), articulated in its statutes (Satzung), include the generation of innovative, evidence-based insights into Value Creation. The Foundation's resources are allocated and audited in compliance with its purpose and applicable Swiss laws.

Measuring the degree of Value Creation in a political economy is the objective of the Elite Quality Index® EQx) project. The underlying assumption of the EQx, shared by the FVC, is that the extent to which elite business models create value, rather than extract it, significantly contributes to a country's economic growth and human development. The Foundation realizes its purpose by supporting the EQx in three ways.

Firstly, the Foundation makes the development of the EQx possible, by coordinating the international partner network, providing support for research initiatives, and by assisting in the publication of the report and dissemination of the results. Dissemination activities include the participation in and organization of international, local and digital events, as well as establishing a collaborative platform for partners to work on and share EQx data. Secondly, the Foundation sees the EQx as a unique intellectual asset for a wide range of educational initiatives. These include university courses for new generations of students, innovative formats for the broader public, as well as custom programs for the top leadership of organizations, governments and institutions. Thirdly, the EQx provides a distinct practice-oriented analytical toolset that can be leveraged for the transformation and renewal of elite business models from Value Extraction towards inclusive Value Creation. The EQx results and interpretations of them can provoke the reflection and analysis that precedes transformative action. The international and open platform collaborative approach of the Foundation enables such impacts, aiming deep into societies and the core of political economies.

If you are interested in learning more about the FVC or having a conversation, please contact us at: partner@valuecreation.org



Purpose

The Elite Quality Index (EQx) aims to produce innovative and evidence-based insights on Sustainable Value Creation and national elite quality around the world. Through research projects and the EQx partner network, we seek to identify the causes of economic growth and human development, as well as the factors behind the rise and fall of nations and organizations. At a time of global disruption, the original ideas and frameworks included in this report provide an alternative understanding of public and policy debates about the future direction of the political economy. The ultimate aim is to identify and initiate ways to transform business models from Value Extraction to Value Creation. To this end, we wish to encourage international dialogue across generations, social groups, elites and non-elites.

We produce novel tools for knowledge dissemination in a variety of educational formats, and offer value-oriented, inclusive narratives for societies.

"Reforms must then be based on adjusting the incentive system so that elite business models create rather than transfer value."

Zhang Jun Fudan University "The EQx report is an essential resource for anyone seeking to understand and navigate the everevolving world of political economy."

Simon Evenett University of St.Gallen "Whether one likes it or not, elites play a big role in a nation's success or failure. They can promote all-round well-being; but they can also be exploitative, stalling the nation's overall progress."

Kaushik Basu Cornell University "By describing the micro-level sustainable value creation fundamentals of the political economy, (the EQx) furnishes detailed elucidation of current economic reality and foresight into the growth prospects of nations."

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