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Elite Quality Report 2020

Tomas, Casas i Klett and Guido, Cozzi

University of St. Gallen

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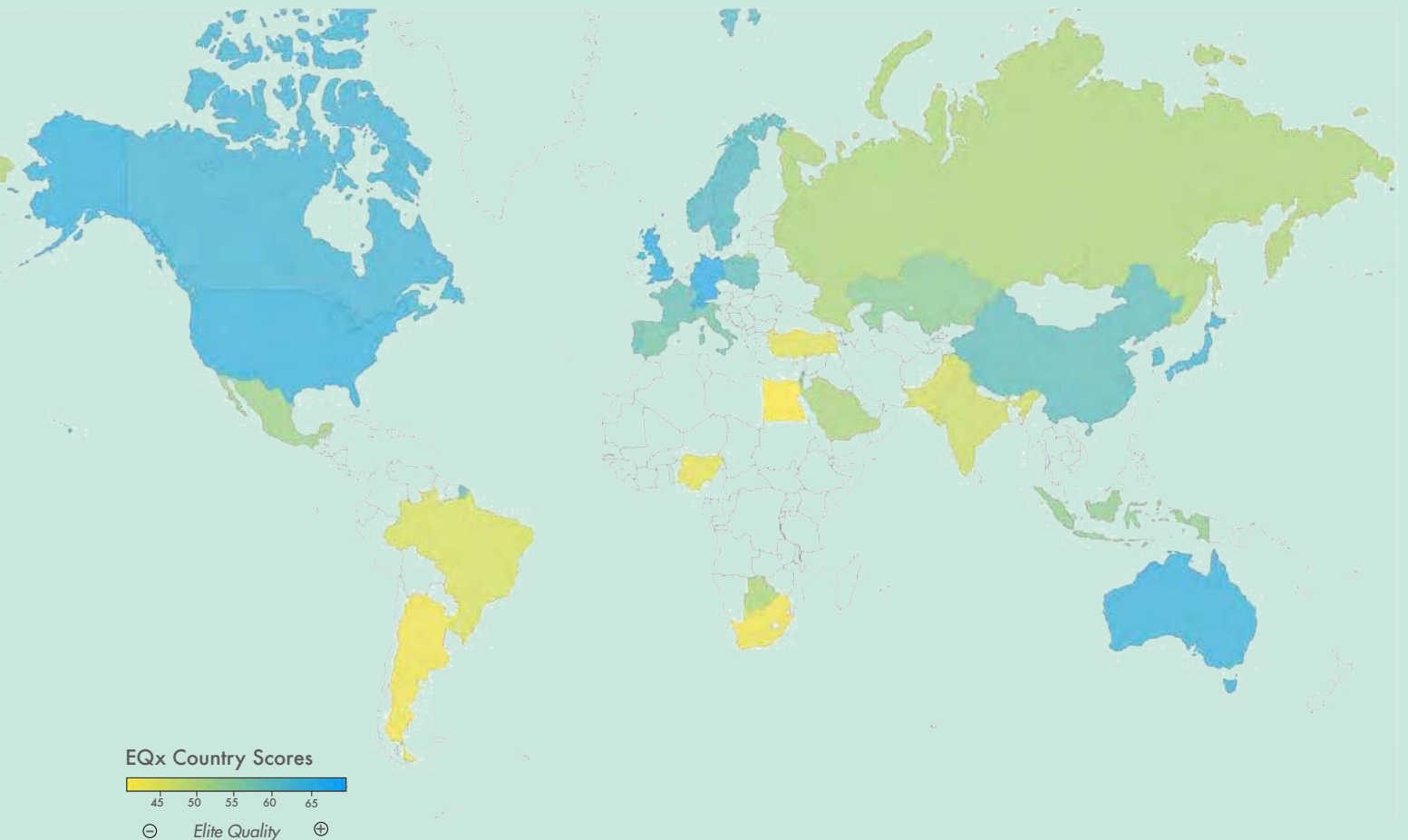


**ELITE QUALITY
INDEX**
EQx2020

ELITE QUALITY REPORT 2020

32 COUNTRY SCORES AND GLOBAL RANK

Value Creation fundamentals in societies:
Global metrics for long-term economic and human development



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

ELITE QUALITY REPORT 2020

32 COUNTRY SCORES AND GLOBAL RANK

Academic Leaders



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Producer





Value Creation fundamentals in societies

Global metrics for long-term economic and human development

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The Abbey Library of St.Gallen (Stiftsbibliothek) in Switzerland has its roots tracing back to medieval times having for over a millennia served as a repository of knowledge
Luca Zanier Photography, Corridors of Power Project

Executive Summary

Elite Quality determines human and economic development

- Elites are an empirical inevitability, dominating all political economies. They provide necessary coordination capacity for the economy's resources, whether human, financial or knowledge-based.
- By determining institutions that enable coordination, elites shape human and economic development, the destiny of societies, the wealth of nations, and their rise and fall.
- To sustain their position, elites run business models that accumulate wealth. High-quality elites run Value Creation business models that give more to society than they take. Low-quality elites do the opposite and operate Value Extraction models.

What did the EQx2020 research discover?

1. There exist substantial **differences** in the states of Elite Quality around the world.
2. **Singapore is number one.** While its score is penalized on account of high Power, the city state's elites are by far the highest value creators on the planet.
3. The **successful Germanic elite model** employed in Switzerland (2nd) and Germany (3rd) fosters a high-level of Value Creation, notwithstanding improvement potential in various areas.
4. We find **Anglo-Saxon elites to be high-quality** and are led by the U.K. (4th) and the U.S. (5th). Interestingly, American and British elites manage to rent seek more than their top Power Sub-Index scores (1st and 2nd), derived from excellent institutions, seem to warrant.
5. Emerging superpower **China has super elites** coming in 12th, at a level much higher than its peers in the middle-income category, and outperforming many advanced E.U. countries.
6. BRIS countries are clustered in the lower levels. **Russia, India, Brazil and South Africa** – in that order – rank between 23rd and 30th.
7. Many **African elites are rent seekers**, approximately as powerful as elites in China or Poland but scoring lowest of all surveyed countries because of high Value Extraction activities.
8. **The E.U. is split by Elite Quality**, with Country Scores varying significantly. Behind top-scorer Germany there is the cluster of Sweden (10th), Poland (13th), Portugal (14th), France (15th), followed by a lagging one with Italy (17th) and Spain (18th).

EQx measures Elite Quality

- We present the first ever international measurement of Elite Quality, the *Elite Quality Index* (EQx) for 32 countries. We use 72 Indicators describing Value Creation/Extraction. The Index architecture includes Power (Sub-Index I), a measurement of future Value Extraction potential, and Value itself (Sub-Index II) and 12 Pillars (e.g. Creative Destruction, Human Capture or Producer Rent).
- Elite Quality is an analytical framework based on economic and management theory designed to interpret – and possibly transform – the state of the world and its future.
- This EQx2020 Report is the first, experimental version of what will be an annual publication. In early January 2021 we are launching the EQx2021 on the theme of Elite Value Creation and Covid-19.

Country	Global Rank	Country Score
Singapore	1	68.5
Switzerland	2	64.9
Germany	3	64.2
United Kingdom	4	63.9
United States	5	63.4
Australia	6	63.2
Canada	7	61.9
Japan	8	61.6
Korea, Rep.	9	61.2
Sweden	10	59.7
Norway	11	58.6
China	12	58.4
Poland	13	58.3
Portugal	14	58.0
France	15	57.4
Israel	16	56.9
Italy	17	55.5
Spain	18	55.5
Kazakhstan	19	52.7
Indonesia	20	52.0
Mexico	21	50.7
Saudi Arabia	22	49.2
Russian Federation	23	48.9
Botswana	24	48.9
India	25	45.4
Pakistan	26	44.5
Brazil	27	44.1
Turkey	28	43.3
Nigeria	29	42.4
South Africa	30	41.7
Argentina	31	41.6
Egypt, Arab Rep.	32	40.0

1. Introduction:

Measuring Value in the Political Economy

More value had been created by early 2020 than at any other time in economic history. Material improvements resulting from Value Creation through pioneering science, innovative services and smart business models are still enormous and evident. Humanity's relentless ingenuity yields increasing benefits for all, enabled by the consolidation of phenomenal global coordination mechanisms such as narratives¹ and, yes, the elites. Yet, despite the accelerating prodigious output of our collective work, values and creativity, discontent, disorder and distress are on the rise.

1.1 Our System, Challenged?

Since 2008, nations – their political and business leaders, narratives and core values – have faced vigorous challenges on multiple and largely unforeseen fronts. Numerous voices claim that we are undergoing, even before the 21st century's inflection pandemic year of 2020, an assault on order of a ferocity not seen since the 1930s. Social, economic and political forces might be gathering momentum to disrupt or even destruct in ways we cannot seem to predict. A glance at the current world situation demonstrates this:

- Protest movements and escalating riots, especially by the young and the disenfranchised
- Uncharted combinations of secular stagnation, stagnant wages, and sub-zero interest rates, along with increasing inequality
- Trade wars, sanctions, technology embargoes and deglobalization
- The extinction rebellion and rapid real-time environmental degradation, confronting us with irreversible losses

- One-off high-impact events like Brexit and black swans of all kinds lurking across emerging markets, Wall Street, the South China Sea and in health systems worldwide
- Populist and anti-establishment politicians, on the Far Right and on the Radical Left
- The rampant invasion of fake news and disinformation campaigns, as well as targeted cyber attacks
- The human tragedy of refugees and the hard responses of those who feel threatened by immigration and the 'other'
- Raging debates within our societies and across the world over how to define our obligations and relations to one another, especially during the crisis caused by Covid-19

Within the top echelons of the political economy, there is no president, no CEO, no technology tycoon, nor general who purports to know the full impact and extent of the disruptions in store. The coming years promise to be interesting, and there is a keen awareness that unwelcome transformations, very costly to many groups in society, are on the horizon. We face takeovers by extremist political leadership with nationalist narratives, destruction of business of the non-creative kind, the breakdown of health care and even of public order. Partial systemic collapse, while still very unlikely, is indeed no longer unthinkable.

It is critical to **understand the deep causes of discontent if we are to address them**. We are familiar with the generally accepted narratives for what is wrong, all amply discussed in the public domain.

Visual 1: Turmoil's questions: Beginning or end? The beginning of what? What are the causes?



What are 'elites'?

Definition: Elites are narrow, coordinated groups with business models that successfully accumulate wealth; they are an empirical inevitability and exist in every society on earth. In short:

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

Fact 1: Elites can be high-quality value creators

Hypothesis: Elite Quality determines economic and human development

Surprise 2: Elites supply essential coordination capacity to society

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

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

Takeaway: EQx is a political economy index that measures the ability of the business models of the elite in a country – on aggregate – to create value, rather than rent seek

Generally accepted causes of discontent that stand out include:

- **Technology**, automatization destroys jobs and creates a new digitally illiterate underclass
- **Globalization**, produces the losers of the “flat world” who react and push for fragmentation
- **Demographics**, the onset of aging societies makes the economy irremediably less productive
- **Geopolitics**, sees big power rivalries reconfigure and lessen business spaces at significant costs
- **Irrational behaviors**, as in populism, racism, business short-termism or police brutality, harm the public interest
- **Black Swan events**, like new viruses, water emergencies or financial crises erode institutions

What if the above diagnosis is incomplete? These mainstream factors might bear less than full responsibility for human development and declining relative prosperity levels that significant segments of society in many countries experience.

1.2 A Gap, and One Worth Addressing?

The Elite Quality Index (also the Index or EQx) proposes an *alternative analytical framework* to interpret – and possibly

transform – the state of the world and its future prospects. It is based on a simple idea.

EQx holds that the business models chosen and run by elites are at the origin of a causal chain that leads to economic and human development. Elites (the ‘who’) affect human and economic development outcomes (the ‘what’), sometimes directly and mostly indirectly via their sway on institutions (the ‘how’) that lay down the rules of the game. Rules give elites the ‘license to operate’. Both the ‘how’ and the ‘what’ are amply measured. For instance, the World Bank’s *Ease of Doing Business Index* (DBI) measures the latter while the World Economic Forum’s *Global Competitiveness Index* (GCI) or the United Nations’ *Human Development Index* (HDI) measures the former.

Measuring the ‘who’ of the political economy is the research gap which we seek to pursue. We do so at the national aggregate level, i.e. the elites in terms of their business models’ Value Creation and Value Extraction choices.

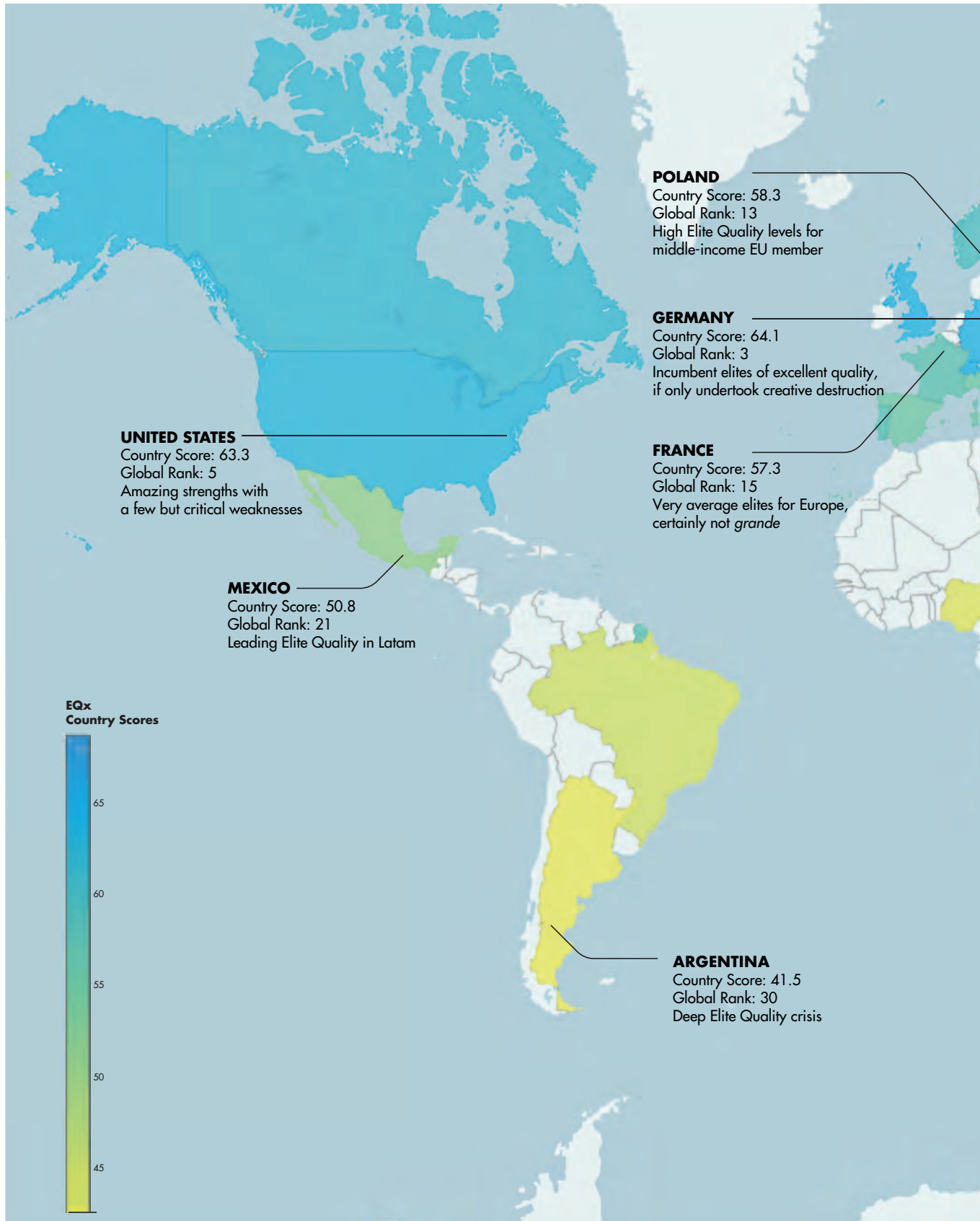
Addressing the identified research gap will, as a next step, involve linking what we term ‘Elite Quality’ to economic and social outcome indicators, such as growth, competitiveness, total factor productivity (TFP) and human development. Sections 4.5 and 6.1 discuss the larger research project associated with EQx including its medium-term growth predictor potential.

Visual 2: Elite Quality as potential research gap
Source: Casas, 2020, Figure 7 (modified)

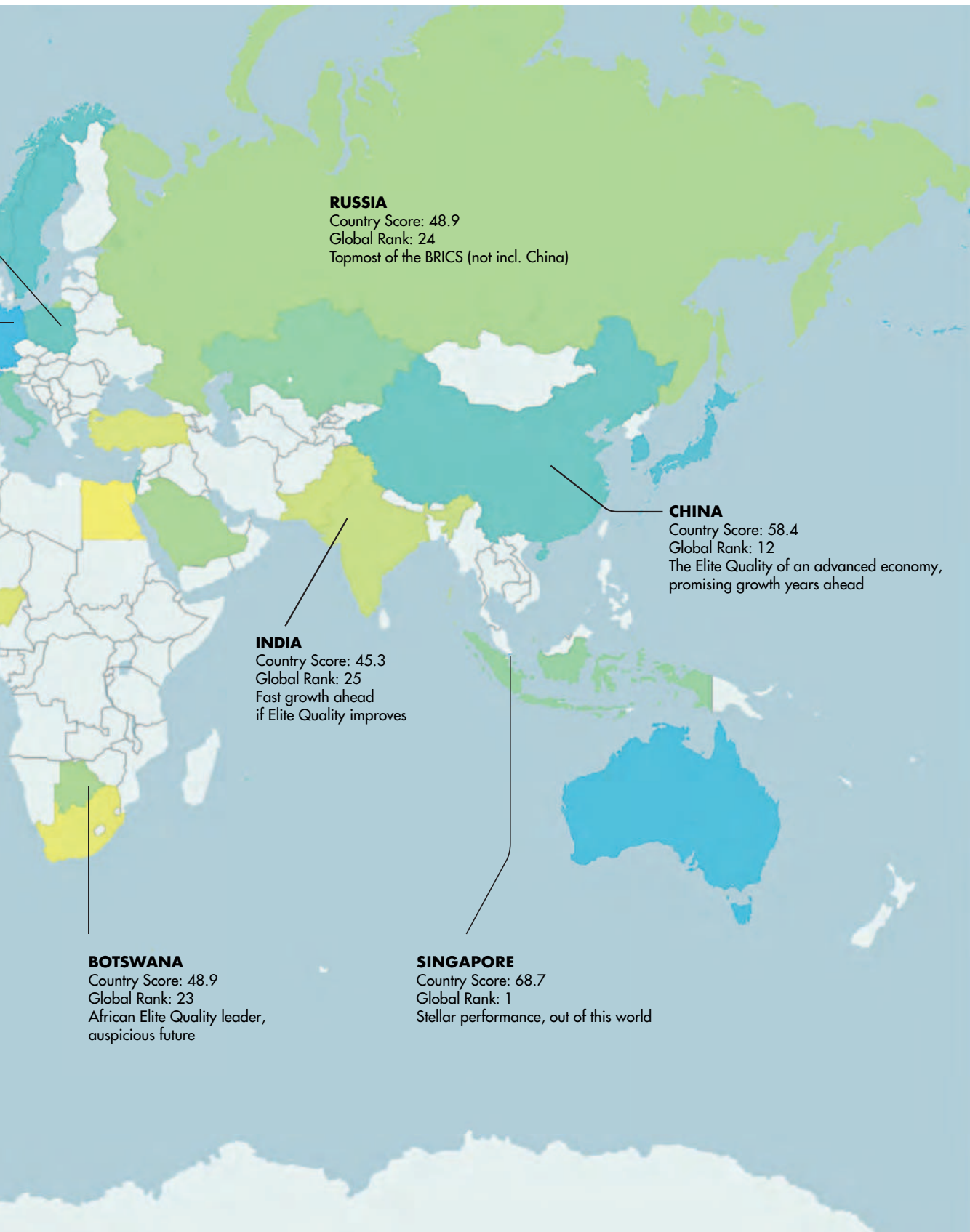


1.3 EQx Results at a Glance

Visual 3: EQx Elite Quality Global Map, color-adjusted Country Scores



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1.4 EQx, Open for You

The EQx research project is open and participative. We are designing the infrastructure for a vibrant community that is inspired by the subject of Elite Quality and its potential impact. The motivation behind the online EQx Index

Management Platform (IMP) is to solicit and organize potential inputs and ideas. Future project stakeholders can be *users, dataset contributors, researchers or partners.*

Who are EQx users?

The EQx project is inclusive by definition, and welcomes anybody who is curious about the economy, the political economy, global comparative indices, business models, power, the idea of value, the future of society, or even current affairs.

EQx is setting up the IMP infrastructure so users can make the index their own, carry out hands-on online simulations with the EQx dataset and reach their very own insights and conclusions, beyond those supplied by EQx Reports.

The IMP will be available soon at www.imp.elitequality.org

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Call to dataset contributors

Who can become EQx Dataset Contributor?

We encourage submission of original ideas for Indicator data. All ideas for novel, measurable Indicator constructs are considered as long as they describe Value Creation/Extraction phenomena in the economy. Moreover, we are open to switch existing datasets with higher-quality sources. Contributions will be duly acknowledged and credited.

Contact us with your original thoughts and suggestions at datasets@elitequality.org

Call to researchers

The EQx project's ethos is that of an open global research community. The EQx2020 Report is a call to parties interested in jointly developing EQx academic projects of a theoretical or empirical nature that aim at leading peer reviewed publications.

Our purpose is to develop practical insights, including for policy. In this regard we look to research partners wishing to take responsibility for a country or region, including the integrity of local data and the interpretation of local results.

Reach us at research@elitequality.org and let's discuss collaboration.

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

The Foundation provides the coordination that brings to life EQx, much of its underlying research and related publications. You might want to engage and associate your institution – or yourself personally – with our non-profit Foundation for a variety of reasons. These might include social engagement, the development of public discourse or the design concrete policy proposals. You might also wish to become a benefactor.

Whether you are running an elite business model or are a concerned citizen, there are many motivations for establishing strategies to “grow the pie” in your political economy. We encourage you to shape your country’s institutions and the narratives on Value, possibility in partnership with FVC.

Start a conversation with us at benefactor@valuecreation.org



2. How 'Elite Quality' Became a Global Index

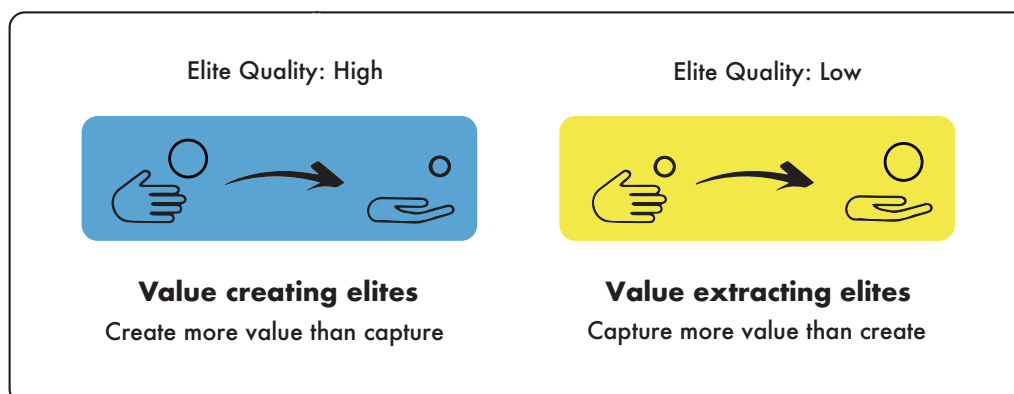
2.1 Conceptual Framework & Definitions

The Elite Quality Index (EQx) proposes an alternative analytical framework to interpret – and possibly transform – the state of the world and 'available futures'. Our key conceptual underpinning is that elites are a central observable phenomenon in political economies, a mathematical certainty existing in every society on earth.

In this study, elites are defined as the relevant leaders possessing the strongest coordination capacity over society's key resources, such as human, financial and other capital. Elites, as rational economic agents, must aim to maximize their wealth, utilizing their talent, resources and coordination capacity. Elites are thus the narrow, coordinated groups within countries that implement business models which successfully accumulate wealth.

Crucially, as part of their wealth accumulation, elites choose business models that either create value or rent seek. As summarized by Hillman and Ursprung (2015, p.3), "in the rent seeking literature, a rent is an unearned reward sought through a quest for privilege. The seeking of rents is personally beneficial... but social loss is incurred because resources are used in non-productive distributive quests". The 2 concepts are antagonists (Value \neq Rent) but they are also 2 sides of the very same coin. In their fundamental form, Value and Rent are at the 2 ends of the business model spectrum, which EQx names Value Creation and Value Extraction. From the micro perspective, where the unit of analysis is the individual organization or the decision-maker, value creating 'high-quality' elites run business models that create more value than they capture. 'Low-quality' elites do the opposite.

Visual4: Micro perspective of Elite Quality: EQx icons representing elites' business model choice
"Capture more or capture less value than create"

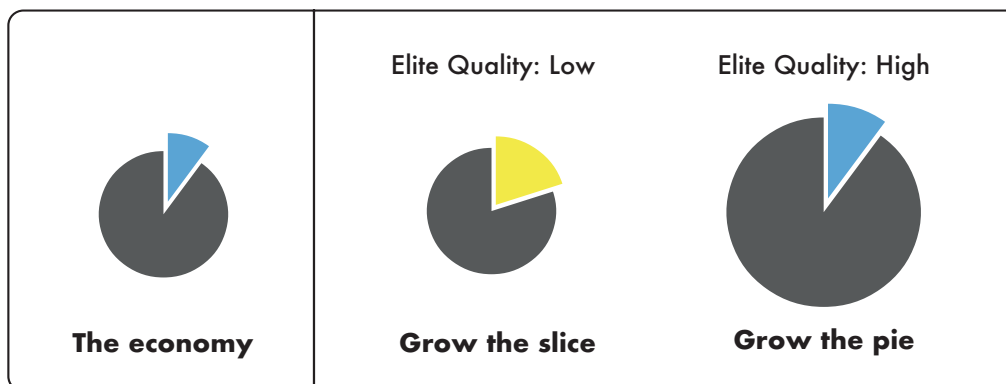


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The choices made at the micro-level have an impact on the macro, i.e. the level of the economy as a whole. In simple terms, rent seeking is the means by which low-quality elites increase their own slice of the (economy's) pie at the expense of the non-elites. This happens when business models are based on monopolies, certain subsidies, trade tariffs or even on the most appalling phenomenon of slavery (which regrettably still exists in the 21st century, as the *Global Slavery Index* annually reports). Elites can also choose a business model that predominantly creates value, rather than extracts value. We call elites that grow the whole pie to increase their own wealth and in doing so enrich their own country, 'high-quality'.

Prosperity for the wider nation, we claim, depends mainly on the nature of the business models chosen by elites. Specifically, whether elites allocate society's key resources like savings, talent, or land to value boosting (or reducing) projects. At one extreme, "rentier capitalism" is the state where "economic and political power allows privileged individuals and businesses to extract a great deal of such rent from everybody else" (Wolf, 2019). Rent seeking policies pursued by low-quality elites result in less competition and thus lower efficiency (Clements & Parry, 2018, p.56). By contrast, high-quality elites have a transformative role in the political economy – and on society in general – because by definition they give more than they take.

Visual 5: Macro perspective of Elite Quality: Economic impact of elites' business model choice
"To grow my own slice or the whole pie?"²



As policies, leaders and circumstances change, so too do Elite Quality and economic and human development outcomes. Often, decisions are made by elites to transition their interests from one business model to the opposite. A rentier elite in the traditional energy sector might take a risk and invest in 4th industrial revolution technologies, while a value creating elite in an advanced industrial sector might leverage political power for a trade barrier or force a regulation that pre-empts innovative new entrants. Voilà! A value creating business model is transformed into a rent seeking one, or vice versa. This fluidity motivates the annual release of the EQx Index and exposes the ability for constructive changes by elites themselves and policymakers based on the information gathered herein.

Equally, a political economy may be shaken by highly disruptive episodes. For instance, in the 21st century we have seen the 4th Industrial Revolution, China's rise and even a pandemic. As technological and social contexts evolve, business models that once created value are naturally overtaken by more innovative models, as human creativity and ingenuity never cease. When the prevalent business models in an economy do not keep up with possibilities afforded by technological and social advancement, stagnation occurs. Elite business models can also, using a Keynesian analogy, be 'sticky'.

Elites can face disruption by using their coordination capacity to accomplish Schumpeterian creative destruction with innovative business models, thereby creating value, or they can do the opposite and become reactionary, seeking rents. Transformations aiming at long-term economic and human development revolve around concrete, industry-by-industry reforms

and incentives. These reforms should galvanize a country's existing coordination capacity toward Value Creation business models, while disincentivizing rent seeking Value Extraction.

EQx holds that the operation of Value Creation business models is in the long-term best interests of the elites, their families and associates. By creating value, not only does the elite's own wealth grow not at the expense of others', but the process of wealth accumulation also accrues social legitimacy, as it infuses society with public goods and inclusive economic growth.

On the other hand, if elites fail to progress out of an impasse, such as one caused by technological changes, discontent or even revolutionary forces may ensue and partially or completely demolish the system, often with symbolic and non-symbolic acts intended to punish or vanquish elites. The rise (and fall) of nations is therefore primarily a function of changes in Elite Quality. That is, whether national elites – on aggregate – increasingly create more value than they capture.

The EQx Index – with its Country Score and Global Rank – is a heuristic that aims to measure these changes, by operationalizing the discussed political economy concepts and equating them to actual levels of Value Creation and Value Extraction. EQx is then a macro signal, or possibly a fundamental independent indicator, determining long-term economic growth and the wealth of nations which result from high-quality elites. We operationalize Elite Quality by developing Sub-Indices I and II: Power and Value.

The Value Sub-Index II is anchored in the ideas of Value Creation developed in management and in rent seeking theories of economics. Value Creation and rent seeking Value Extraction are on opposite sides of the same continuum. Elite business models are somewhere in the range between Value Creation, at one extreme, and Value Extraction on the other. The EQx mandate is to incorporate datasets that supply evidence of Value Creation/Extraction, even though the latter might be easier to ascertain and measure, because rent seeking results are visible and affected via concrete interventions in politics.

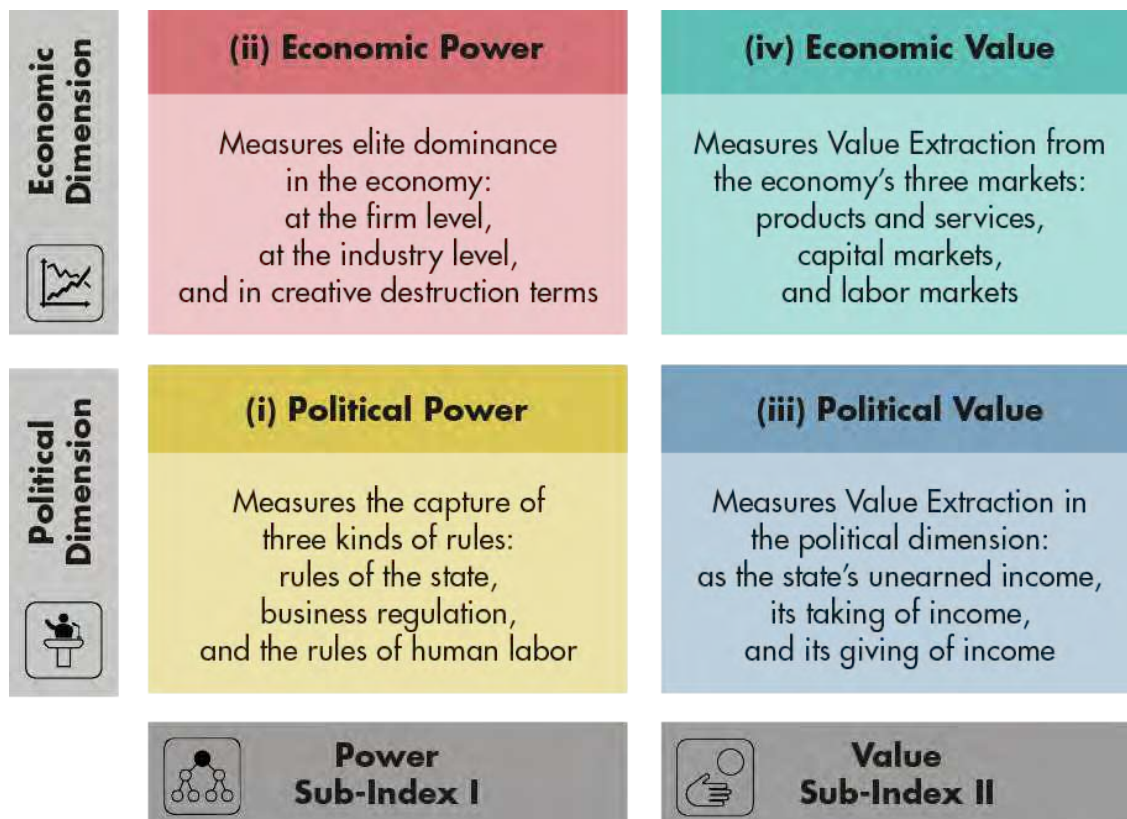
How is power in the Power Sub-Index I measured? Distortions that enable rent seeking business models require power. Since there is no rent seeking without power, power is conceptualized as rent seeking potential. Power is not rent

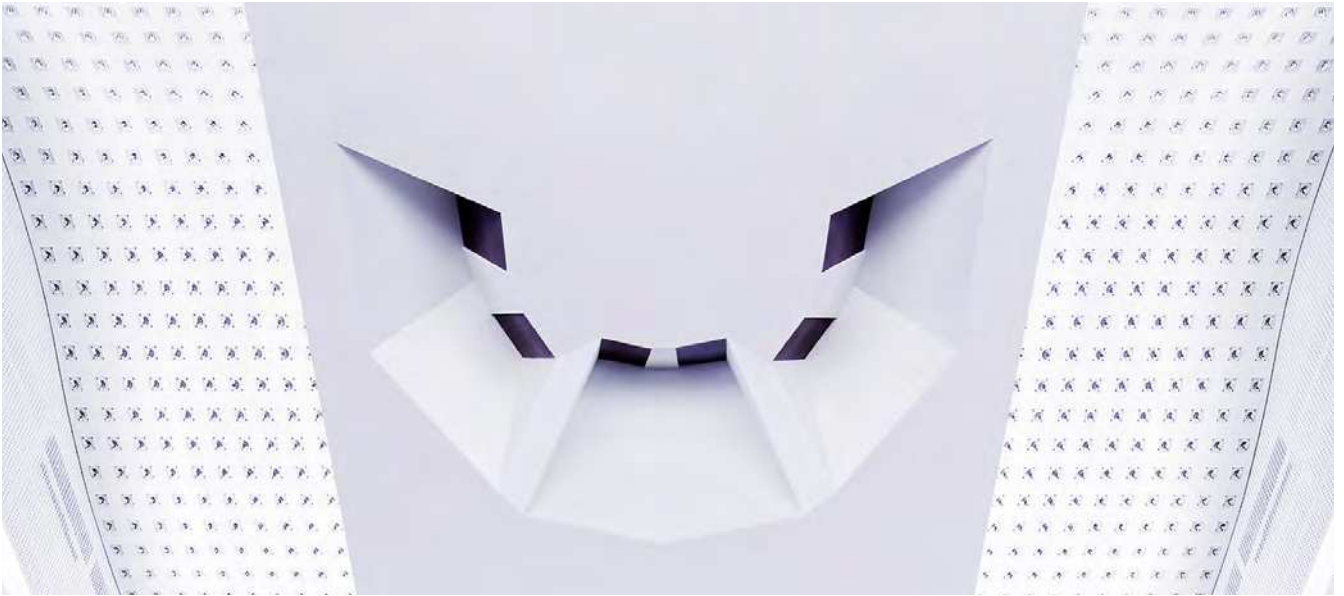
seeking per se, since power is a necessary, but not sufficient condition. In some countries, elites enjoying high degrees of power invest in and run Value Creation business models.

Given that EQx is a political economy index, the Power Sub-Index I and the Value Sub-Index II each possess the corresponding 2 Dimensions: Political and Economic. While these 2 political economy terms might be self-explanatory, the definitions of all 4 Index terms are conveniently provided on the next page.

Combining the 2 Sub-Indices with the 2 Dimensions brings forth EQx's 4 Index Areas. Each EQx Index Area is brought to life by 3 conceptually related Pillars, which are the direct host of the different datasets – the Indicators – that feed the Index with data. The matrix from which the 4 EQx Index Area quadrants emerge is presented below.

Visual6: Index Areas matrix, where Power and Value Sub-Indices meet Political and Economic Dimensions





What is Power?

The capacity to enforce one's preferences; Power is also Value Extraction potential

What is Value?

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

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

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2.2 EQx Architecture

The architectural design of EQx has been conceived of as a 4-level structure (Casas, 2020).

From the bottom up, EQx is based on a transparent series of selected datasets, operationalized as indivisible Indicators (Level 4). The respective datasets are collected, conceptually validated, collated and referenced (see section 7.2). They come from open, government and varied sources including the World Bank, the IMF, the finance industry or other indices. Selected Indicators are developed by the EQx team of researchers and collaborators. For each EQx Indicator and its underlying dataset there is a clear rationale of how they reflect Value Creation or its opposite, Value Extraction (see Indicators table in section 6.4).

Each of the (currently) 72 Indicators is logically connected to a corresponding Pillar (Level 3), which are described in detail in sections 2.3 (conceptually) and 3.4 (results). The 12 Pillars

(Level 3) are – in turn – grouped according to 4 Index Areas (Level 2). The 4 Index Areas are the product of a 2x2 matrix where the Power Sub-Index I and the Value Sub-Index II meet the Political Dimension and the Economic Dimension. For the Power Sub-Index I and Value Sub-Index II and for all the 12 Pillars, EQx provides both Country Scores and the Global Rank.

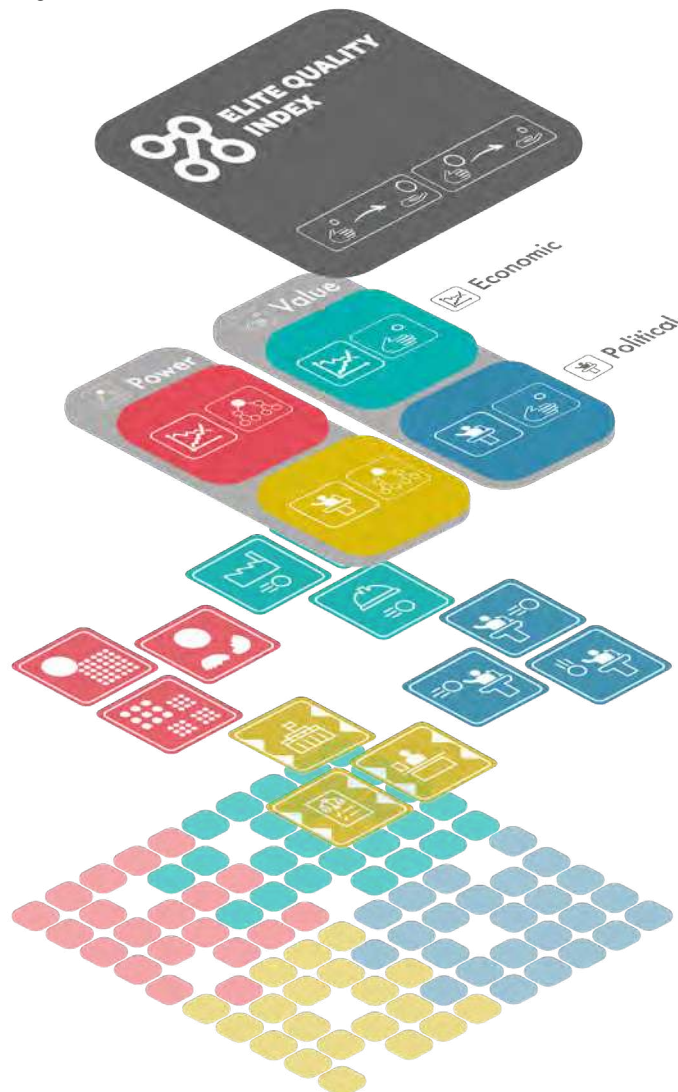
At the top of the EQx architecture, the 4 Index Areas come together to produce the Elite Quality Index, EQx (Level 1), with its Country Scores and Global Rank.

The index architecture provides the methodological structure for the EQx construction, which is detailed in-depth in the EQx Methodology Paper. The document can be downloaded at: https://elitequality.org/methodology_paper. Various methodological aspects of EQx are available in sections 2.4 (Methodology Introduction), 2.5 (Statistical Assessment), 6.2 (Methodological Note).

Visual 7: EQx Architecture
Source: Casas, 2020, Figure 9 (modified)

12

(x1)
Index
Level 1



(x2)
Sub-Indices
Level 2

(x12)
Pillars
Level 3

(x72)
Indicators
Level 4

2.3 EQx Pillars

The 12 EQx Pillars each capture a specific element of the Economic and Political Power/Value complex present in countries. The purpose of the Pillars is to define and form conceptual lenses through which we can approach, understand and measure specific phenomena. They comprise a weighted sum of expertly chosen Indicators which numerically evidence present or potential future Value Creation or rent seeking.

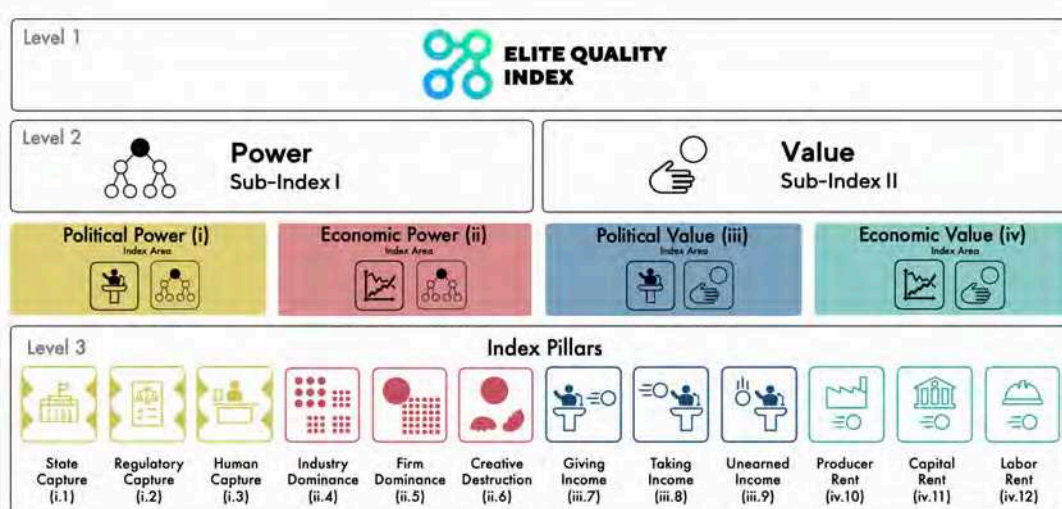
The **Political Power** Pillars were selected to address the capture of 3 kinds of rules: the rules of the state via the 'State Capture' (i.1) Pillar, the rules of business regulation via 'Regulatory Capture' (i.2), and the rules for labor markets and civil service jobs via 'Human Capture' (i.3). 'State Capture' addresses how distributional coalitions capture the state and its government branches like with *Political corruption* (COR, i.1). 'Regulatory Capture' suggests the extent to which rules and regulation, 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, including any privileges in the political system, as well as their ability to influence wages and working conditions.

The **Economic Power** Pillars measure elite 'Industry Dominance' (ii.4) and 'Firm Dominance' (ii.5) within the economy, as well as the opposite: the extent of 'Creative Destruction' (ii.6). 'Industry Dominance' measures the dominance of leading industries by measuring the degree of diversity in an economy. 'Firm Dominance' measures the power of single businesses within the economy, with Indicators such as *Antitrust exemptions* (ATX, ii.5). We borrow Schumpeter's (1942) concept of 'Creative Destruction' – the replacement of outdated by innovative structures – for the third Economic Power Pillar which includes measures of *Entrepreneurship* (ENT, ii.6) and *VC finance* (VCK, ii.6). The aim is to measure the pressures for renewal and disruption in the economy which fuel Value Creation.

The **Political Value** Pillars are named 'Giving Income' (iii.7), 'Taking Income' (iii.8) and 'Unearned Income' (iii.9), and reflect policy decisions in the political sphere that concern redistribution in the broadest sense, as in Acemoglu and Robinson (2012, p.76) "from one subset of society to benefit a different subset". An important point here is that we only consider the merits of such redistribution in terms of Value and try to assess for each surveyed Indicator whether it is extracted or created. 'Giving Income' measures how the government uses and manages public finances, looking at 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 *Delta capital gains tax vs income tax* (DKI, iii.8), or whether it allows income or the ultimate value – life – to be taken as in *Homicide rate* (HOM, iii.8). The 'Unearned Income' Pillar focuses on the exploitation of natural resources such as *Dutch disease propensity* (DUT, iii.9), or of the future at the expense of the present like *Government debt as % of GDP* (DBT, iii.8). Political Value offers 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 directly measure the extent of Value Creation (or Extraction) from the economy's 3 markets: the products & services markets, the capital markets and the labor markets. 'Producer Rent' (iv.10) estimates the rents extracted by producers and suppliers in the market for goods and services, whilst 'Capital Rent' (iv.11) measures the rents extracted both directly and indirectly as a result of financial market participation. 'Labor Rent' (iv.12), which includes Indicators such as *Unemployment rate* (UEM, iv.12) and the *Gender wage gap* (GVG, iv.12), allows us to assess the rents arising within a country from interventions by both supply and demand forces in the labor market.

Visual 8: EQx Architecture, specifying Level 2 and 3 constituents



2.4 EQx Methodology Introduction

EQx aims to be an academically grounded and statistically valid measure of Elite Quality. At the same time, judgement calls are inevitable during the process of index construction (Mazziotta & Pareto, 2013, p.74). Therefore, EQx’s overarching objective is to make the procedure as clear and transparent, and hence as justifiable as possible (Santeramo, 2017, p.135). In consequence, the underlying assumptions and methods used for index construction are presented and evaluated in detail in *Measuring Elite Quality* (Casas, Cozzi, Diebold, & Zeller, 2020), a.k.a. the EQx Methodology Paper.

The steps underlying the EQx Index construction are shown in Visual 9 below. Steps 1 and 2 are detailed in the EQx White Paper (Casas, 2020) and summarized in sections 1 to 3 of this report. Steps 3 to 8 are developed in detail in the EQx Methodology Paper, and a brief summary is supplied in the Exhibit section 6.2. In this report we focus on the construction process and the weighting, and provide a brief summary of the main methodological steps for reference purposes. The weighting part of Step 6 is examined in this section, while the statistical assessment, Step 8, is concisely summarized in the next section, 2.5. The results of Step 7 are presented in the report which is the realization of Step 9.

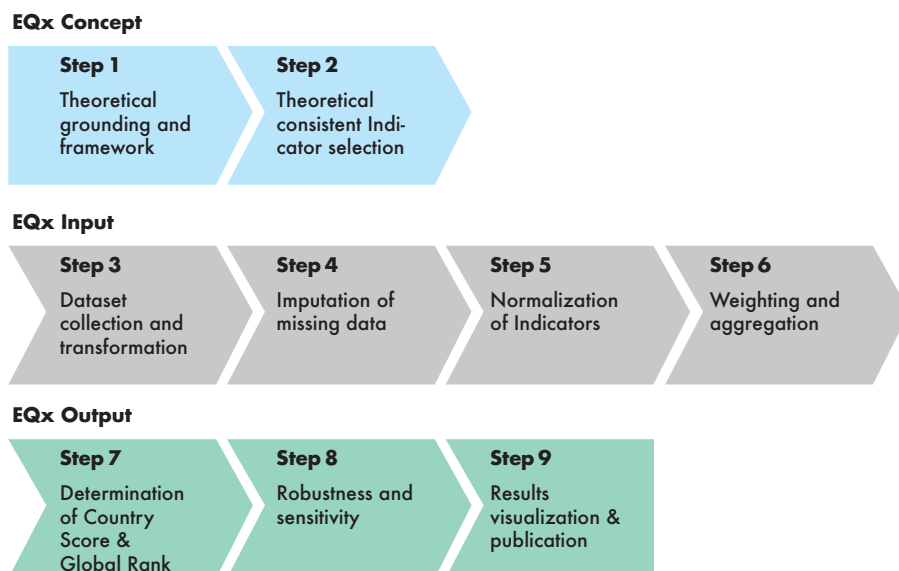
Weighting Scheme

The Indicator weighting scheme of any index is decisive, determining scores and rank. Best practices in index construction see weights explicitly made consistent with the index concept and made transparent. In other words, first, a weighting scheme must reflect what the index aims to measure. Second, each of the datasets that constitute the index must see their weight assigned in a documented and traceable manner.

In EQx, the fundamental datasets are the Indicators, and they all denote present or future Value Creation (≠ Extraction) phenomena. For instance, Indicators considered include *Firm Concentration* (HHI, ii.5), *Global Pluralism Index* (PLU, i.1), *Trade freedom* (TRF, iv.10), *Firm exit ratio* (EXR, ii.6), *Crony capitalism* (CRO, i.2), *Natural interest rate deviation from optimum* (DNI, iv.11), or *Corporate tax rate deviation from optimum* (DCT, iii.8) (for the full EQx Indicators list, see Exhibit 6.4). The weight of each Indicator in EQx depends on the weight of that Indicator (Level 4) within its Pillar (Level 3), the weight of the Pillar (Level 3) within the Index Area, and the weight of the Index Areas (Level 2) within the EQx Index (Level 1).

What does the EQx Index aim to measure? Again, the overall Elite Quality of nations in terms of the Value Creation caused by the nation’s elite business models as evidenced by aggregated datasets. Generally speaking, indices, in terms of what they measure, lay on a spectrum ranging from established to emerging concepts. On one hand, indices advance and measure well established constructs like competitiveness, innovation, multidimensional poverty, the gender gap or prosperity, and on the other, novel constructs like ease of doing business, happiness, attractiveness or economic complexity. Elite Quality is a novel construct and, as such, has necessitated a weighting method that combines both conceptual and expert-led approaches.

Visual 9: EQx’s 9 step construction process



Elite Quality is measured at present by 72 EQx Indicators, each of which is evidence of Value Creation (or its opposite, Value Extraction) in the political economy, at present or potentially in the future.

The EQx notion sees Power as a necessary condition for Value Extraction and rent seeking. The Power Sub-Index I is thus the indicator of potential future Value Extraction. Therefore, the relative weighting for the 2 Sub-Indices Power and Value is conceptual and determined by the authors after thorough deliberation: the Power Sub-Index I has a weight of 34% whereas the Value Sub-Index II is weighted at 66%. Further research will determine the extent to which Power leads to future Value Creation/Extraction, and is one of the factors that might lead to the re-calibration of weights. Incidentally, the Elite Power Sub-Index I can be construed as an independent index in its own right.

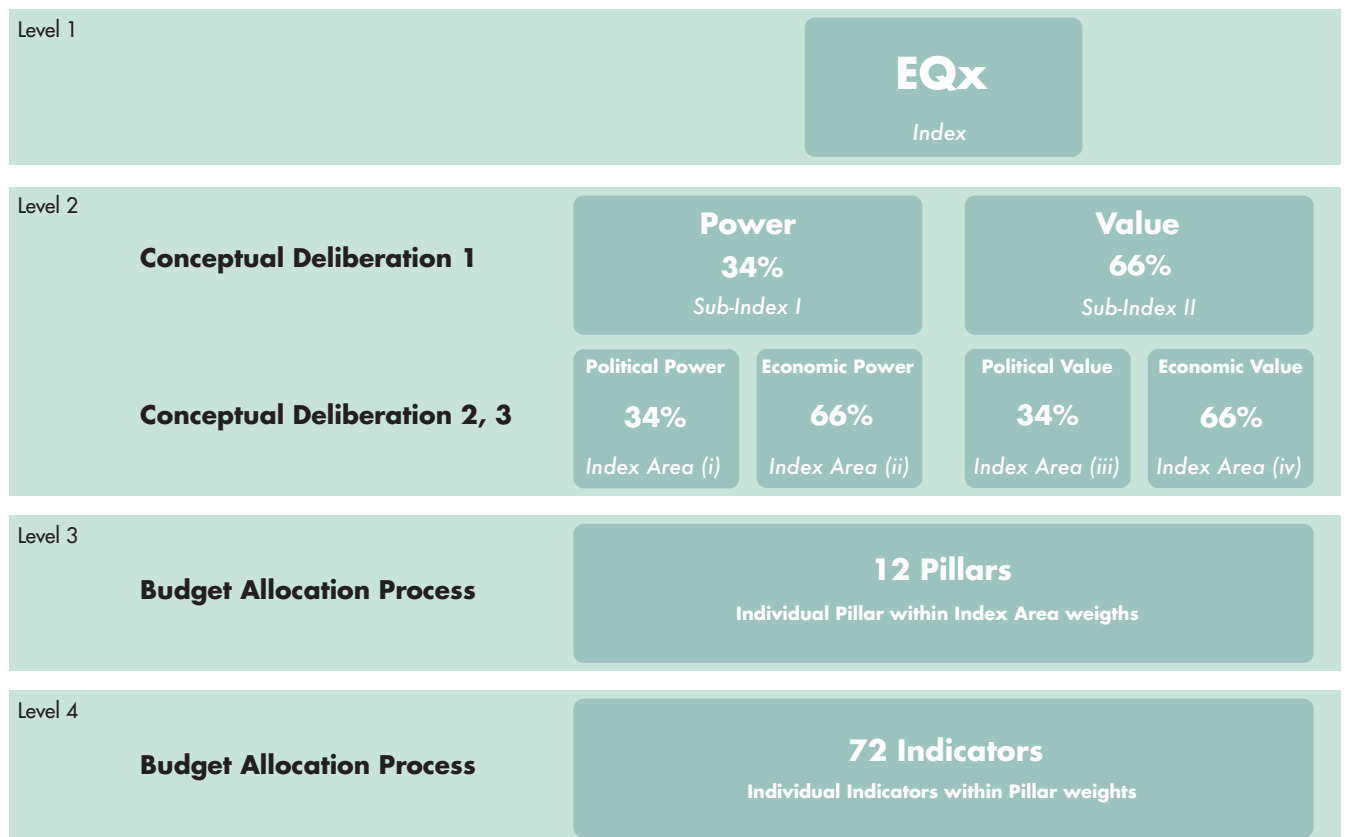
The EQx could have been christened Political Economy Index because it measures Power and Value in the political economy. Each of EQx's 2 Sub-Indices contain a Political and an Economic Dimension, as discussed earlier. The weights of these 2 Dimensions within the Power Sub-Index I and the Value Sub-Index II respectively are also the result of the conceptual EQx design and of the authors' judgement: the weights for both are established at roughly 1/3 : 2/3 (conceptual de-

liberations 2 and 3). For the Power Sub-Index I, the rationale is that Economic Power is supreme, while Political Power only reflects potentially extractive processes if it transits to the economic arena. For the 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.

One can imagine a matrix with the 2 Sub-Indices intersecting the 2 Dimensions, thereby yielding 4 quadrants. Each is an EQx Index Area (see Visual 10). Their nomenclature is discernible: Political Power (PP), Economic Power (EP), Political Value (PV) and Economic Value (EV). The conceptual deliberation weighting 1, 2 and 3 just described extends a specific weight to each Index Area: 11.6% (PP); 22.4% (EP); 22.4% (PV) and 43.6% (EV).

While the weights of Level 2 elements (the 2 Sub-Indices, their 2 Dimensions, and the 4 derived Index Areas) are determined by conceptual deliberation, the weights of EQx structure levels 3 and 4 are established by a panel of experts employing Budget Allocation Process (BAP) methodology. BAP establishes the weighting of Pillars (Level 3) within each of the 4 Index Areas, as well as the weighting of the Indicators (Level 4) within each of the 12 Pillars.

Visual 10: EQx weighting overview



2.5 Statistical Assessment

As the previous steps highlight, the EQx is based on several judgement calls and is the result of a multilevel calculation exercise. This raises the question: how reliable and meaningful is the EQx?

Evidence of the reliability of the Index is obtained by a range of robustness tests, presented and discussed in detail in the EQx Methodology Paper and summarized hereinafter. The tests aim at validating the previously presented judgement calls by gauging the sensitivity of the Index to modifications of its set-up, and, in particular, investigating how sensitive the EQx Country Rank is, *ceteris paribus*, to changes in key modelling assumptions. 5 statistical tests assess the Index's robustness in different regards, as summarized in Visual 11.

In summary, the 5 tests performed on EQx2020 data suggest that EQx Country Scores and the implied Global Rank are not driven by (i) individual Indicators, (ii) data quality or availability, and are robust to a range of alternative (iii) normalization (iv) weighting and (v) aggregation schemes.

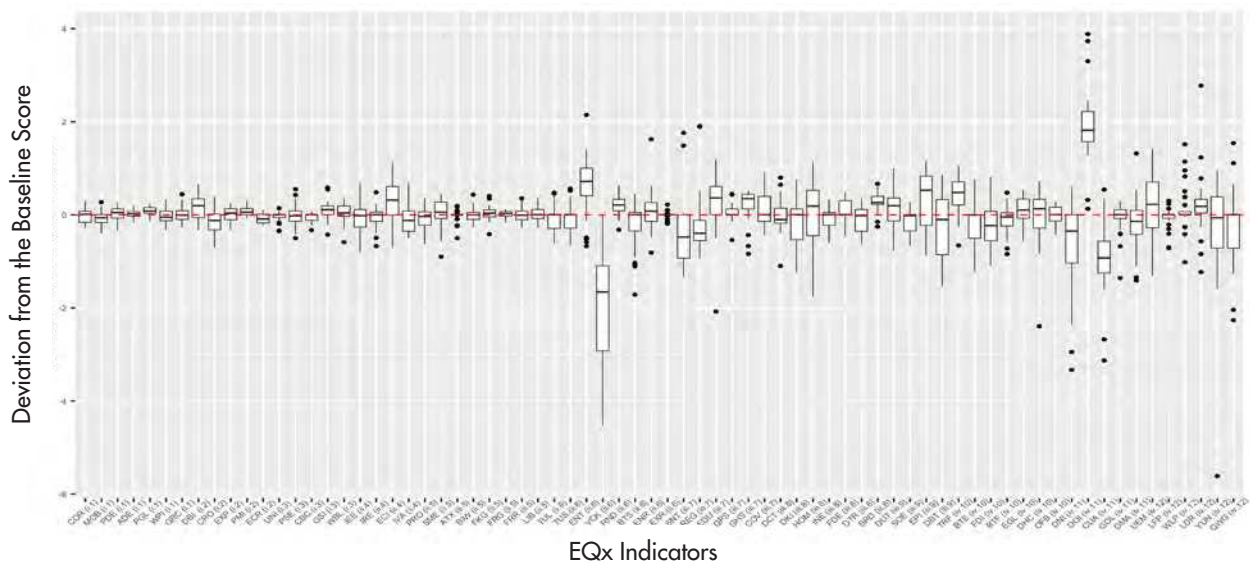
Test 1 – Leave-one-out robustness

Test 1 assesses the sensitivity of the Index to the selection of underlying Indicators and aims at showing the balanced structure of the EQx. Are all of the 72 Indicators equally important? Are some redundant, or, on the contrary, dominating Index scores? To answer these questions, we test the impact of each Indicator on EQx Country Scores and Global Rank, by excluding one Indicator at a time. Visual 12 shows the effect on EQx Country Scores. The distribution of differences in EQx Country Scores is illustrated by vertical lines for each excluded Indicator. A small box and short vertical line close to the zero-difference horizontal red dashed line indicate that the respective Indicator does not significantly affect EQx Country Scores. Thus, Visual 12 shows that while all Indicators contribute somewhat to the final EQx Scores, most Indicators differ only moderately in their influence. Furthermore, considering the impact on the Global Rank, in almost all cases excluding an Indicator does not change the rank of a country at all, or only by one rank (the visual is presented in the EQx Methodology Paper).

Visual 11: EQx statistical assessment tests, overview table

Test Nr.	Test Name	Main Results
1	Leave-one-out robustness	EQx has a balanced structure. While all Indicators and Pillars contribute to final scores, none dominates the ranking.
2	Sensitivity to data availability	Differences in EQx scores between countries are not significant with respect to the number of Indicators used for Index calculation.
3	Sensitivity of the normalization scheme	EQx is stable to changes in the trimming threshold used for the normalization of Indicator values (e.g. highly significant Kendall Tau b correlation coefficient of 0.95, when comparing EQx ranking to a ranking using no trimming during the normalization).
4	Robustness to the weighting scheme	EQx ranking is largely robust to slight and even far-reaching modifications in the weighting scheme (e.g. highly significant Kendall Tau b correlation coefficient of 0.77, when comparing EQx ranking to a ranking using equal weighting at every aggregation level).
5	Robustness to the aggregation scheme	EQx ranking is largely robust to modifications in the aggregation scheme (e.g. highly significant Kendall Tau b correlation coefficient of at least 0.96, when comparing the EQx ranking to a ranking using geometric aggregation at one of the aggregation levels).

Visual 12: Test 1, on Indicators: Deviation from baseline scores, excluding one Indicator at a time
 Note: Boxes represent 50% of all countries; the horizontal line within a box indicates the median



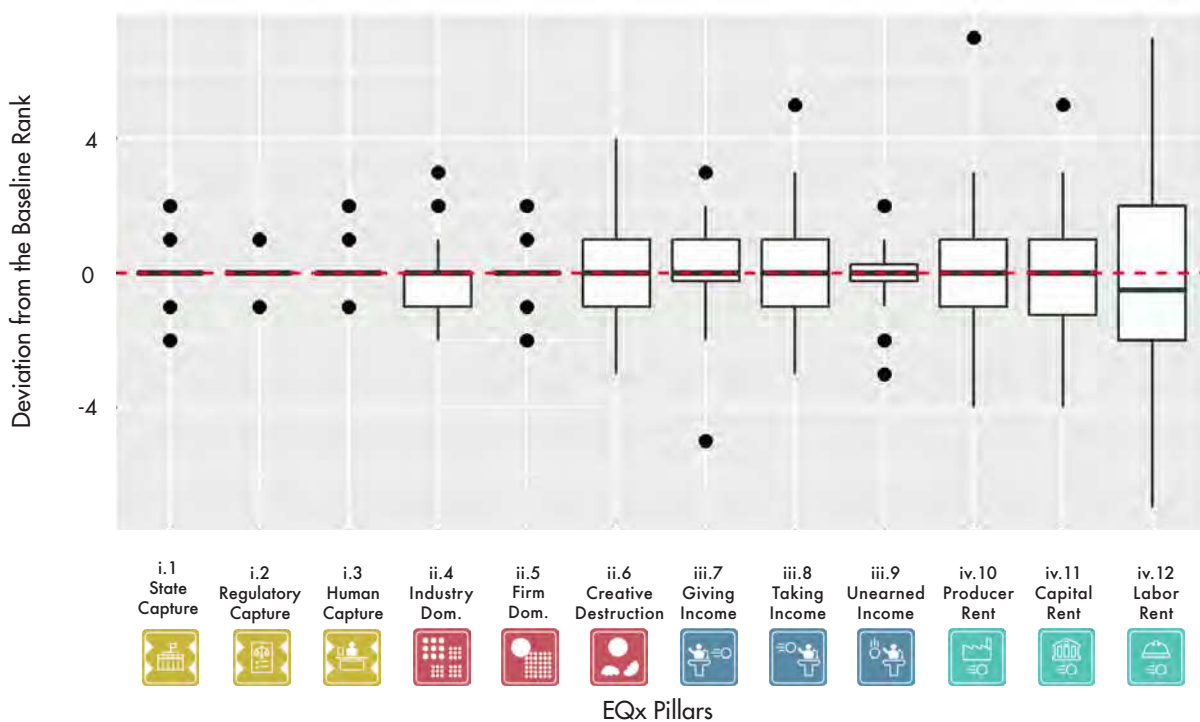
To assess whether EQx has a balanced conceptual structure, we re-run Test 1 but this time by examining the effect of omitting one Pillar at a time on the Global Rank. Visual 13 shows the subsequent distribution of the differences in the Global Rank, which is illustrated by the vertical lines for each excluded Pillar. Pillar 12 (Labour Rent) is the highest-impact Pillar, since its omission shifts countries' Global Rank the most. However, for 50% of countries, omitting one Pillar affects their Global Rank by only up to one position for the majority of Pil-

lars. The median deviation from the baseline EQx Global Rank is zero in almost all cases. Omitting one of the Pillars 1, 2, 3, 5 or 9 does not affect the Global Rank position for nearly all countries.

Thus, the results suggest that while all Indicators and Pillars contribute to the EQx, with some having a larger impact than others, no single Indicator and no single Pillar dominates the final EQx Global Rank.

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Visual 13: Test 1, on Pillars: Deviation from baseline ranking when excluding one Pillar at a time
 Note: Boxes represent 50% of all countries; the horizontal line within a box indicates the median

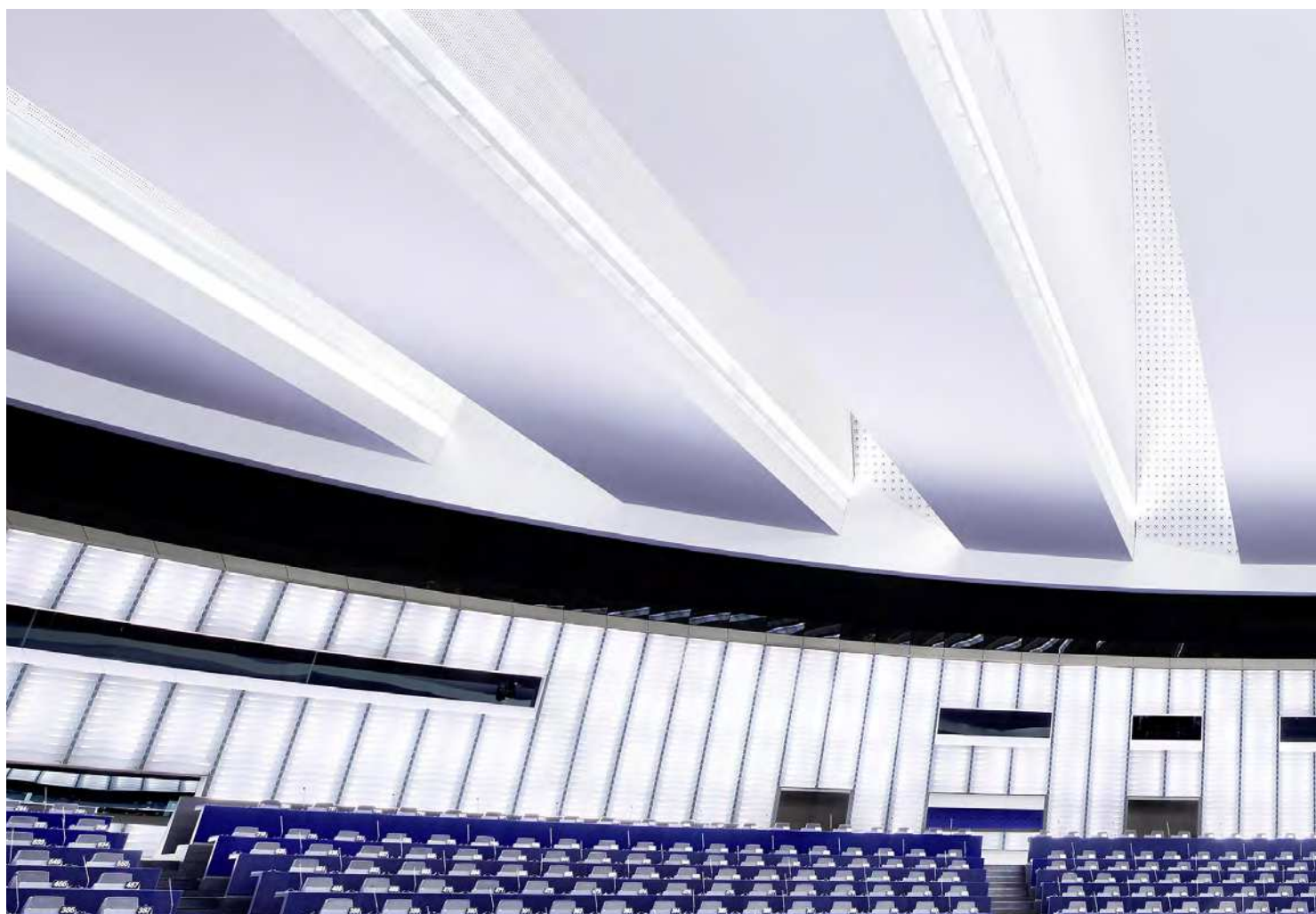


Test 2 – Sensitivity to data availability

Test 2 gauges the meaningfulness of the EQx in terms of the data used, by investigating whether missing data points follow a completely random pattern or a systematic pattern (the latter being a problematic indication of bias). In other words, are Country Scores related to the availability of data? Indeed, countries with more data tend to score higher in the EQx. However, this relationship is not deemed to be particularly strong. That is, differences in EQx Country Scores are not significant with respect to the number of Indicators. Furthermore, provided the considered Indicators are unbiased, the state of Elite Quality is depicted using less, but nevertheless correct information. In view of the high-quality data constituting the EQx, we thus do not expect EQx scores to be biased in terms of data availability.

Test 3 – Sensitivity of the normalization scheme

The mean and standard deviation underlying the Indicators' standardization are calculated from the 95% trimmed datasets. Test 3 evaluated the sensitivity of the EQx to this method, by calculating Index values using several thresholds for the computation of means and standard deviations during the normalization process, and comparing the resulting ranking to the baseline EQx ranking. The rankings using different trimming thresholds are highly correlated with the baseline ranking. For instance, when applying no trimming at all, the resulting ranking is still highly and significantly correlated with the baseline ranking, with a Kendall Tau-b correlation coefficient of 0.95 (Spearman correlation coefficient: 0.99).



Test 4 – Robustness to the weighting scheme

Special consideration is given to the question of whether the Global Rank would change considerably if a different weighting scheme was used. This is done in Test 4 by comparing the ranking resulting from an alternative weighting scheme to the baseline EQx Country Rank. The alternative schemes entail, for instance, applying equal weighting at the Sub-Index aggregation level while the remaining weighting scheme remains unchanged, or, equal weighting at every level of aggregation (Indicator, Pillar, Index Area, Sub-Index level). The resulting alternative rankings are highly and significantly correlated with the EQx ranking: in the first example, the Kendall Tau-b correlation coefficient amounts to 0.89, and in the second example to 0.77.

Test 5 – Robustness to the aggregation scheme

A similar picture arises when considering a different aggregation scheme. To assess the sensitivity of the EQx Country Scores and Global Rank towards the underlying functional form, 2 alternative aggregation schemes are considered in Test 5. First, a weighted geometric mean is taken instead of a weighted arithmetic mean at each level of aggregation. Second, a Leontief function is applied where, for instance, the Pillar score is obtained from the unweighted smallest Indicator value within that Pillar. In that case, aggregated Country Scores are constrained by the minimum value of considered elements (Saito, 2012, p.1). Again, after applying the alternative schemes at different aggregation levels, the resulting alternative index rankings are highly and significantly correlated with the EQx Global Rank. For instance, the Kendall Tau-b correlation coefficient when applying a geometric function at any one of the aggregation levels amounts to at least 0.96, and when applying a Leontief function at any one of the aggregation levels, to at least 0.76.



3. EQx Results

3.1 Elite Quality Country Score, Global Rank and Highlights

Visual 14: EQx2020 table of Country Scores and Global Rank with Power and Rent Sub-Indices

Country	EQx		Sub-Indices			
	Rank	Score	Power (I)		Value (II)	
			Rank	Score	Rank	Score
Singapore	1	68.5	15	59.2	1	73.4
Switzerland	2	64.9	5	63.8	2	65.5
Germany	3	64.2	3	65.0	3	63.7
United Kingdom	4	63.9	2	70.6	7	60.5
United States	5	63.4	1	70.7	8	59.6
Australia	6	63.2	8	63.4	4	63.1
Canada	7	61.9	9	62.7	5	61.5
Japan	8	61.6	10	62.0	6	61.4
Korea, Rep.	9	61.2	4	65.0	9	59.3
Sweden	10	59.7	11	61.8	10	58.6
Norway	11	58.6	13	60.2	13	57.8
China	12	58.4	19	58.2	11	58.5
Poland	13	58.3	17	58.5	12	58.2
Portugal	14	58.0	12	61.4	15	56.3
France	15	57.4	7	63.4	16	54.3
Israel	16	56.9	6	63.5	19	53.5
Italy	17	55.5	16	58.6	18	53.9
Spain	18	55.5	14	59.9	21	53.2
Kazakhstan	19	52.7	28	43.5	14	57.5
Indonesia	20	52.0	22	49.2	20	53.5
Mexico	21	50.7	25	47.4	22	52.4
Saudi Arabia	22	49.2	30	40.0	17	53.9
Russian Federation	23	48.9	24	48.3	25	49.2
Botswana	24	48.9	29	42.7	23	52.0
India	25	45.4	23	48.4	27	43.8
Pakistan	26	44.5	32	32.5	24	50.7
Brazil	27	44.1	20	50.2	28	41.0
Turkey	28	43.3	21	49.2	29	40.3
Nigeria	29	42.4	31	34.7	26	46.4
South Africa	30	41.7	18	58.5	32	33.1
Argentina	31	41.6	26	47.1	30	38.7
Egypt, Arab Rep.	32	40.0	27	44.2	31	37.8

Beyond academia, the aim of the Elite Quality Index (EQx) is to become a tool for thought leaders and front-runners in business, government and broader areas of social engagement. EQx is an instrument that aims to support national

elites' Value Creation business models and incentivize political economy tenets that foster such models.

The main findings as we interpret the EQx2020 results are discussed below:

What do EQx scores tell us?

Finding 1: Singapore

The clear leader, so successful that it is a stand-alone outlier. Singaporean elites base their business models on Value Creation. They are also significantly more powerful than their Western counterparts; precisely because of this feature, Singapore's EQx Country Score is strongly penalized (because Power is potential Value Extraction). Yet, Singaporean elites refrain from rent seeking activity. Thus, despite its middling rank in the Power Sub-Index I, the country comes in well ahead of all others in the overall Global Rank, thanks to a stellar showing in the Value Sub-Index II. The Asian city state is the gold standard of elite governance. One must then ask: how can the world learn from Singapore's elite governance?

Finding 2: U.S. and U.K.

EQx's most thought-provoking result might be the 4th and 5th place of the Anglo-Saxon economies. The surprise starts with the excellent scores attained in the Power Sub-Index I; American and British elites are the least powerful of all. This comes with a twist: despite their relative weakness, they manage to rent seek. We see a political economy configuration opposite to that in Singapore. The question emerges: on the back of their strong showing, will the U.S. and the U.K. model result in higher economic growth and human development rates than other advanced economies in continental Europe and East Asia?

Finding 3: China

The emerging superpower's aggregate Elite Quality Country Score is at the high end of the spectrum. China's performance is all the more extraordinary given its middle-income status. As a matter of fact, China's Elite Quality is comparable to European advanced economies like Norway or Sweden. At a level much higher than its peers in the middle-income category, China manages to stimulate Value Creation, while keeping rent seeking business models under control. The question thus emerges; what accounts for China's success – is it its large economy, authoritarian political governance, or institutions that favor competition?

Finding 4: E.U. core economies

The E.U.'s leading countries vary significantly in their Country Scores. Germany is well ahead of France, while Italy and Spain place a couple of steps lower. One must ask: do dissimilar Value Creation elite business model configurations point to divergent long-term growth prospects for individual E.U. countries, and do we have multiple political economy models within Europe?

Finding 5: BRICS

The often-discussed BRICS split between China and the other 4 countries is clearly visible in the EQx, although with a nuance. Russia, India, Brazil and South Africa (in that order) cluster around relatively low levels. A rung below Russia we find Brazil and India at similar levels, with the latter's lower GDP per capita implying future growth potential. An important question emerges: how can the 'BRIS' elites transition to higher Value Creation business models on aggregate and so advance their long-term growth prospects?

3.2 State of Elites Framework: Country Mapping, Elite Typology and Highlights

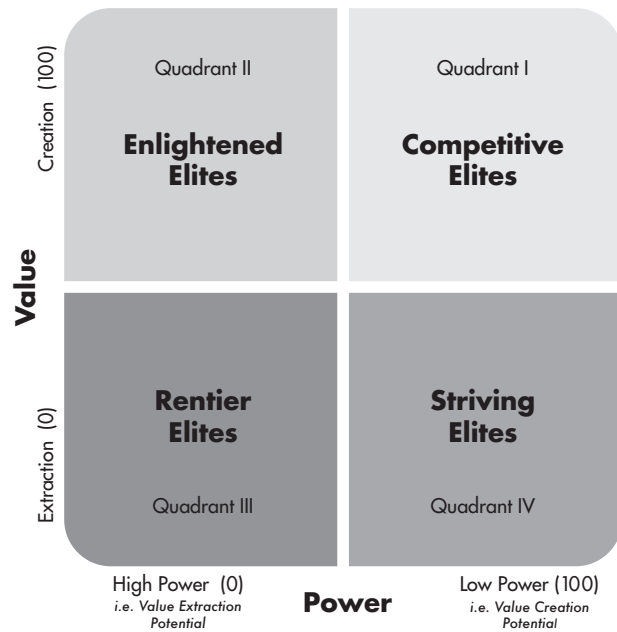
The State of Elites framework revolves around EQx's 2 Sub-Indices, Power and Value. Both represent the degree of Value Creation along a spectrum ranging from high to low. The rationale for Value Creation ≠ Extraction is described in Section 2.1.

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 converts to Value Extraction. Value Extraction business models require Power to operate and thus Power is described as future Value Extraction potential in the Visual 15. 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 is best apprehended 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 15: State of Elites framework, description of the 4 states

Source: Casas, 2020, Figure 10 (modified)



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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 is civil, that competition will produce a plethora of public goods, including human and economic development. Technological possibilities are seized, and long-term economic growth is maximized and limited only by human capacity to innovate.

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

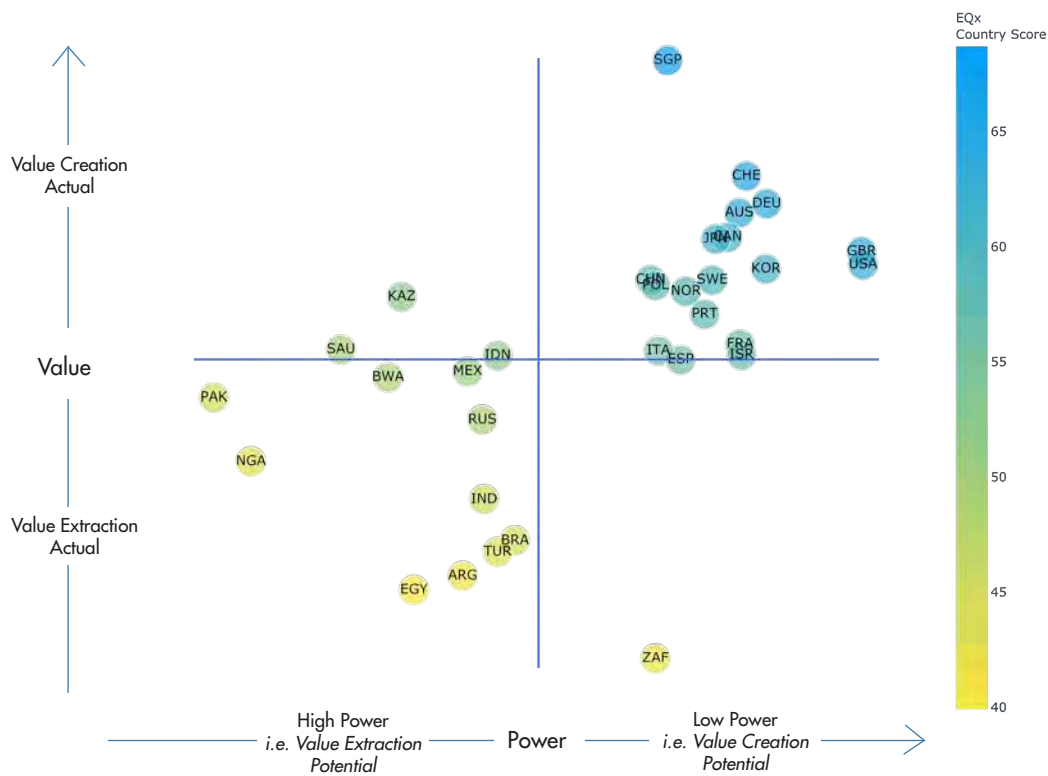
Quadrant 3 exhibits 'rentier elites'. Countries with economies in this state are characterized by highly dominant and powerful elites that have consolidated value extracting business models. Having captured the levers of power and overcome the resistance of productive forces, the elites have designed 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 that will in turn protect and consolidate their business models.

EQx2020 State of Elites, results

Employing the Power Sub-Index I and Value Sub-Index II Country Scores, we position each of the 32 covered countries in this Report in the State of Elites Framework.

Visual 16: EQx2020 State of Elites Framework: Country positions based on EQx Sub-Indices Power and Value



EQx2020 State of Elites, highlights

The high-level State of Elites analysis has most of the 32 EQx2020 surveyed countries as either 'rentier' or 'competitive', and we detect a developmental relationship between the quadrants. Within each quadrant, however, the picture that emerges is more complex. Each cluster, development level or region can be analyzed on its own terms. Such a perspective then yields an understanding of each of the 4 State of Elites in terms of tendencies: the variance from one political economy to another, even when quadrants are shared, is significant.

For instance, India and Pakistan have similar Country Scores, both being in the overall 'rentier' quadrant. The EQx interpretations and policy implications diverge greatly: while Pakistani elites tend towards the 'enlightened', the aggregate of Indian elites is disposed to the 'striving'. That is, Pakistan elites are much more powerful but extract less value than their Indian counterparts, which on aggregate are more dispersed and yet manage to rent seek more effectively.

In the 'competitive' quadrant we see a relationship between the leading countries at the frontier of Elite Quality (Singapore, Switzerland, Germany, U.K. or U.S.) that runs perpendicular to the trendline in the overall sample. That is, Singapore tends toward the 'enlightened' space given its relatively powerful elites (more than compensated for by the actual Value Creation of its elites). On the other hand, the U.S. or the U.K. score highest in terms of Power but manage to rent seek with Value scores at the levels of countries in the next cluster where we find Korea, Sweden or China.

The 3 countries in the 'enlightened' quadrant restrain their Power (and Value Extraction potential) to actually create moderate levels of value. Saudi Arabia, Indonesia, and especially Kazakhstan fall in this category. The question is, will they (i) follow the path of Singapore, or instead (ii) monetize their power, or even (iii) decline and tend towards the 'striving' positioning of Brazil or Turkey? After all, weakening elites could lead to a free-for-all rent seeking situation, as seems to be the case in South Africa.

3.3 Value Configuration Framework: Economic Activity as Shares of Value Creation/Extraction

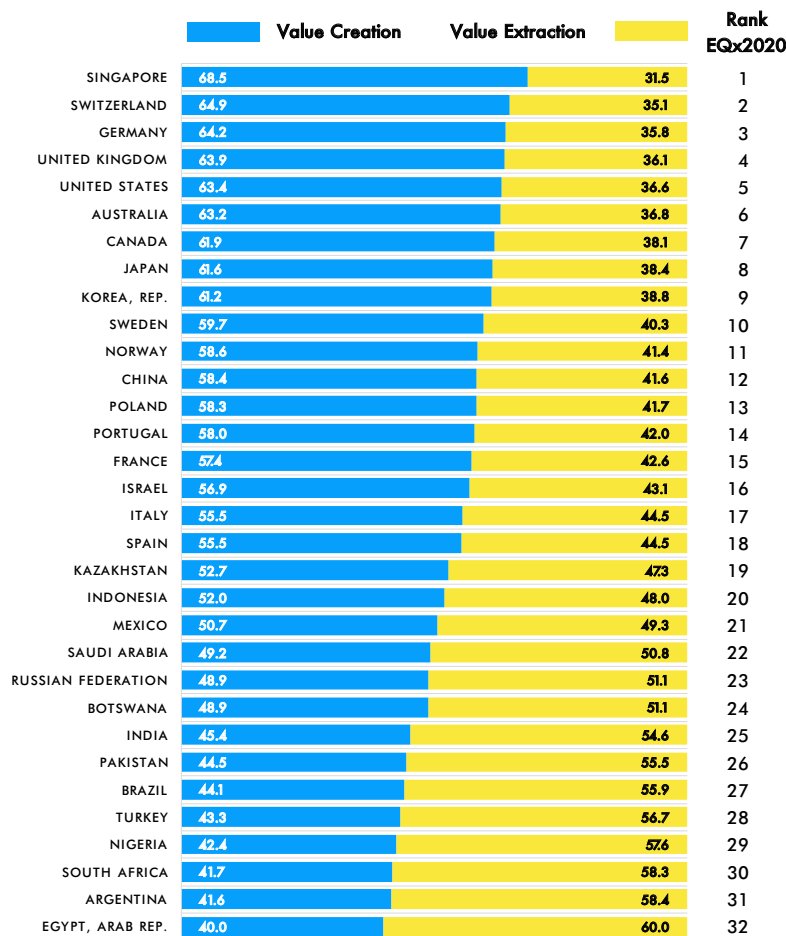
EQx ranks countries on Elite Quality. That is, each country has a score that represents a point on the Value Creation to Value Extraction spectrum of the political economy. The Country Scores are normalized to a range of 1 to 100, with 100 being the highest score, i.e. the best, in terms of Value Creation.

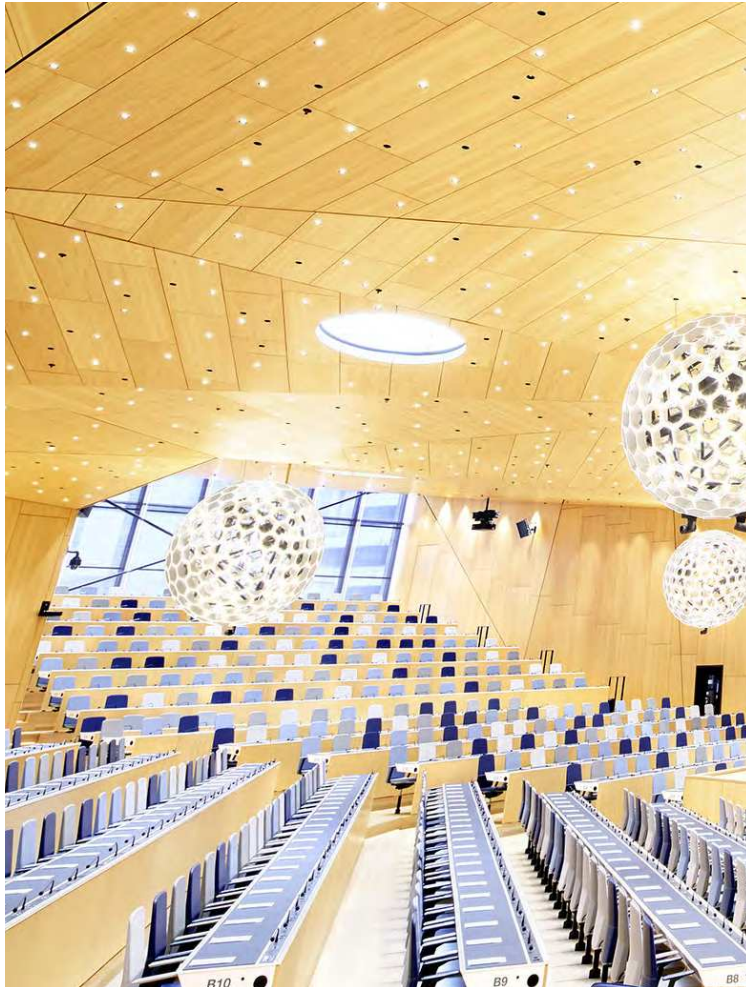
To make concrete the abstract aggregate notion, to support policy and social debates, and to facilitate the connection of the macro (country-level) EQx to the micro (company-level), we introduce the Value Configuration framework. The Value Configuration suggests the relative proportion of Value Creation vs Value Extraction business models within a given economy on a relative and comparative basis. A simple conversion turns EQx scores into Value Creation percentages, where the distance from a theoretical perfect 100% is assumed to be economic activity derived from Value Extraction business models. While figuratively speaking Country Scores represent a point on a continuum, the Value Configuration is a heuristic where

the range up to the Country Score spot is determined to be Value Creation and the remainder 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.

Value Configuration is a rendition of the political economy position of a given country in relation to others, reflecting the respective proportions of value creating and rent seeking business models. For any given political economy, the ratio between the 2 business models is not an absolute, but instead qualified by the same metric of the other countries in the Index. Derivate work on the Value Configuration heuristic is currently being tested at the firm-level, where a method is being developed to assess the percentage of revenue (and profits) generated by firms from Value Creation business models and their value extracting opposite. This assessment is also performed in comparative terms, the benchmark in this case being other firms.

Visual 17: EQx Value Creation vs Value Extraction Configuration, based on EQx Country Scores





3.4 Pillar Results

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 Rank measure where exactly in the political economy Value is being created and if the pie (versus 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 rules of business regulation, and the rules for labor markets and civil service jobs. 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 state's top echelons. Specific Indicators measure *Social Mobility* (MOB, i.1) and any evidence that the state has been captured, as for instance evidenced by *Political corruption* (COR, i.1) or in the planned Indicator, *Political turnover* (TUP, i.1), which aim to reflect the degree of 'creative destruction' in politics.



Pillar i.2, Regulatory Capture measures the extent to which rules and regulation, or the making thereof, have been captured by special interests. The Pillar includes *Administrative decentralization* (AED, i.2) and *Crony capitalism* (CRO, i.2), derived from an index proposed by The Economist ("Comparing crony capitalism", 2016), which measures wealth derived by billionaires from rent-heavy industries as a signal of the successful capture of regulators or legislators. It also incorporates the World Bank's widely-recognized *Ease of Doing Business Index* – coined in the EQx as *Institutional quality* (DBI, i.2) – which measures the quality of a country's institutions and regulatory environment.

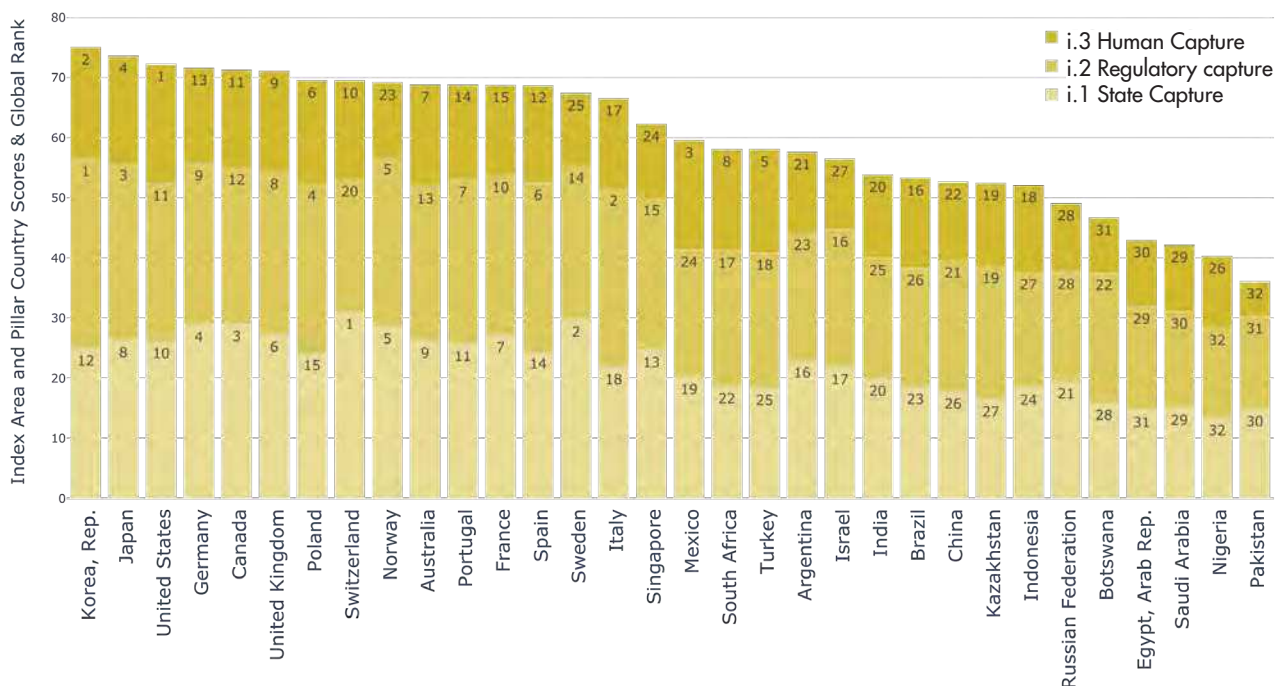


Pillar i.3, Human Capture attempts to measure the power of labor and civil service coalitions, including their privileges in the political system. This might be reflected by their ability to influence their own wages and working conditions. In this Pillar, evidence of their Political Power is measured by *Unionization rates* (UNI, i.3), or *Public sector employees as % of total employment* (PSE, i.3). Other areas of human capture are operationalized by the *Women, Business and the Law* (WBL, i.3) Indicator, or the extreme phenomenon of modern slavery by the *Global Slavery Index* (GSI, i.3).



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Visual 18: Index Area (i) – Political Power, Pillars with Country Score and Global Rank



Economic Power Pillars, Index Area (ii)

The Economic Power Pillars measure elite dominance in the economy: First at the industry level, then at the single business level, and lastly, the opposite of dominance, i.e. creative destruction.

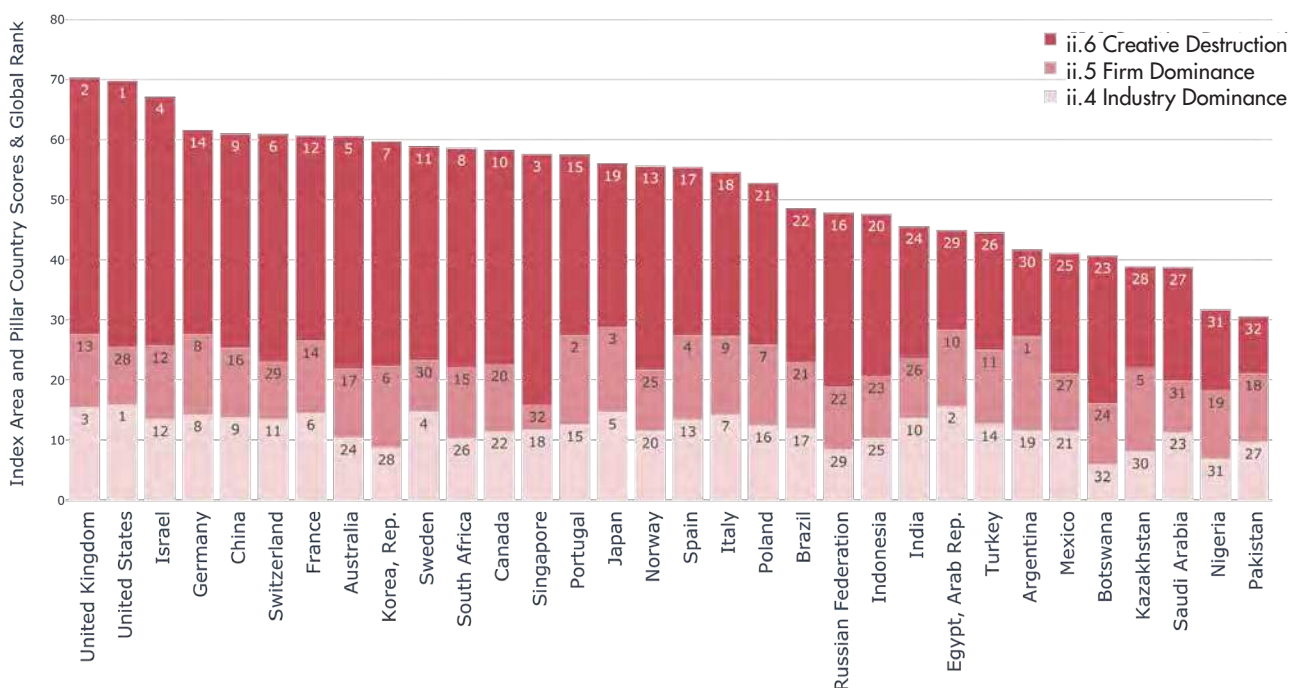
Pillar ii.4, Industry Dominance measures a national economy's diversity. Influence of a country's dominant industries in the political economy is assessed by Indicators measuring, for instance, the relative export volumes, revenues, or profits of leading industries as percentage of GDP. The Pillar also includes Indicators like the *Economic Complexity Index* (ECI, ii.4) measuring the "amount of productive knowledge" (Hausmann, et al., 2011, p.63) implied in a country's export structures.

Pillar ii.5, Firm Dominance measures the degree of power concentration in the hands of a nation's leading firms. To that effect, the Pillar examines, for instance, the *Top 10 firms market capitalization as % of GDP* (FKG, ii.5), as well as the *number of Small and medium-sized enterprises per 1,000 people* (SME, ii.5). Indicators further considered will be measurements of policies designed to maintain healthy levels of competition and limits to Economic Power.

Pillar ii.6, Creative Destruction estimates the pressures for renewal and disruption in an economy. Borrowing Schumpeter's concept, one focus is entrepreneurs whose role is to challenge incumbents and drive economic growth. The Pillar first considers the "destruction" part of the process for instance by measuring the *Listed firms turnover, long run 15 years / short run 3 years* (TUL/TUS, ii.6) and the *Firm entry/exit ratio* (ENR/EXR, ii.6). Then, it considers the forces fostering "creation" in the economy, such as the all-important level of *Entrepreneurship* (ENT, ii.6) or *VC (venture capital) finance* (VCK, ii.6).



Visual 19: Index Area (ii) – Economic Power, Pillars with Country Score and Global Rank



Political Value Pillars, Index Area (iii)

The Political Value Pillars measure Value Creation (≠Extraction) in the political dimension: Political rent is conceptualized as the state's unearned income, as well as the state's taking and giving of income.

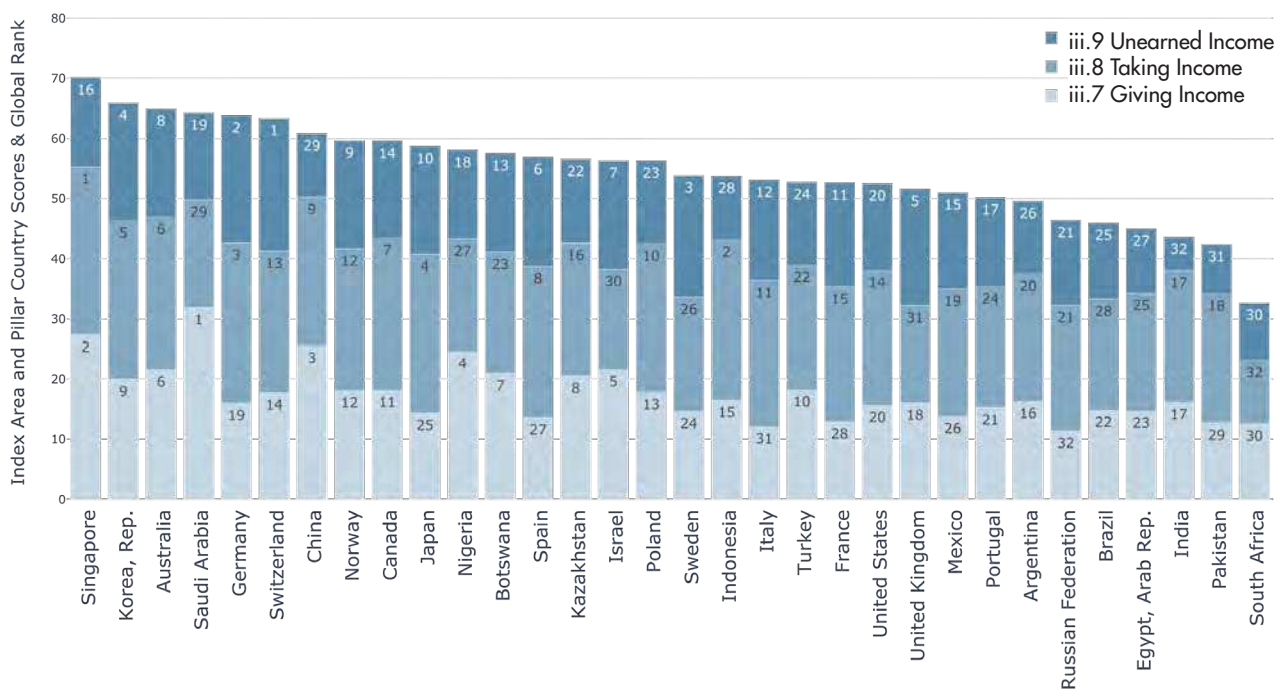
Pillar iii.7, Giving Income focuses on how the government uses and manages public finances. Redistribution of state income in the form of *Subsidies and transfers as % of expenses* (SNT, iii.7) is an important Indicator of this Pillar; many of these processes often divert resources away from most efficient uses and create hidden costs (Clements & Parry, 2018). The Pillar also evaluates Indicators conducive to Value Creation, like public education provision or health including *Covid-19 safety* (COV, iii.7), that increase competition in many markets and act to curb rent seeking behaviors.

Pillar iii.8, Taking Income measures rent extraction occurring as the state collects income from productive citizens and other wealth generators, fails to protect these, or endorses wealth transfers carried out by powerful coalitions. The Pillar includes tax system properties such as the *Corporate tax rate deviation from optimum* (DCT, iii.8). Plans for future Indicators include a *Housing affordability survey* (HAS, iii.8) since land prices are often determined by the government on behalf of narrow coalitions with pernicious effects on the young and working classes, or measures related to the challenging tasks of establishing a security optimum: the absence of security encourages proliferation of extractive (criminal) business models and an over-investment is a sign of rent seeking.

Pillar iii.9, Unearned Income mainly focuses on the exploitation or Value Extraction of natural and various resources, including the future. For instance, environmental footprints are conceptualized as wealth provided by nature – i.e. wealth that is not earned in full. Accordingly, a low *Environmental Performance Index* (EPI, iii.9) represents intergenerational wealth transfers, as does *Government debt as % of GDP* (DBT, iii.9). *State ownership, control and involvement in business* (SOE, iii.9) is another Indicator here – the license to operate is self-issued rather than earned.



Visual 20: Index Area (iii) – Political Value, Pillars with Country Score and Global Rank



Economic Value Pillars, Index Area (iv)

The Economic Value Pillars measure Value Creation (\neq Extraction) in the economy's 3 markets: The products and services market, the capital market and the labor market.

Pillar iv.10, Producer Rent 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 entry* (BTE, iv.10) or *Foreign direct investment as % of GDP* (FDI, iv.10). Protectionist measures against entry enable Value transferring business models to be established, usually to the benefit of domestic producers and investors, inducing welfare losses well-documented in economics.



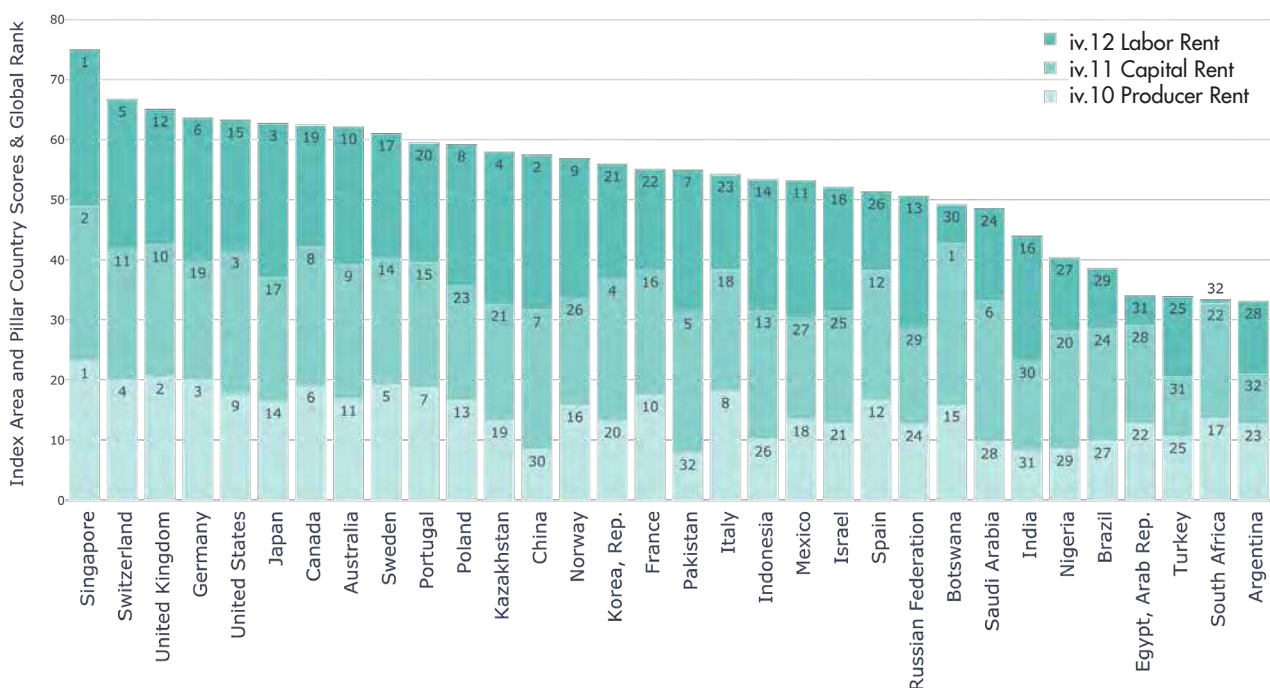
Pillar iv.11, Capital Rent focuses on rents extracted through direct or indirect financial market participation. Data from markets, including *Neutral interest rate* (DNI, iv.11), *M&A as % of GDP* (DMA, iv.11), *Gold demand as % of GDP* (GOL, iv.11) or *Currency appreciation* (CUA, iv.11), are assessed to determine Value Extraction. Controversial positions which require further research are taken – for example, considering rent deviations from theoretical free-market 'optimal values'. More complex forms of rent seeking in capital markets will also be considered in the future, like the difference between return on assets (ROA) and total factor productivity (TFP).



Pillar iv.12, Labor Rent seeks to determine all rents arising from interventions in or related to labor markets by participants on both supply and demand sides. For this purpose, the Pillar includes the *Unemployment rate* (UEM, iv.12) and other measures which often are the result of intra-labor rent seeking. Value Extraction phenomena in which rent seeking can a priori occur on either the employers or employees side are also measured, like the *Delta real wage vs labor productivity* (WLP, iv.12). More clear-cut Value Extraction models considered are the *Gender wage gap* (GWG, iv.12) and the planned *Cost of Thriving Index* (CTI, iv.12).

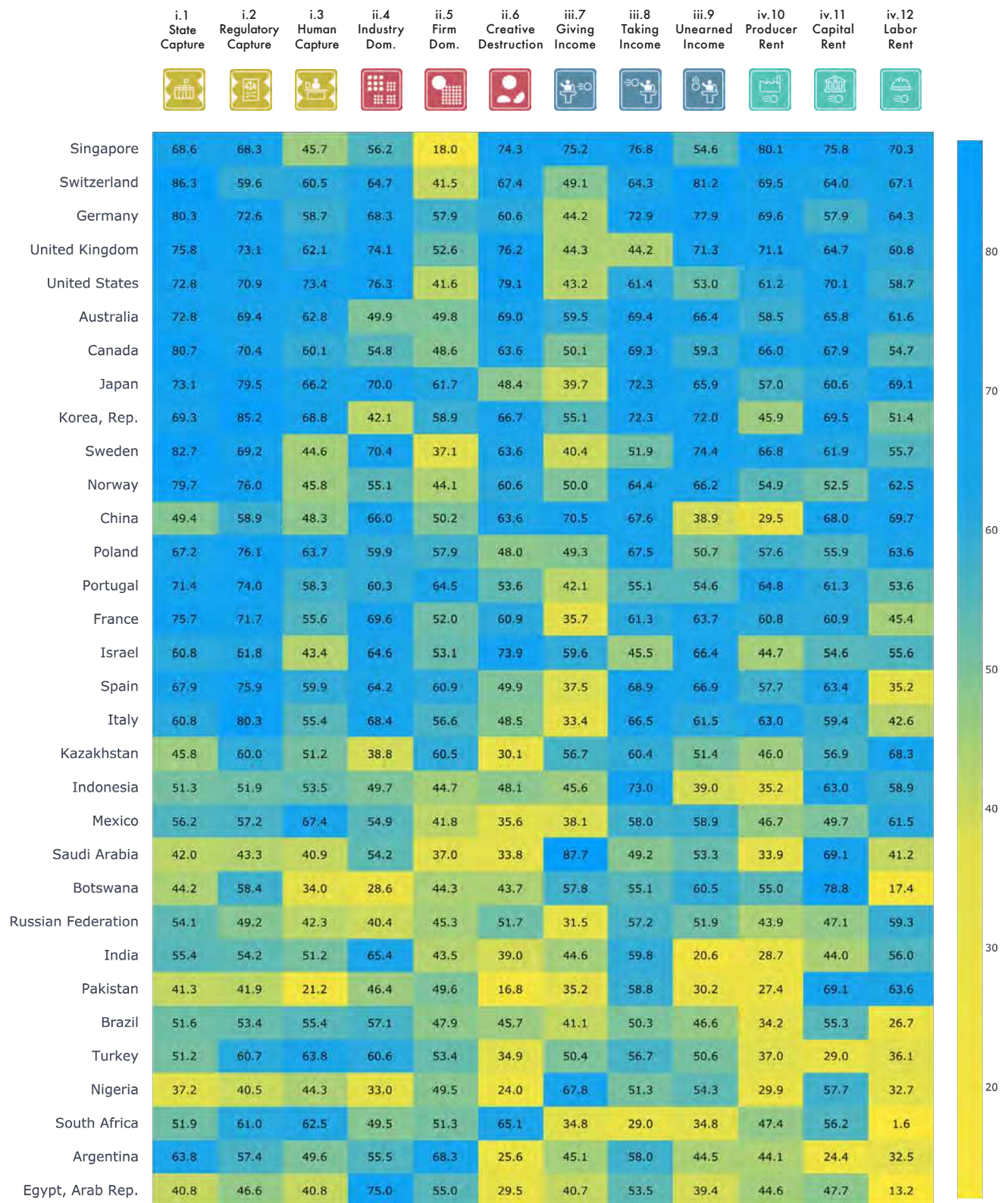


Visual 21: Index Area (iv) – Economic Value, Pillars with Country Score and Global Rank



EQx2020: By Pillar Country Scores

Visual22: Table of complete EQx Pillars by Country Scores, color-coded



EQx2020: By Pillar Global Rank

Visual 23: Table of complete EQx Pillars by Global Rank, color-coded

	i.1 State Capture	i.2 Regulatory Capture	i.3 Human Capture	ii.4 Industry Dom.	ii.5 Firm Dom.	ii.6 Creative Destruction	iii.7 Giving Income	iii.8 Taking Income	iii.9 Unearned Income	iv.10 Producer Rent	iv.11 Capital Rent	iv.12 Labor Rent
Singapore	13	15	24	18	32	3	2	1	16	1	2	1
Switzerland	1	20	10	11	29	6	14	13	1	4	11	5
Germany	4	9	13	8	8	14	19	3	2	3	19	6
United Kingdom	6	8	9	3	13	2	18	31	5	2	10	12
United States	10	11	1	1	28	1	20	14	20	9	3	15
Australia	9	13	7	24	17	5	6	6	8	11	9	10
Canada	3	12	11	22	20	10	11	7	14	6	8	19
Japan	8	3	4	5	3	19	25	4	10	14	17	3
Korea, Rep.	12	1	2	28	6	7	9	5	4	20	4	21
Sweden	2	14	25	4	30	11	24	26	3	5	14	17
Norway	5	5	23	20	25	13	12	12	9	16	26	9
China	26	21	22	9	16	9	3	9	29	30	7	2
Poland	15	4	6	16	7	21	13	10	23	13	23	8
Portugal	11	7	14	15	2	15	21	24	17	7	15	20
France	7	10	15	6	14	12	28	15	11	10	16	22
Israel	17	16	27	12	12	4	5	30	7	21	25	18
Spain	14	6	12	13	4	17	27	8	6	12	12	26
Italy	18	2	17	7	9	18	31	11	12	8	18	23
Kazakhstan	27	19	19	30	5	28	8	16	22	19	21	4
Indonesia	24	27	18	25	23	20	15	2	28	26	13	14
Mexico	19	24	3	21	27	25	26	19	15	18	27	11
Saudi Arabia	29	30	29	23	31	27	1	29	19	28	6	24
Botswana	28	22	31	32	24	23	7	23	13	15	1	30
Russian Federation	21	28	28	29	22	16	32	21	21	24	29	13
India	20	25	20	10	26	24	17	17	32	31	30	16
Pakistan	30	31	32	27	18	32	29	18	31	32	5	7
Brazil	23	26	16	17	21	22	22	28	25	27	24	29
Turkey	25	18	5	14	11	26	10	22	24	25	31	25
Nigeria	32	32	26	31	19	31	4	27	18	29	20	27
South Africa	22	17	8	26	15	8	30	32	30	17	22	32
Argentina	16	23	21	19	1	30	16	20	26	23	32	28
Egypt, Arab Rep.	31	29	30	2	10	29	23	25	27	22	28	31

4. EQx Country Analysis

4.1 Selected Country Flashcards

Switzerland

EQx2020 Global Rank: **2nd**



As a result of strong decentralization and direct democracy, rent seeking in Switzerland is limited, notwithstanding particular exceptions such as the 5% of annual budget expenditure allocated to agricultural sector subsidies (Federal Chancellery, 2019, p.9). While the business elites have amassed quite high levels of economic dominance (as evidenced by the Power Sub-Index), this has not as yet been converted into domestic rent seeking. The high Elite Quality outcome is attributable to the international orientation of Swiss firms' activities, and to their establishment of strong institutions.

United States

EQx2020 Global Rank: **5th**



The strong rank of the U.S. befits a country that has maintained robust domestic demand growth for so many decades, with curbed market and political power restraining rents on both Sub-Indices. The rise of populism and movements such as Occupy and the June 2020 protest movement and riots, however, demonstrate how sensitive democracies can be to low-quality on just a few Pillars. The U.S. ranks well almost across the board, but notable outliers – including high *Billionaires' wealth as a percent of GDP* (BIW, ii.5), *School life expectancy* (EDU, iii.7), the *Homicide rate* (HOM, iii.8) or *Health Care as % of GDP deviation from optimum* (DHC, iv.10) – should ring alarm bells regarding future stability.

By Freya Beamish

Israel

EQx2020 Global Rank: **16th**



Elites in Israel score well on elements tied to the leading IT sector; leading the Creative Destruction (ii.6) Indicators including *Entrepreneurship* (ENT, ii.6), *VC finance* (VCK, ii.6), and *R&D as % GDP* (RND, ii.6). The strong democratic tradition of Israel and its entrenched openness to globalization have created a very open and competitive society. However, long-term challenges remain for political stability, including political sclerosis, uneasy social relations between the majority and minorities, and dominance of billionaires in the economy.

By Prof. Shlomo Weber

Kazakhstan

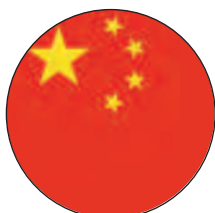
EQx2020 Global Rank: **19th**



The former Soviet Republic turns in a strong performance, and its Elite Quality is such that future growth can be expected (Visual 46). Blessed by oil, but being the most landlocked country on earth, Kazakhstan has managed to maintain trade and investment relationships with Russia, China, the West and the Arab world. The elite configuration under its first President, Nursultan Nazarbayev, was modelled after Singapore. Yet, with the recent energy crisis and the closing acts of the founding father era beginning, it is imperative that value creating elites start to take center stage.

China

EQx2020 Global Rank: **12th**



China is the top performer of all surveyed countries relative to its GDP, scoring higher than large E.U. economies like France or Spain. This extraordinary performance for a middle-income country also comes with inconsistency, as China scores between 3rd and 30th place across the EQx Pillars. China's state capitalism model is consistent with the high levels of Political Power recorded. In order to keep its high growth path over the longer-term, policymakers should want to contain any future Value Extraction potential that Power implies. Singapore shows how such a feat is realized.

by Freya Beamish

Russia

EQx2020 Global Rank: **23th**



Russian elites find themselves in a difficult position in their relations with political authorities, as excellent scores on *Entrepreneurship* (ENT, ii.6), *Barriers to start-ups* (BTS, ii.6), and *Political globalization* (PGL, i.1) stand in contrast to the realities of poor scores on *Administrative decentralization* (ADE, i.1), *Economic globalization* (EGL, iv.10), and *Barriers to FDI* (BTF, iv.10). Political risk from domestic realities and external geopolitical pressure have pushed elites closer to the government, leaving less opportunity for Value Creation and more for rent seeking in an environment wary of globalization.

by Prof. Shlomo Weber

Brazil

EQx2020 Global Rank: **27th**



Brazil has made progress since the 1985 restoration of its democracy, especially regaining and largely holding control of inflation. However, at present, faith needs to be restored in the government, with the country scoring below average across all Index Areas. In order to secure a robust long-term growth path, and catch up with its BRIC peers, elites should transition to Value Creation business models, while providing conditions conducive to business and entrepreneurship in the economy.

South Africa

EQx2020 Global Rank: **30nd**



South Africa seems entangled in a vicious circle of rent extraction rooted in the Apartheid era, with new elite agents and their business models having joined the fray. Reforms reduced wealth transfers and power concentration, helping the country reach the middle ranges of the Power Sub-Index. Yet rent seeking levels are among the world's highest, and thus most economic growth translates into inequalities. This is mainly driven by the revolving door between business and politics, leading to favorable rules for rent seeking, private contracts and even bribery. The low degrees of aggregate Economic Power, fostered by a strong startup ecosystem, is a bright spot.

4.2 Country Scorecards: Deep Dive Analysis

France: Able to increase Elite Quality – but no signs it will do so across the board

France’s relatively low EQx position, ranking 15th overall, is all the more disheartening when compared with Germany’s 3rd place – the lower quality levels of French elites relative to those of their Northern neighbors means that the gap between the 2 largest E.U. economies is destined to widen, unless bold reforms addressing elite business models are undertaken.

That France is in disarray, and has not regained its footings in the aftermath of 2008, is in many people’s minds, with the images of “les gilets jaunes” literally setting streets on fire. The protest movement which began in October 2018 might re-emerge with renewed force after the quarantine of Spring 2020. The movement started as a demonstration against a planned tax on diesel and petrol, intended to encourage the country to reach its green energy targets faster. However, quickly the movement began to encapsulate a number of additional grievances. Understanding these dynamics is not straightforward. For instance, the Elite Quality Index ranks France 25th in terms of *Tax revenue as % of GDP* (DTR, iii.8), but it is unclear if the protesters in their calls for a total tax system reform would reduce France’s systemic levels of Value Extraction, or on the contrary would lead to new forms of rent seeking. An additional source of discontent motivating the movement is the apparent lack of economic prospects in France. Whilst 2019 saw a 10-year low of unemployment, it still performs poorly in the Index, ranking 24th for *Unemployment rate* (UEM, iv.12), and 23rd for *Youth unemployment rate* (YUN, iv.12).

As part of efforts to defuse the protests and appease the public, Macron announced EUR 25bn of tax cuts and extra spending in order to increase the disposable income of households¹. These measures included EUR 5bn of cuts to income tax for low-

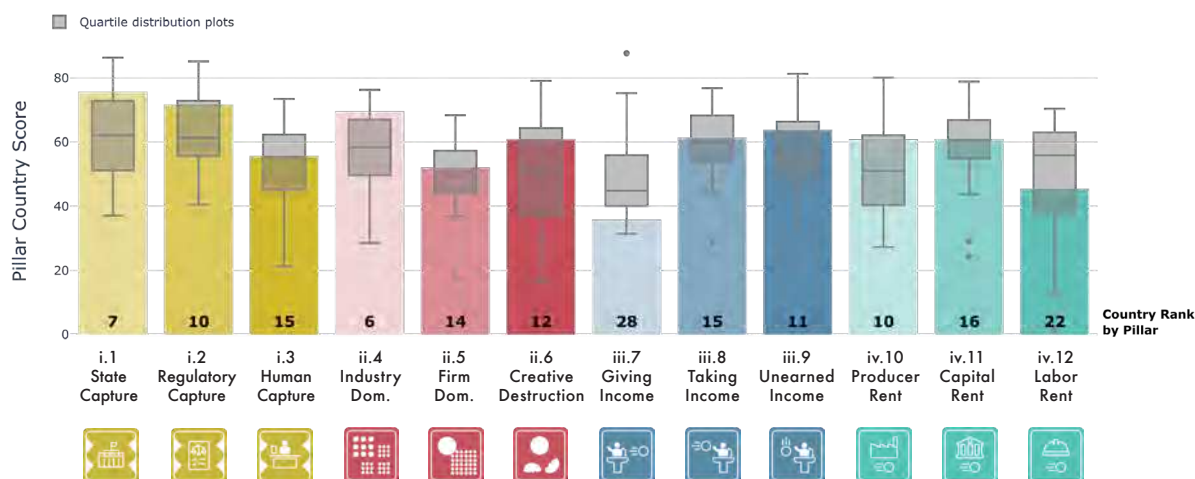
er and average earners, as well as an increase in pensions for the same group². Does this loosening of the purse strings mean that France’s vast public debt, which sees the country rank 27th for *Government debt as % of GDP* (DBT, iii.9), is extracting value from the future to solve the problems of the present? Even the IMF described levels as “too high for comfort”³.

In other areas France is exemplary, refraining from extracting rents from the future. Macron’s concession to protestors in cancelling the fuel tax has not compromised his promise to “make our planet great again”. Ranking at the top of the *Environmental Performance Index* (EPI, iii.9), France voted into law in July 2019 a climate and energy package that commits itself to becoming carbon neutral by 2050⁴.

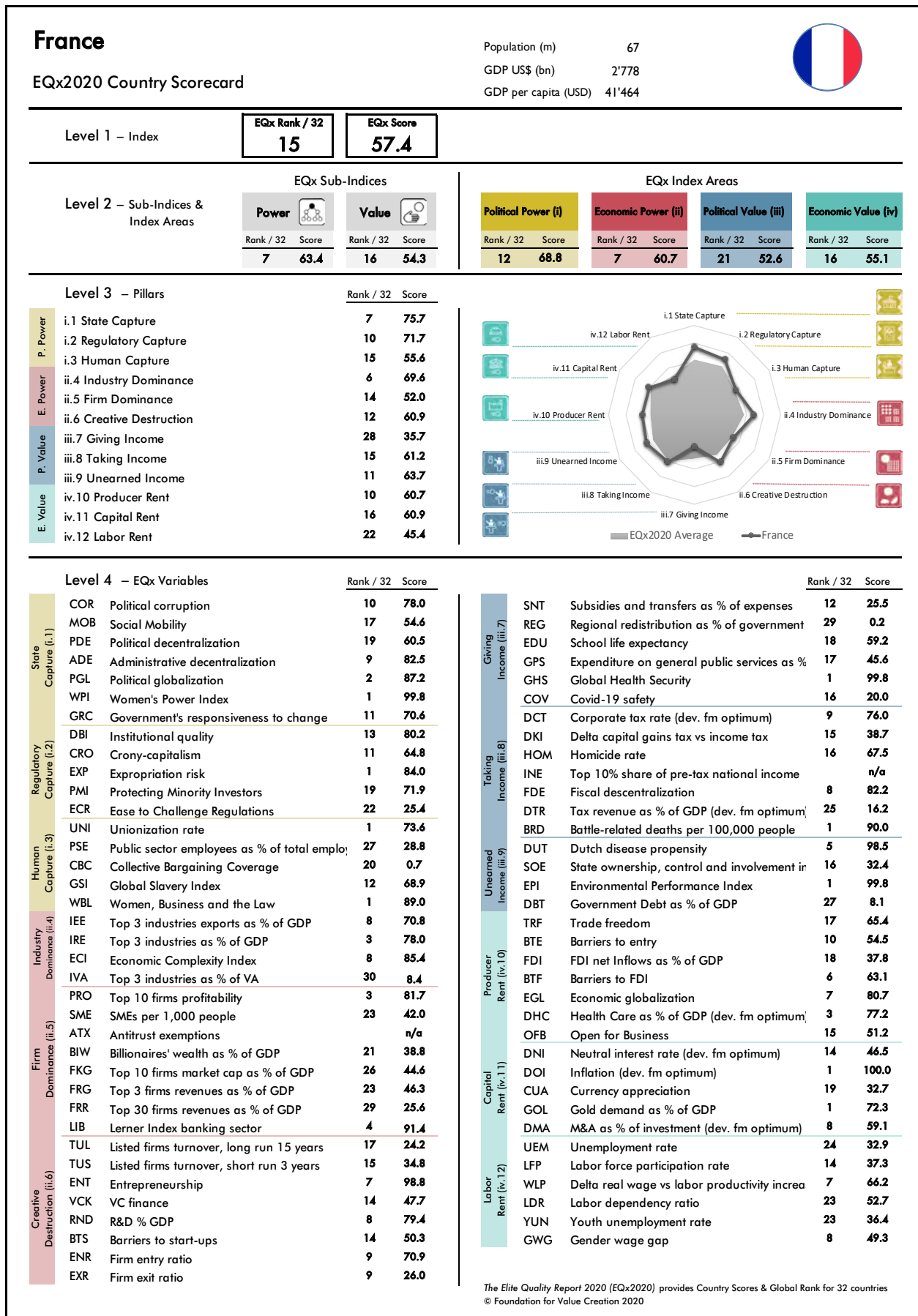
Innovative new policy responses with respect to women’s rights are an additional example of France’s elites rejecting rent extraction business models – benefitting at least half of the population no less! As the November 2019 femicide protests demonstrate, there remains much work to be done on the subject, but France’s elites are resolute, and used the country’s G-7 presidency to establish a new Women 7 engagement group. The aim of this group is to ensure commitments will be made to gender equality throughout the G7 process⁵. EQx reflects these steps forward, ranking France at the top in both the *Women’s Power Index* (WPI, i.1) and the *Women, Business and the Law* (WBL, i.3) Indicators. If France is capable of hampering value destruction at the all-important gender and environmental levels, why not in the other areas of our Index?

Diana van der Watt & Céline Diebold
University of St.Gallen

Visual 24: France performance overview by EQx Pillar vs overall distribution



Visual 25: France EQx Country Scorecard



Germany: On the podium, still below potential

Germany's 30th anniversary of the fall of Berlin Wall was celebrated last year. Reflecting back on this milestone, Germany's elites have managed to transform the country into the diverse and open economic powerhouse of Europe, with nearly a quarter of its population having an immigrant background⁶. On the other hand, there are challenges too. Asset inflation and stagnant wages might account for the discontent reflected in the rise of the far-right Alternative for Germany (AfD), which emerged top in the European Parliament election in Brandenburg and Saxony, both states in the former Communist East Germany. Moreover, the last 18 months saw the country flirt with a technical recession and confront the realization that, in terms of the 4th Industrial Revolution, a technology gap with the U.S. and China is widening. That Tesla was at one point more valuable than all German automotive companies combined is telling⁷. Voices in Germany Inc. have started to plead for protectionist measures – are elites afraid of competing with Chinese rivals?

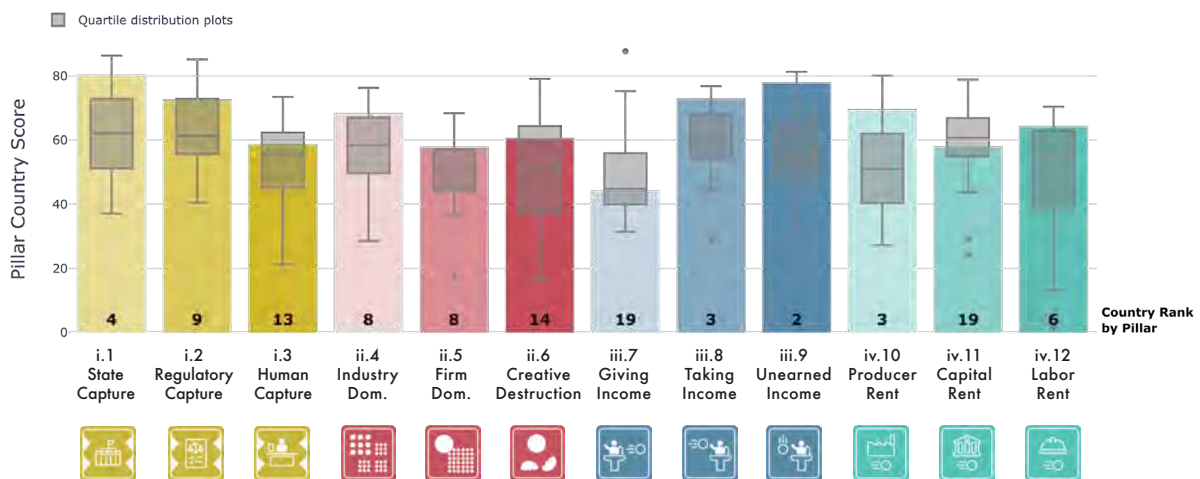
The EQx Index nevertheless acknowledges German inclusivity and modernity, and ranks it 3rd overall. The youth of today's Germany have good reason to feel optimistic about their future, demonstrated tangibly by ranking 3rd in *Youth unemployment* (YUN, iv.12) and 8th in *School life expectancy* (EDU, iii.7). One ranking sure to capture attention is the 2nd place score of Germany's *Covid-19 safety* (COV, iii.7) Indicator, earning international praise for agile and decisive policy responses⁸. In the Spring of 2020, Germany outshone its neighbors, with far fewer per capita deaths than most other European countries, owing to the country's earlier roll-out of extensive testing⁹. With fears of a second wave of the virus later in the year, any celebration is premature, but this is a very strong signal of Germany protecting the broad-based Value Creation potential of its citizens. The Covid-19 safety Indicator in next year's EQx will be telling.

There is not only a need for medical elites to flatten the epidemiological curve and prevent value destruction, but also for economic elites to address any recessionary curve and prevent rent seeking as the state invests in reconstruction. Germany's top score in the *Economic Complexity Index* (ECI, ii.4) indicates diversification throughout the economy, and together with earning the 6th spot in *R&D % of GDP* (RND, ii.6), we would hope that the German economy is well placed to tackle the challenge. Furthermore, the country's number 1 rank in *Expropriation risk* (EXP, i.2) underscores how Germany is an attractive place to do business. With the *Firm Dominance* (ii.5) Pillar at 7th, it seems unlikely that the German government, with its 4th place ranking in *State ownership, control and involvement in business* (SOE, iii.9), will subsidize national heroes at the cost of the majority.

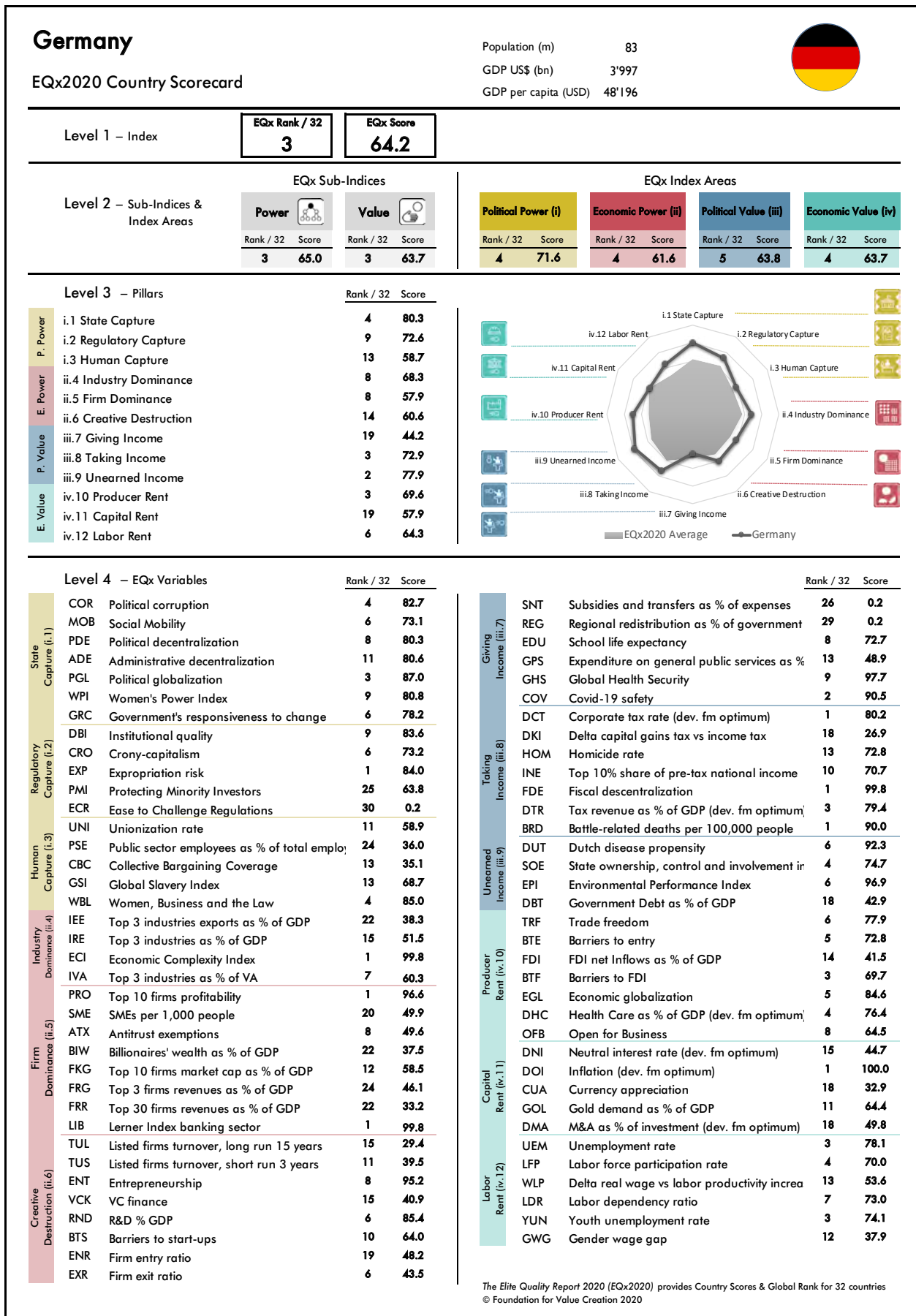
Another German icon is of course Angela Merkel. Her gradual retreat as Chancellor of Germany, scheduled for 2021, naturally draws attention to the legacy she leaves behind. For a country led by the world's most powerful woman¹⁰, Germany ranks a respectable yet disappointing 9th place in the *Women's Power Index* (WPI, i.1) Indicator and 12th place in the *Gender wage gap* (GWG, iv.12). Furthermore, despite the rhetoric about climate change¹¹, Germany lags behind European peers, United Kingdom and Spain, on the *Environmental Performance Index* (EPI, iii.9) Indicator. Another fundamental issue is found at the Creative Destruction Pillar (ii.6), ranking at 14th. Here, elites might pre-empt new value creators from getting real traction, whilst disruptive value remains in the purview of incumbents, notwithstanding the promise of Berlin as a start-up capital. Germany can and might, in other words, do much better.

Diana van der Watt & Camille Zeller
University of St.Gallen

Visual 26: Germany performance overview by EQx Pillar vs overall distribution



Visual 27: Germany EQx Country Scorecard



Italy: Change needed, not in sight

Italian elites have a middling score across Sub-Indices, but their Pillar performances vary greatly. Whilst Italy comes 2nd in the Regulatory Capture Pillar (i.2), it comes 2nd to last in Giving Income (iii.7), dragged down by government redistribution, with the North-South divide being a textbook case study of divergence in development. As one of the most affected countries in Europe by Covid-19, with levels of debt and unemployment looming large, the ability of its economy and citizens to recover depends on the government creating incentives for Value Creation by small, medium and family businesses, reducing debt and unemployment, and rooting out extractive business models.

In terms of political elite dynamics, August 2019 saw the end of the government formed in 2018 between the 5 Star Movement (M5S) and the League. The change was the result of the League's leader Salvini's dash for a snap election to capitalize from an expected vote redistribution away from M5S and to the League, which was forecasted by pollsters. However, the gamble backfired as the M5S persuaded the Democratic Party (PD) to join a coalition government, which is still in force today (mid-2020). Hence the new populist elite, victorious in the 2018 elections, crashed, due to one of its 2 main parties attempting to increase its share of the pie. That enabled a comeback of the older elite (represented by the PD), now leading a semi-populist government. These dynamics are well reflected in the EQx, and in the State of Elites framework (Visual 16). Italian elites are shown as relatively weak and disinterested in Value Creation, being all too ready to capture rents as soon as the opportunity arises.

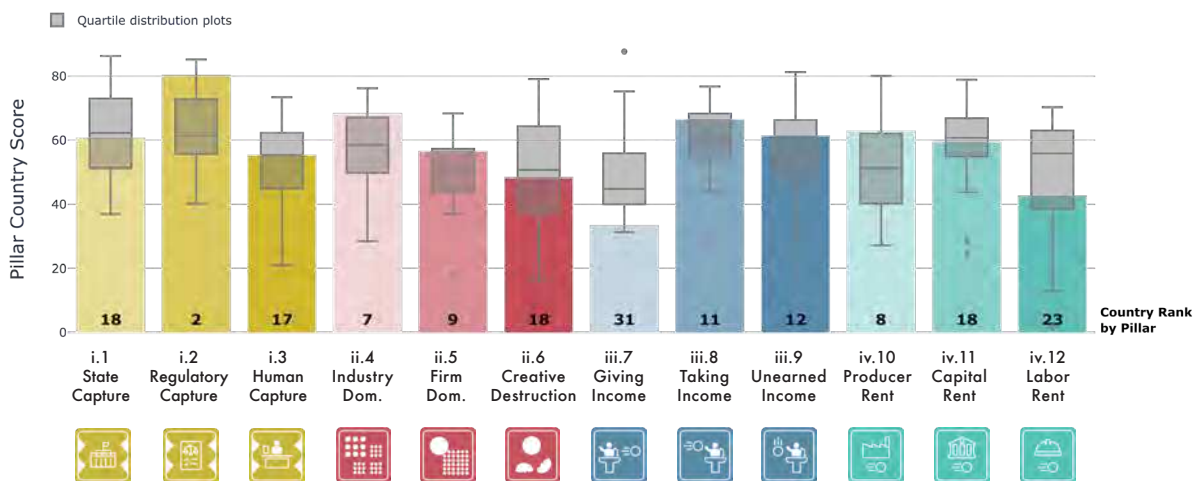
A Salvini-led centre-right coalition won the regional election in Umbria last November, a historically PD-dominated region. This attests well to *Political decentralization* (PDE, i.1), in which Italy ranks the highest in our Index. The political power of regions is strong, and indeed the League, in opposition to the central government, controls Italy's richest region, Lombardy. An important weakness of the system is the inability of the government to respond to change, which sees Italy ranking last at 32nd on this Indicator (GRC, i.1) despite the inclusion of much poorer countries in our EQx2020 sample. Its mediocre ranking at 19th in *Global Health Security* (GHS, iii.7) and in *Covid-19 safety* (COV, iii.7) is consistent with the exceptional collapse of the health system as a result of the pandemic. The dysfunctional *Administrative Decentralization* (ADE, i.1) in Italy is depicted by rank 22, which suggests why completely differently affected regions reacted the same way as Lombardy, resulting in several controversies.

Italy's inability to respond to change was unfortunately confirmed by the debacle experienced with the Covid-19 attack and the related economic crisis. Transformation in the transalpine country has proven elusive, making it likely that elite business models based on Value Extraction endure. Yet, a pain threshold was exceeded in 2020, so could this be the catalyst for the reform necessary to crush decades of inertia?

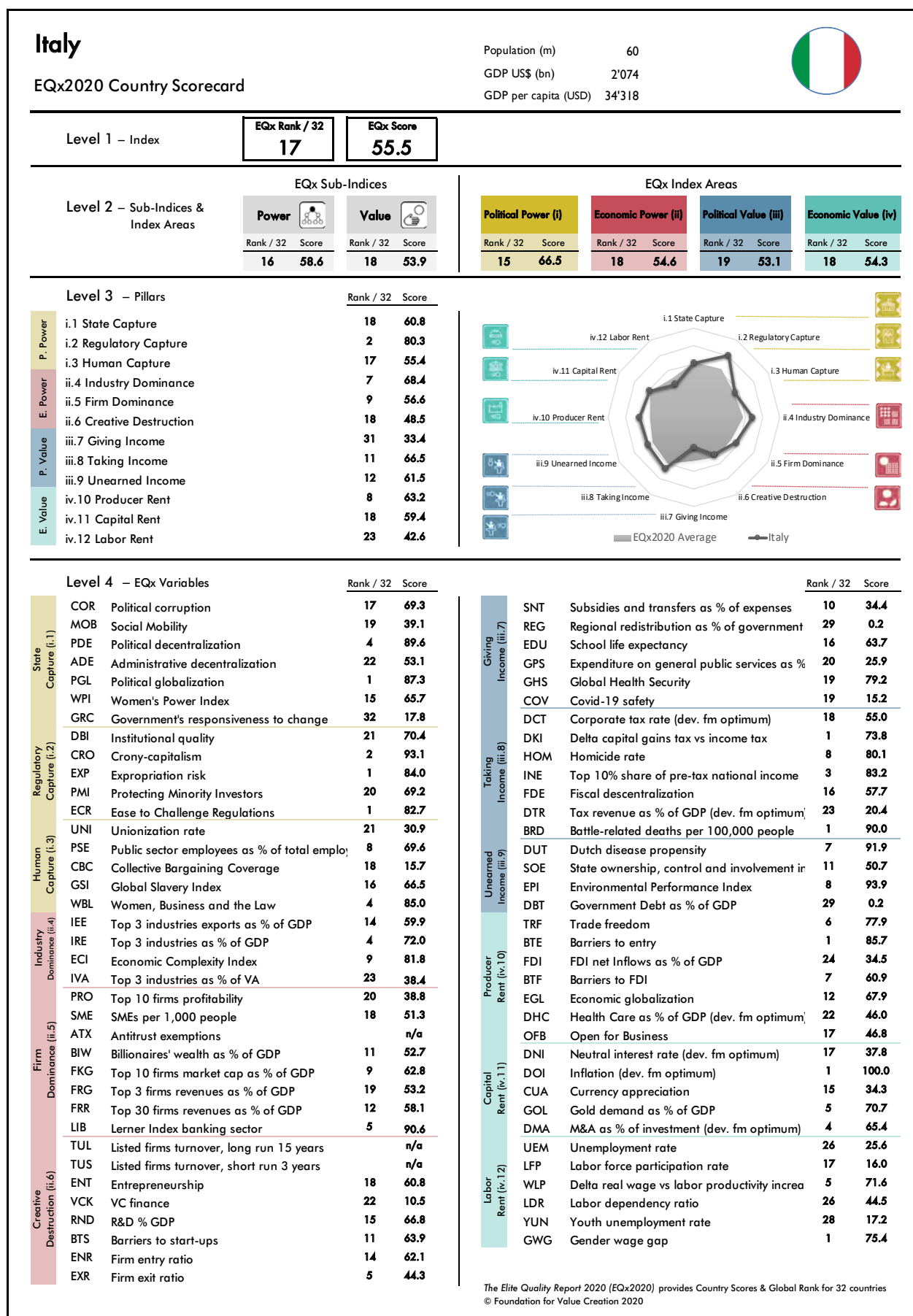
Prof. Guido Cozzi,
University of St.Gallen

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Visual 28: Italy performance overview by EQx Pillar vs overall distribution



Visual 29: Italy EQx Country Scorecard



Japan: Will elites finally shift gears in the Reiwa era of “beautiful harmony”?

In May 2019, the ascension of Emperor Naruhito to the throne of Japan saw the closing of the Heisei era, meaning “achieving peace”. Starting in 1989 – the same year the Nikkei reached its peak – the Heisei period turned out peaceful, maybe even excessively so at a time when the disruptions associated with the 4th Industrial Revolution created new value elsewhere. With peace and stability being one of Japan’s strengths, we aptly see it rank at the top in Indicators for external peace, measured by *Battle-related deaths* (BRD, iii.8), and internal peace, measured by the *Homicide rate* (HOM, iii.8). Overall Japan sits in 8th place, slightly ahead of its Asian peers.

Japan’s analysis requires deep contextual understanding. In some areas where Japan scores well, such as in the Firm Dominance Pillar (ii.5), there might be factors not fully captured, like interlocking shareholdings. For instance, and as mentioned in the North East Asia special regional analysis (Section 4.4), the power of Japan Inc. seems reflected in the operative part of the Abenomics program. This effectively depreciated the yen, and in turn increased the profits of Japanese companies, but not their competitiveness (as seen in export market shares). This could be construed as an indirect subsidy or a form of corporate rent seeking at the cost of the general public.

40 Also of note, is that Japan started massive Value Extraction at the end of the 1990’s with low interest rate (and ZIRP) policies. Yet today, and in light of similar policies by central banks in advanced economies (especially by the ECB), such Value Extraction does not stand out from its developed nation peers in the Capital Rent Pillar (iv.11).

The Giving Income Pillar (iii.7) seems to reflect, correctly, Japanese politicians’ preference toward regional income re-distribution. On the other hand, the Taking Income Pillar (iii.8) ranks Japan 2nd in

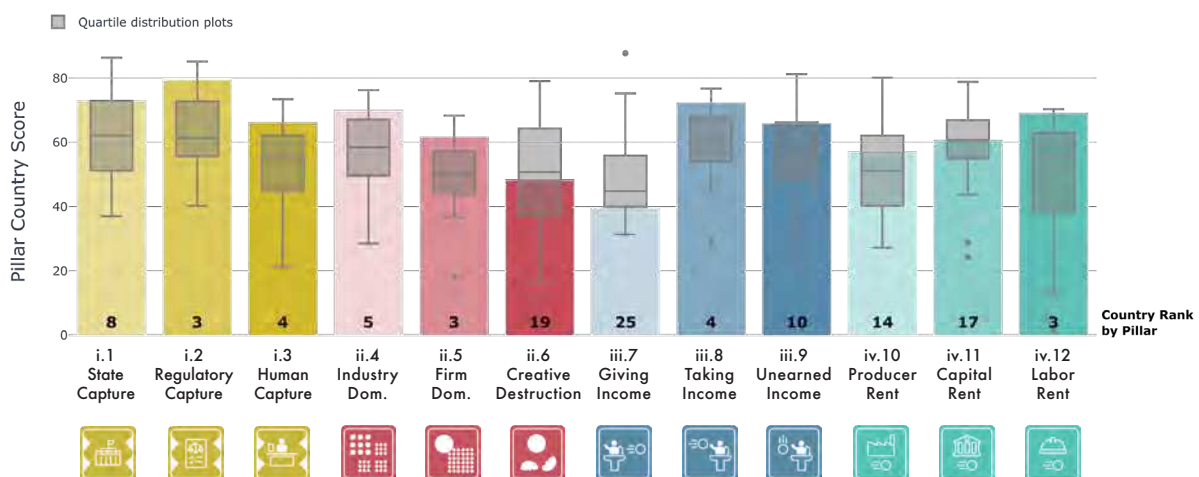
Tax revenue as a % of GDP (DTR, iii.8). While commendable, it points to an imbalance between government revenue and outlays. Hence, ranking 29th on *Government debt as a % of GDP* (DBT, iii.9), Japan is burdened with the industrial world’s largest public debt, sitting in 2019 at double its USD 5trn economy¹². Value is extracted from the patient Japanese population and from future generations – an extreme view would see low fertility rates as a protest of sorts against rent seeking by elites.

Japan could grow by further opening up. A lot, for instance, would be gained by improving on *Trade freedom* (TRF, iv.10), where it currently ranks 18th, and on *Economic globalization* (EGL, iv.10) where it ranks 15th. Japan already showed commendable leadership with the ambitious CPTPP (Comprehensive and Progressive Agreement for Trans-Pacific Partnership) trade deal, which over the long run might compensate for lost corporate earnings hit by the trade conflict between the U.S. and China, its 2 most important export markets.

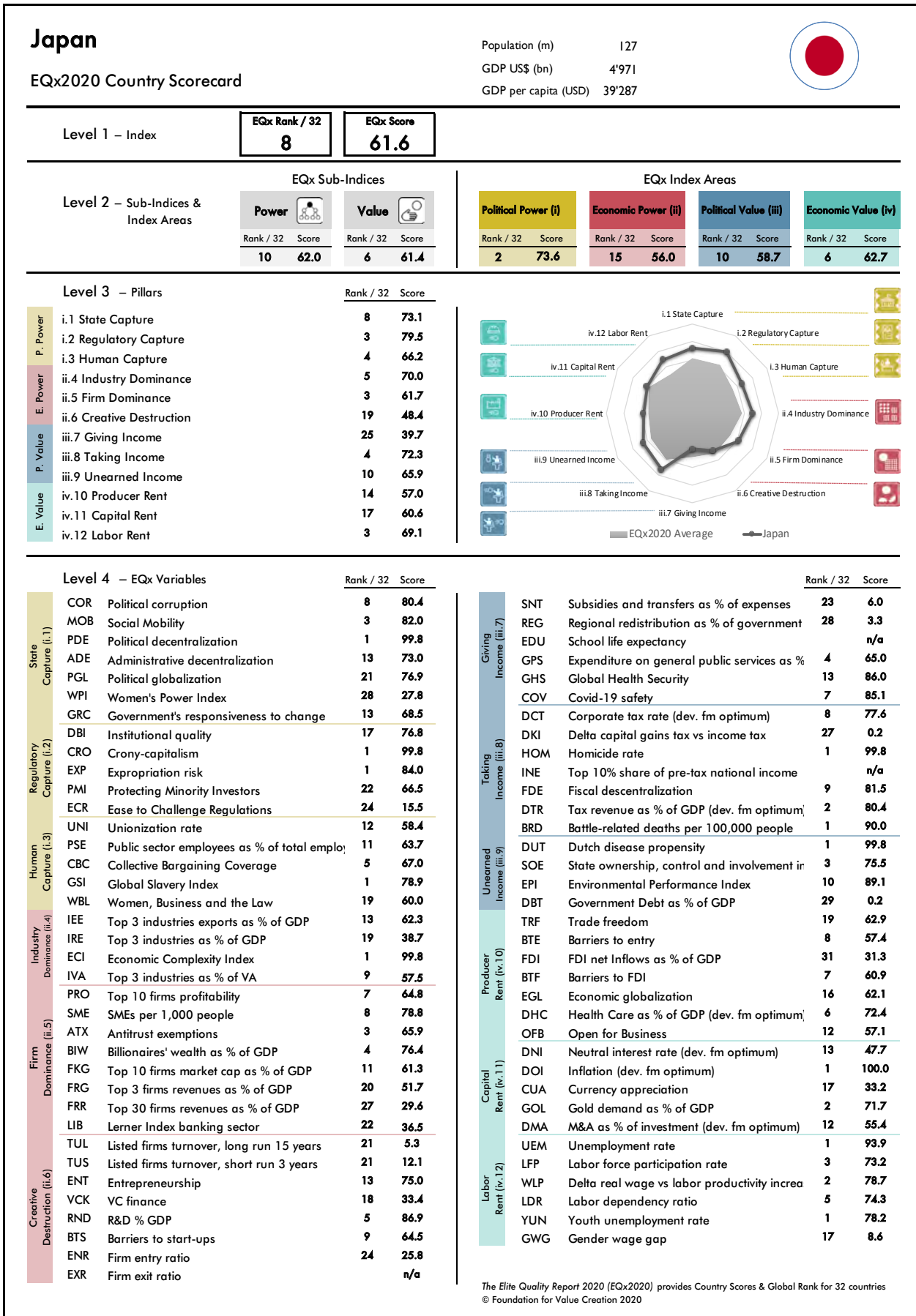
Raising productivity is a priority for Japan’s elites, and the labor market is hence an important space that brings together demographics and growth. The Labor Rent Pillar (iv.12) sees Japan performing very well including a low *Unemployment rate* (UEM, iv.12). However, labor turnover is low, and upward mobility of non-regular workers is limited, meaning that the extent of subtle but persistent distortions might be underestimated. Moreover, demographic trends threaten to create serious labor shortages in the future, with the number of workers set to deplete by almost 8 million in 2030¹³. While Japan scores rather low on all 3 EQx gender Indicators, if the Prime Minister’s “Abenomics is womenomics” is truly implemented and Japan breaks with tradition here, the country will witness a growth and productivity boost in the coming years.

Anonymous authors

Visual 30: Japan performance overview by EQx Pillar vs overall distribution



Visual31: Japan EQx Country Scorecard



Norway: Traversing peaks and valleys

The Norwegian numbers on the 72 Indicators of the EQx are, like the country itself, a profile of peaks and valleys. A recognizable picture emerges of the Norwegian economy at present, excelling in egalitarian taxation (rank 1 in indicator *Delta capital gains vs income tax* (DKI, iii.8)) and labor participation (rank 5 in the *Labor force participation rate* (LFP, iv.12)), and a society relatively free of violence and social unrest (rank 4 in *Homicide rate* (HOM, iii.8)) is depicted. Conversely, Norway scores at the bottom on *FDI net Inflows as % of GDP* (FDI, iv.10) with another low score on *Dutch disease propensity* (DUT, iii.9). These are unique national characteristics of the Norwegian economy and political system.

Norway's profile is partially explainable through the country's historical dependence on natural resources. Other characteristics are linked to a political governance system loosely referred to as the "Nordic Model". The mixture of characteristics poses some uncomfortable questions to the country's elites about future strategic choices.

Norway has historically been dependent on dominant industries, strongly tied to its natural resources: A once world-dominant merchant fleet was replaced in turns by a hydro-powered electrochemical industry, paper mills, petroleum and offshore technologies. This is mirrored by rank 30 in Pillar 'Firm Dominance' (ii.5). One may call this an "all-in type" of economy where the labor force is consumed by dominant industries, raising labor costs and rendering the country vulnerable to international market disruptions. A few large companies dominate and indicate the identity and characteristics of elites.

The petroleum economy sees labor costs at levels that make Norway an unlikely recipient of foreign investments, along with other signs of Dutch disease. Reflected in EQx too, is the tradi-

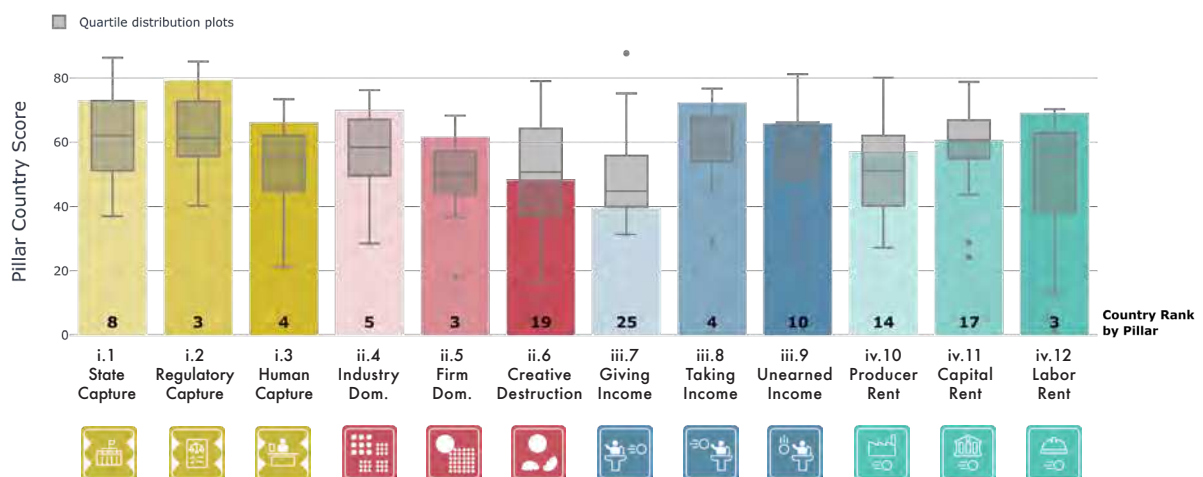
tional skepticism against foreign acquisition of natural resources – which kept Norway out of the EU – to protect energy, fisheries and fish farming. Additionally, the world's biggest sovereign fund has made Norway a net exporter of capital, with little need for FDI, potentially preempting some of the Dutch disease's worst effects.

This situation is new, as Norway traditionally lacked private capital concentrations and economic transitions were facilitated by the country's political system. The "Nordic Model" is basically social-democratic in its outlook, consisting of a high acceptance of government regulation, publicly financed healthcare and education and a high level of co-operation between employers and labor unions. As the EQx data shows, this model comes with high-quality institutions (rank 5 in *Institutional quality* (DBI, i.2)), income equality (rank 1 in *Top 10% share of pre-tax national income* (INE, iii.9)), and high levels of work force participation (rank 5 in *Labor force participation rate* (LFP, iv.12)). However, it also tends to come with an inflated public sector (rank 26 in *Tax revenue as % of GDP* (DTR, iii.8)).

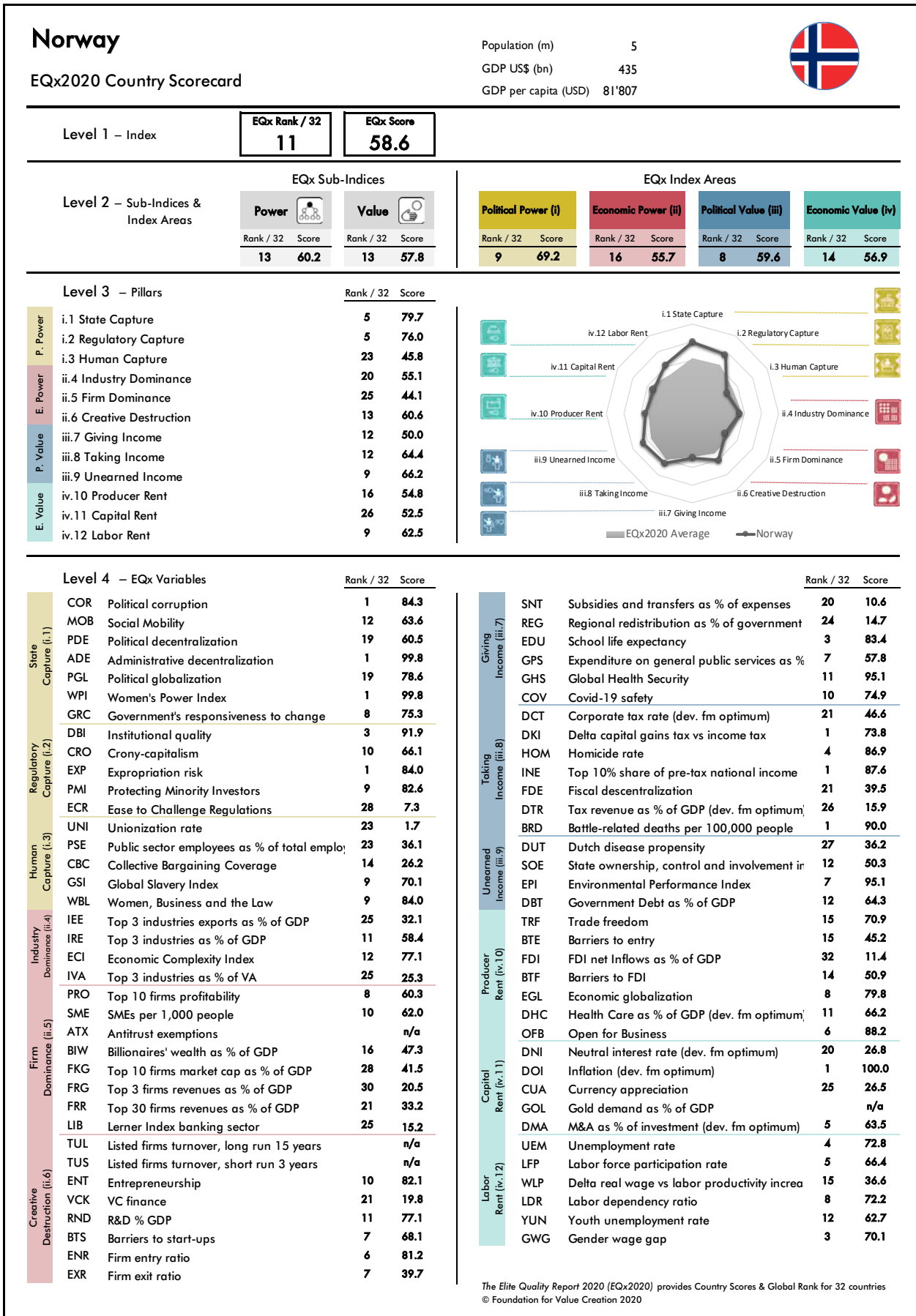
At present, the Nordic Model seems to be an advantage in weathering the Covid-19 pandemic. In the long run, however, ranking at the extreme ends on some indicators may indicate some political rigidity in policy choices. In a more diversified economy, Norway may need higher levels of FDI (and venture capital investment), openness to entrepreneurship and a transparent business environment. At the same time political promises to the population must be kept. While until now Norway has been able to traverse peaks and valleys, a more digitized and technology-based world poses challenges to the predominant business models of Norway.

Prof. Jan Ketil Arnulf, Prof. Janicke Rasmussen
& Prof. Dag Morten Dalen
BI Norwegian Business School

Visual 32: Norway performance overview by EQx Pillar vs overall distribution



Visual33: Norway EQx Country Scorecard



Portugal: Strong Southern European performance, and plenty of work ahead

After joining the European Community in 1986, Portugal experienced a period of real convergence with its European partners until 2000. Since then, with the single currency, its economic performance deteriorated to the point that, after the 2008-10 crisis, it had to call upon external aid to meet its commitments. Today Portugal grows below the E.U. average, it is not competitive, and it is one of the most indebted member states, heavily dependent on the external sector - tourism in particular.

Despite this economic context, Portuguese elites have a middling score (rank 14th) in the group of the sampled countries, ranking better than others in southern Europe such as Italy (rank 17th) or Spain (rank 18th) and even better than France (rank 15th). This could be a catalyst for a new phase of real convergence with the E.U., already initiated before the current pandemic crisis, but which has caused a major setback in such endeavour.

However, this overall score hides great disparities in the four Index Areas, revealing a better performance in terms of Value Creation by the economic elites (iv, rank 10th) and worse in terms of Political Value (iii, rank 25th).

Emphasis should be placed on the good performance in terms of *Trade freedom* (TRF, iv.10, rank 6th), *Barriers to entry* (BTE, iv.10, rank 7th), foreign direct investment attraction (FDI and BTF, iv.10, rank 7th and 1st, respectively) and *Economic globalization* (EGL, iv, rank 6th). These results are in line with the fact that Portugal is a small economy open to the exterior, that promoted a series of privatizations (SOE, iii.9, rank 9th) and a "golden visa" programme as a form of external financing. The country has also been able to attract several technological investments due to the competitive value of its qualified labour.

Despite the good performance in terms of Economic Value, there are still great opportunities for improvement such as unemployment (EMU, iv.12, rank 22nd), and in particular *Youth unemployment* (YUN, iv.12, rank 20th), and the health care services (DHC, iv.10, rank 20th). The covid-19 pandemic crisis has made the need to correct the weaknesses of the health system all the more evident.

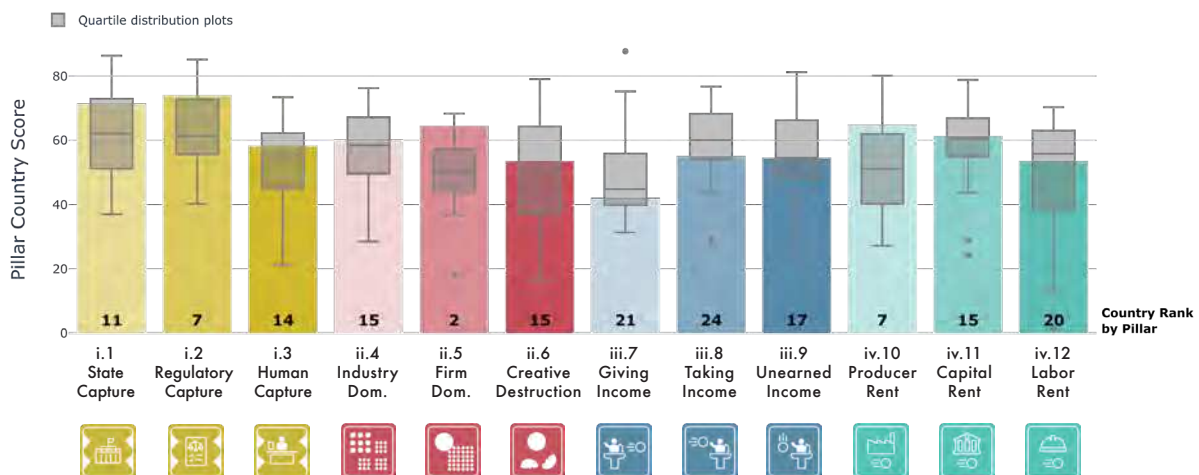
The worse performance in terms of Political Value stems from significant regional disparities (REG, iii.7, rank 25th), the low quality of public services (GPS, iii.7, rank 19th), the huge corporate tax burden (DCT, iii.7, rank 25th), all which contribute to the weak competitiveness of the Portuguese economy and low level of investment along with the high and extractive general tax burden (DTR, iii.7, rank 21st). In this respect, the mediocre nature of public expenditure (DBT, iii.9, rank 29th), which represents a strong extraction of value from future taxpayers' generations, should also be highlighted.

As for political and the economic power, Portugal outperforms the average of surveyed countries. Small countries are often at risk to be at the mercy of powerful elites, yet Portugal boasts high competition due to the good firm entry and exit dynamics in several markets. In this context, the number of large companies is small, contributing to a low concentration of the economic power.

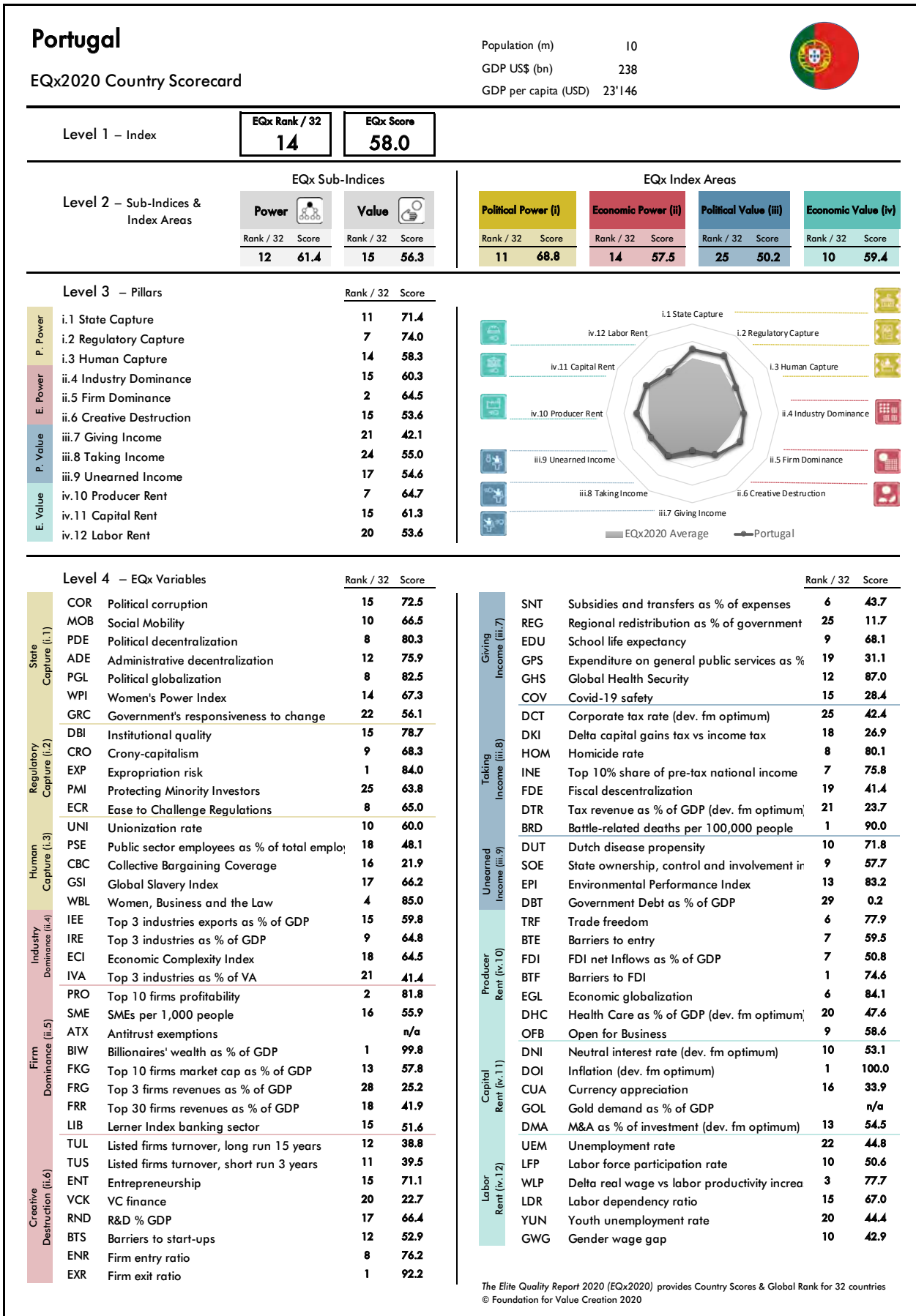
The results at the level of Political Power derive mainly from E.U. membership (*Political globalization* (PGL, i.1), rank 8th) and from the effective institutional arrangements of municipalism, regional coordination commissions and its autonomous regions (*Political decentralization* (PDE, i.1), rank 8th). Additionally, the imposition of quotas for gender diversity in public offices, in the state-owned business sector and in public companies contributes to the good performance in this area (WBL, i.3, rank 4th).

Prof. Cláudia Ribeiro & Prof. Óscar Afonso
School of Economics and Management,
University of Porto

Visual 34: Portugal performance overview by EQx Pillar vs overall distribution



Visual35: Portugal EQx Country Scorecard



Russia: To unleash true potential

For over 70 years, the Soviet Union was a non-market economy. Over the 30 years of Russia's new history, the country has made significant progress on many fronts, including the legalization of private property, large-scale privatization, restructuring of the main natural monopolies, liberalization of capital controls, the emergence and strengthening of antitrust policy, and almost complete repayment of public debt. However, since the mid 2000s the role of the state in the economy and the share of government-controlled firms has increased, and is now reaching problematic levels. Issues with the protection of property rights and rule of law persist and manifest themselves in the lack of judicial independence, lack of equality before the law, and unfair competition practices, ultimately leading to the exploitation of non-elites. These themes see the overall score for Russia below the sample mean in rank 23. It is higher than other BRICS countries, except China (rank 12th), and it ranks lower than the only other post-soviet country in the ranking – Kazakhstan (ranked 19th).

Russia exhibits significant variation across different dimensions. On 11 out of 72 Indicators Russia's rank is in the top 10 of countries in the sample, but on 38 of Indicators it is in the bottom half of the list and on 16 Indicators it is in the bottom fifth of the countries. It scores higher on economic dimensions (rank 21st for Economic Power, and 23rd for Economic Value) than on political dimensions (rank 27th for both Political Power and Political Value).

The highest scores come from dimensions that reflect sound macroeconomic policies, such as *Inflation* (DOI, iv.11, rank 1st) and *Government Debt as % of GDP* (DBT, iii.9, rank 2nd), as well as some aspects of tax policies (*Delta capital gains tax vs income tax*, DKI, iii.8, rank 1st) and a competitive banking sector (*Lerner Index banking sector*, LIB, ii.5, rank 1st). Low public debt is especially important, as it reflects restraint of elites in rent seeking by placing an unfair financial burden on future generations. Higher than average scores in the category of *Institutional Quality* (DBI,

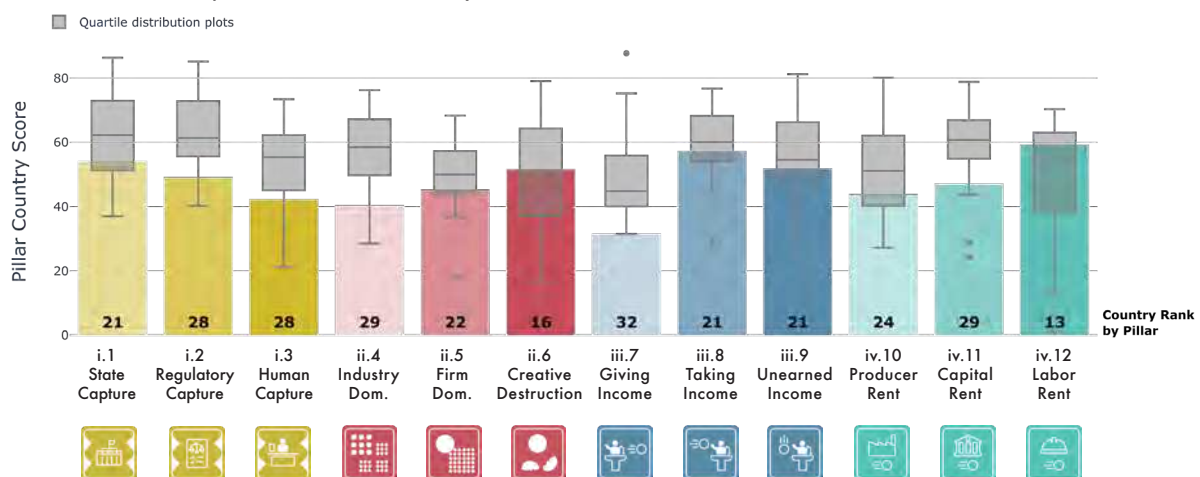
i.2, ranked 12th) reflect progress on the measure included in World Bank's Doing Business rating, where Russia has jumped from the 130-140 division to the 30-40 division in 7 years.

The lowest scores come from Indicators reflecting Regulatory Capture (i.2). Persistent problems with the protection of property rights in Russia are reflected in *Protecting minority investors* (PMI, i.2, ranked 29th) and *Expropriation risk* (EXP, i.2, ranked 28th). Low ranking in terms of *Crony-capitalism* (CRO, i.2, ranked 29th) reflects the fact that a large share of Russian billionaires come from industries that are prone to monopolization, or rely on close connections with the government. Relatedly, problems with firm dominance (ii.5) caused by high concentration of wealth are reflected in low ranking for such measures as *Billionaires' wealth as % of GDP* (BIW, ii.5, ranked 29th) and *Top 3 firms revenues as % of GDP* (FRG, ii.5, ranked 29th). The *Dutch disease propensity* (DUT, iii.9, ranked 30th) and political corruption are also widely known problems. Less attention is usually paid to problems with gender inequality reflected in low scores for *Women's Power Index* (WPI, i.1, ranked 29th) that reflects the share of women in top echelons of power.

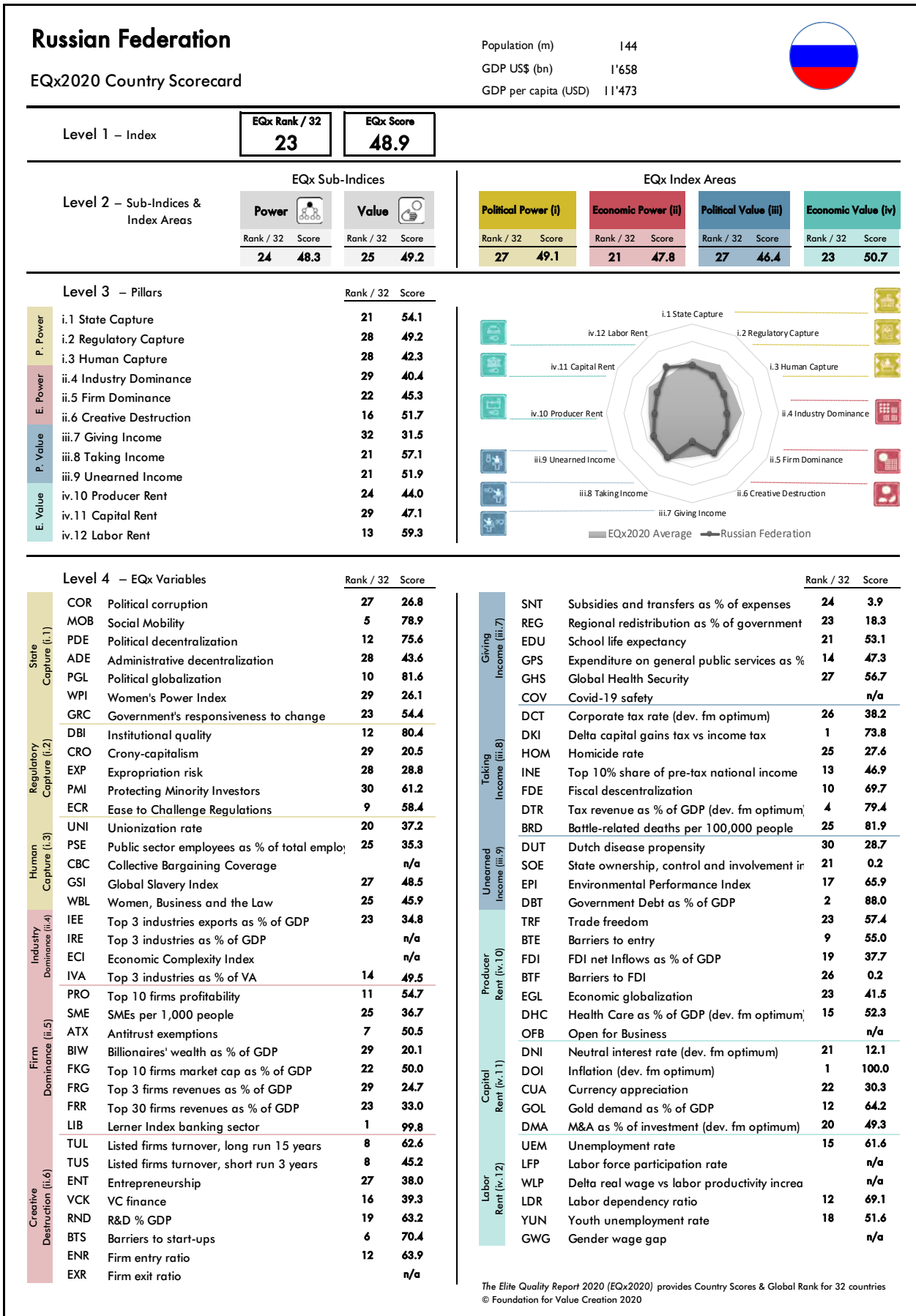
One of the main problems in Russia, that is both a cause and a consequence of limited Elite Quality, is pervasive lack of trust: the government does not trust citizens and businesses; citizens and businesses do not trust each other and together they do not trust the state. This increases the costs of doing business, pushes private business into the arms of the state as a means of protection and as a means of rent extraction, reduces the effectiveness of institutions, replacing them with personalistic rule, and ultimately squeezes capital and brains out of the country. Unleashing the true potential of Russia will not be possible without addressing this widespread issue.

Prof. Ruben Enikolopov & Andrei Sharonov,
Respectively Rector New Economic School &
President SKOLKOVO Moscow School of Management

Visual 36: Russian Federation performance overview by EQx Pillar vs overall distribution



Visual37: Russian Federation EQx Country Scorecard



Turkey: Rentier models bereft of power, or reactivating convergence with Europe?

Turkish elites have a long history of domestic power struggles, especially after the long-dominating “White Turks” military elite was challenged and then replaced by the popular Erdogan-led A.K.P. in the early 2000s. The political elites’ tussle for power wrecked their E.U. entry hopes about a decade ago, leaving Erdogan to impose a despotic regime and to resort to the help of the Gülen’s minoritarian religious elite, which then turned inimical in the failed coup of 2016 and ensuing repression. A part of the business elite maintained their privileges and rents associated with traditional models. Yet these are not secure and can be taken away from them at any time, which is consistent with the high *Expropriation risk* (EXP, i.2) Indicator. In the State of Elites framework, we see them in the area where ‘striving’ elites meet ‘rentier’ elites (Visual 16).

Business elites will, however, not be challenged by new innovative and emerging players with more efficient business models. The Creative Destruction Pillar (ii.6) is at rank 26 – very low. SMEs are not encouraged (SME, ii.5, rank 27) despite Turkey’s resilient entrepreneurial traditions.

The state itself might distract business elites away from market-oriented productive activities, as it is a source of rents. The State Capture Pillar (i.1) is problematic (rank 25), plagued by vast corruption (COR, i.1, rank 25), low administrative decentralization (ADE, i.1, rank 25), and minimal women power (WPI, i.1, rank 25), which deprives the economy of important resources.

High unemployment (UEM, iv.12, rank 27) co-exists with the lowest collective bargaining coverage rate and the sec-

ond-lowest labour unionization rate in our sample. The labour market is among the most severely affected by slavery (GSI, i.3, rank 30) and by labour dependency (LDR, iv.12, rank 28). Moreover, wars are terrifying human capital Value Extraction models and our proxy for external peace, *Battle-related deaths* (BRD, iii.8), shows Turkey among the worst performers in the sample (rank 29). Overall Turkey comes in a very commendable 5th in the Human Capture Pillar (i.3), and while the *Health Care as % of GDP* (DHC, iv.10) is low, fortunately it fares far better in *Covid-19 safety* (COV, iii.7, rank 12).

The Capital Rent Pillar (iv.11) is another story where Turkey scores 2nd to last, dragged down by the massive lira depreciation and debt crisis of 2018, which weakened the popular support for the new A.F.K. elite. This could generate further instability, or hopefully more pluralism.

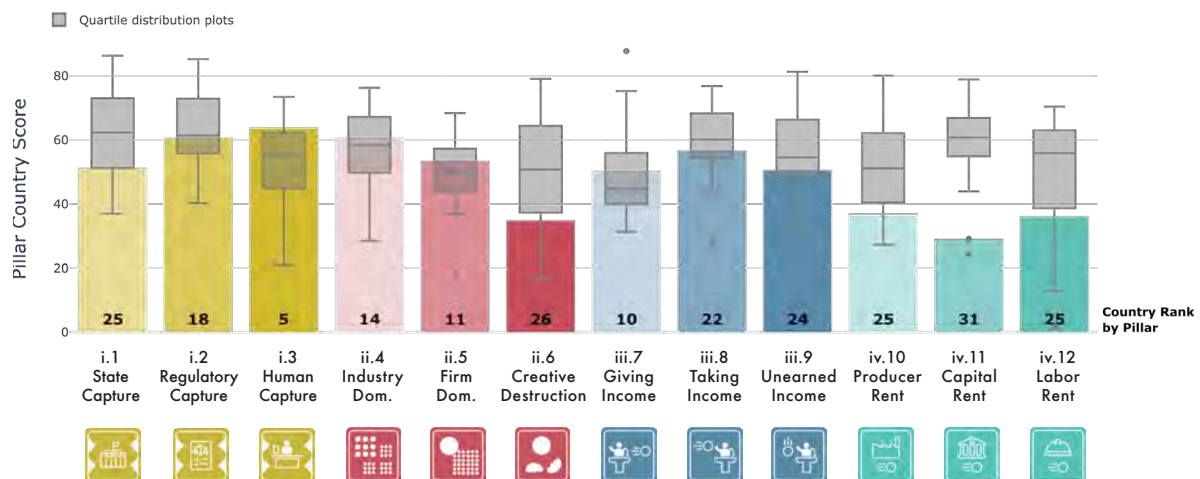
The Chinese development model might have been attractive to Turkey, visible in rapid modernization projects like the double-deck Eurasia Tunnel. But the transplant has only been partial and left out some of the Value Creation aspects of East Asian state capitalism. Looking forward, should growth continue to rely on projects like the Kanal Istanbul connecting the Black Sea to the Marmara Sea with its environmental risks?

Turkey’s potential should not be underestimated: The country could try to capitalize on its education (EDU, iii.7, rank 4) to build up a better educated, more innovative and inclusive elite, able to get closer to the European trade partners and hopefully reactivate a convergence process.

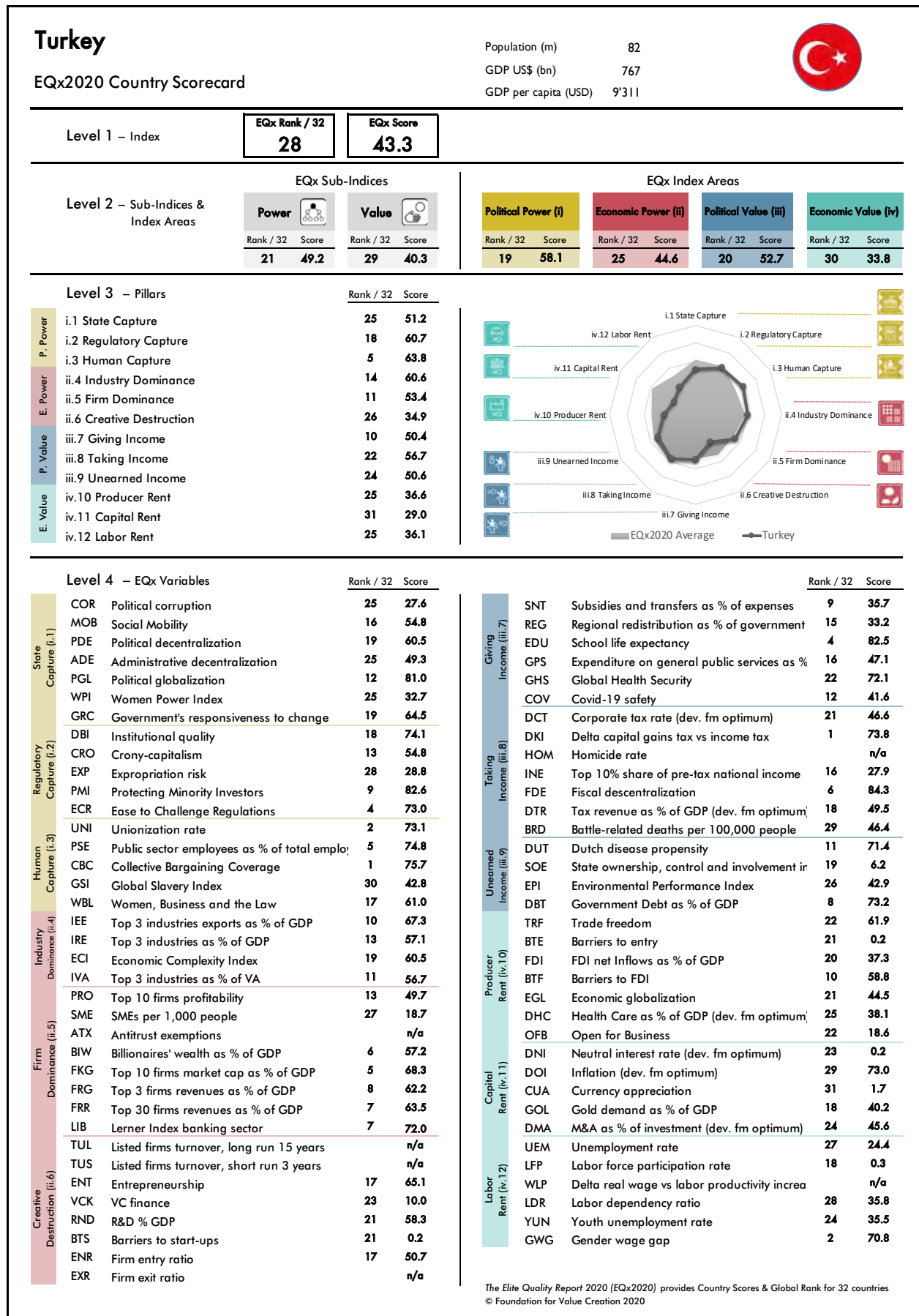
Prof. Guido Cozzi,
University of St.Gallen

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Visual 38: Turkey performance overview by EQx Pillar vs overall distribution



Visual39: Turkey EQx Country Scorecard



United States: Low elite power for a great future, and surprisingly high Value Extraction

U.S. elites are value creators second to none: consider GAFA, Wall Street or the energy industry, innovative powers and competitiveness have made them global leaders. Many across the world are watching the rising capabilities of Chinese elites with anticipation and trepidation, with Value Creation similar to their American counterparts in key areas like artificial intelligence, e-commerce or new materials. However, looking forward, the U.S. seems to have a decisive advantage over all other countries in the Index: it ranks 1st in the Power Sub-Index, an indication of future Value Creation potential.

At the same time, it seems paradoxical that U.S. elites place only 8th in the second Sub-Index: Value. This is certainly a high score, but not the level of excellence found with the Power Sub-Index. One might wonder how American elites manage, despite having so little power (compared to elites in other political economies), to succeed at rent seeking?

Perhaps an indication of how value is extracted – certainly not yet reflected in the 5th rank seen in *Trade freedom* (TRF, iv.10) – is President Trump’s trade war not only against China, but at one time even against European and North American allies. Steel or Aluminum tariffs are a license to engage in Value Extraction activities - from other Americans no less! U.S. citizens are now forced to pay higher input prices when manufacturing cars or beer kegs (or when consuming these). Maybe the discontent reflected in the election of President Trump, the subsequent scandals, and the George Floyd protests and riots, all relate to the U.S. 13th place for *Political corruption* (COR, i.1), or to the appalling 28th rank in *Government debt as % of GDP* (DBT, iii.9), which make social relief and spending on health care highly unlikely.

At a domestic level, the American people seem increasingly concerned about inequality. While the index places the U.S. 24th for *Billionaire’s wealth as % of GDP* (BIW, ii.5), itself a measure of dominance and not of Value Extraction, it could still serve as proof of the worrisome rising narrative of the death of the American dream¹⁴. Alarming in this regard is for example the U.S.’s 21st place in *Social mobility* (MOB, i.1), meaning that many value creators don’t have the opportunity to realize their potential.

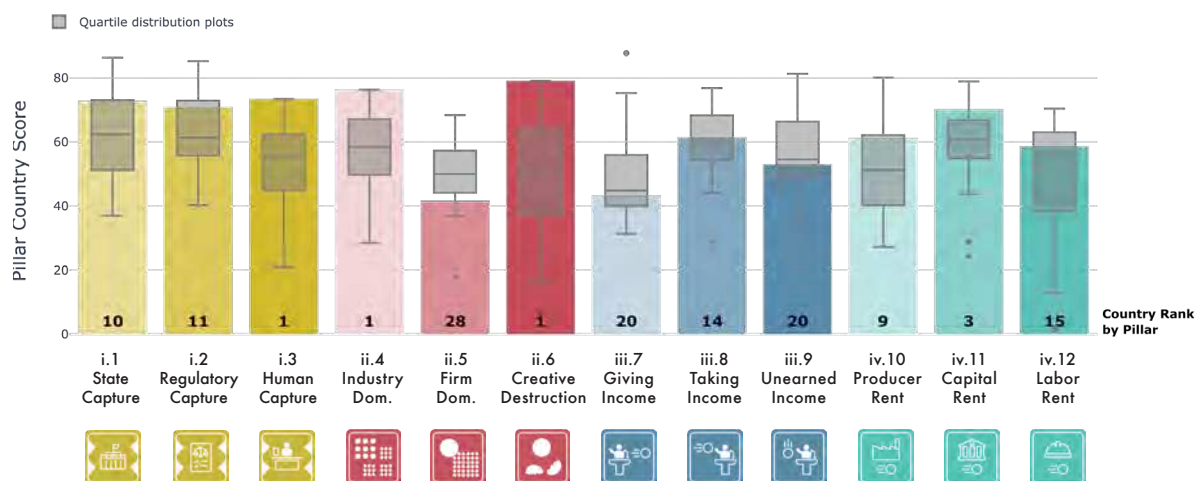
EQx scores suggest that the United States is in an unparalleled position to succeed if elites have the will to stop cold rent seeking tendencies. The 1st place ranking in the Creative Destruction Pillar (ii.6), and in the *Entrepreneurship* (ENT, ii.6) Indicator is evidence that America is loaded with wealth creation potential. Although 2019 was characterized as a year that “unicorns stumbled”¹⁵, with some of Silicon Valley’s most famous creations such as Uber and Lyft disappointing upon IPO, the tech hub remains the envy of countries worldwide. It is there where Value Creation, if encouraged appropriately and inclusively, can further boost the U.S. EQx ranking.

In conclusion, any problems the U.S. has are fixable. The top Power Sub-Index rank means that the U.S. is a self-correcting system. If elites would only unleash the full potential of America’s institutional strengths for the sake of creating new value, while stopping pork and other Value Extraction rackets, the U.S. could easily climb atop the world’s Elite Quality ranking, while the inclusive American Dream of opportunity for all might be realized.

Prof. Tomas Casas & Diana van der Watt
University of St.Gallen

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Visual40: United States performance overview by EQx Pillar vs overall distribution



Visual41: United States EQx Country Scorecard

United States

EQx2020 Country Scorecard

Population (m) 327
 GDP US\$ (bn) 20'494
 GDP per capita (USD) 62'641



Level 1 – Index

EQx Rank / 32	EQx Score
5	63.4

Level 2 – Sub-Indices & Index Areas

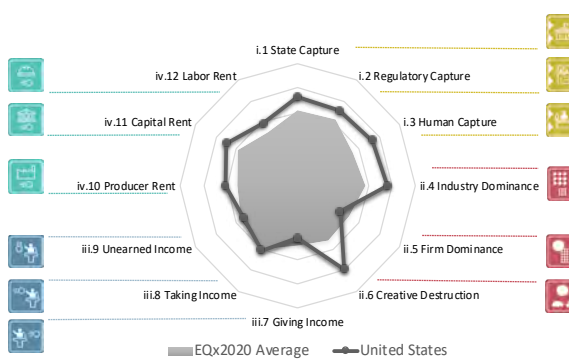
EQx Sub-Indices			
Power		Value	
Rank / 32	Score	Rank / 32	Score
1	70.7	8	59.6

EQx Index Areas

Political Power (i)		Economic Power (ii)		Political Value (iii)		Economic Value (iv)	
Rank / 32	Score	Rank / 32	Score	Rank / 32	Score	Rank / 32	Score
3	72.2	2	69.9	22	52.5	5	63.3

Level 3 – Pillars

	Rank / 32	Score
P. Power		
i.1 State Capture	10	72.8
i.2 Regulatory Capture	11	70.9
i.3 Human Capture	1	73.4
E. Power		
ii.4 Industry Dominance	1	76.3
ii.5 Firm Dominance	28	41.6
ii.6 Creative Destruction	1	79.1
P. Value		
iii.7 Giving Income	20	43.2
iii.8 Taking Income	14	61.3
iii.9 Unearned Income	20	53.0
E. Value		
iv.10 Producer Rent	9	61.4
iv.11 Capital Rent	3	70.1
iv.12 Labor Rent	15	58.7



Level 4 – EQx Variables

	Rank / 32	Score
State Capture (i.1)		
COR Political corruption	13	75.6
MOB Social Mobility	21	35.0
PDE Political decentralization	1	99.8
ADE Administrative decentralization	4	91.1
PGL Political globalization	9	82.3
WPI Women's Power Index	18	40.4
GRC Government's responsiveness to change	3	94.9
Regulatory Capture (ii.2)		
DBI Institutional quality	4	91.5
CRO Crony-capitalism	16	53.1
EXP Expropriation risk	1	84.0
PMI Protecting Minority Investors	17	76.7
ECR Ease to Challenge Regulations	30	0.2
Human Capture (ii.3)		
UNI Unionization rate	4	69.7
PSE Public sector employees as % of total employ	3	78.1
CBC Collective Bargaining Coverage	3	71.2
GSI Global Slavery Index	4	73.3
WBL Women, Business and the Law	12	75.0
Industry Dominance (ii.4)		
IEE Top 3 industries exports as % of GDP	1	96.4
IRE Top 3 industries as % of GDP	7	70.4
ECI Economic Complexity Index	7	91.5
IVA Top 3 industries as % of VA	29	12.3
Firm Dominance (ii.5)		
PRO Top 10 firms profitability	22	33.5
SME SMEs per 1,000 people	17	53.4
ATX Antitrust exemptions	10	21.4
BIW Billionaires' wealth as % of GDP	24	33.2
FKG Top 10 firms market cap as % of GDP	21	50.4
FRG Top 3 firms revenues as % of GDP	6	66.3
FRR Top 30 firms revenues as % of GDP	13	54.9
LIB Lerner Index banking sector	17	45.5
Creative Destruction (ii.6)		
TUL Listed firms turnover, long run 15 years	14	34.8
TUS Listed firms turnover, short run 3 years	14	36.1
ENT Entrepreneurship	1	99.8
VCK VC finance	3	96.2
RND R&D % GDP	7	83.9
BTS Barriers to start-ups	5	70.7
ENR Firm entry ratio	n/a	
EXR Firm exit ratio	n/a	

	Rank / 32	Score
Giving Income (iii.7)		
SNT Subsidies and transfers as % of expenses	19	11.5
REG Regional redistribution as % of government	19	28.1
EDU School life expectancy	13	65.9
GPS Expenditure on general public services as %	15	47.3
GHS Global Health Security	1	99.8
COV Covid-19 safety	n/a	
Taking Income (iii.8)		
DCT Corporate tax rate (dev. fm optimum)	11	67.6
DKI Delta capital gains tax vs income tax	17	34.0
HOM Homicide rate	24	38.9
INE Top 10% share of pre-tax national income	n/a	
FDE Fiscal decentralization	5	92.7
DTR Tax revenue as % of GDP (dev. fm optimum)	14	69.1
BRD Battle-related deaths per 100,000 people	1	90.0
Unearned Income (iii.9)		
DUT Dutch disease propensity	13	68.1
SOE State ownership, control and involvement in	13	49.5
EPI Environmental Performance Index	14	81.7
DBT Government Debt as % of GDP	28	4.9
TRF Trade freedom	5	79.4
Producer Rent (iv.10)		
BTE Barriers to entry	4	80.8
FDI FDI net Inflows as % of GDP	16	39.5
BTF Barriers to FDI	16	49.7
EGL Economic globalization	15	64.5
DHC Health Care as % of GDP (dev. fm optimum)	29	21.9
OFB Open for Business	2	94.1
Capital Rent (iv.11)		
DNI Neutral interest rate (dev. fm optimum)	2	73.3
DOI Inflation (dev. fm optimum)	1	100.0
CUA Currency appreciation	7	53.0
GOL Gold demand as % of GDP	4	71.1
DMA M&A as % of investment (dev. fm optimum)	27	43.6
Labor Rent (iv.12)		
UEM Unemployment rate	8	71.6
LFP Labor force participation rate	9	53.8
WLP Delta real wage vs labor productivity increa	11	57.5
LDR Labor dependency ratio	13	68.7
YUN Youth unemployment rate	7	67.6
GWG Gender wage gap	15	28.4

The Elite Quality Report 2020 (EQx2020) provides Country Scores & Global Rank for 32 countries © Foundation for Value Creation 2020

4.3 Extreme Country Performances by Pillar

The leaders

Visual 42 displays the podium results of each Pillar, drawing our attention to the countries which might provide inspiration for others in terms of Pillar specific value creating business models.

The performance of Singapore is exceptional, ranking 1st place overall and featuring no less than 6 times in Visual 42. Singaporean elites dominate the Economic Value Index Area, the only country to come on top on all 3 Pillars which comprise this Index Area. The country is notably missing from the Political Power Pillars, despite having leading scores in Indicators including *Institutional quality* (DBI, i.2) and *Government's responsiveness to change* (GRC, i.1).

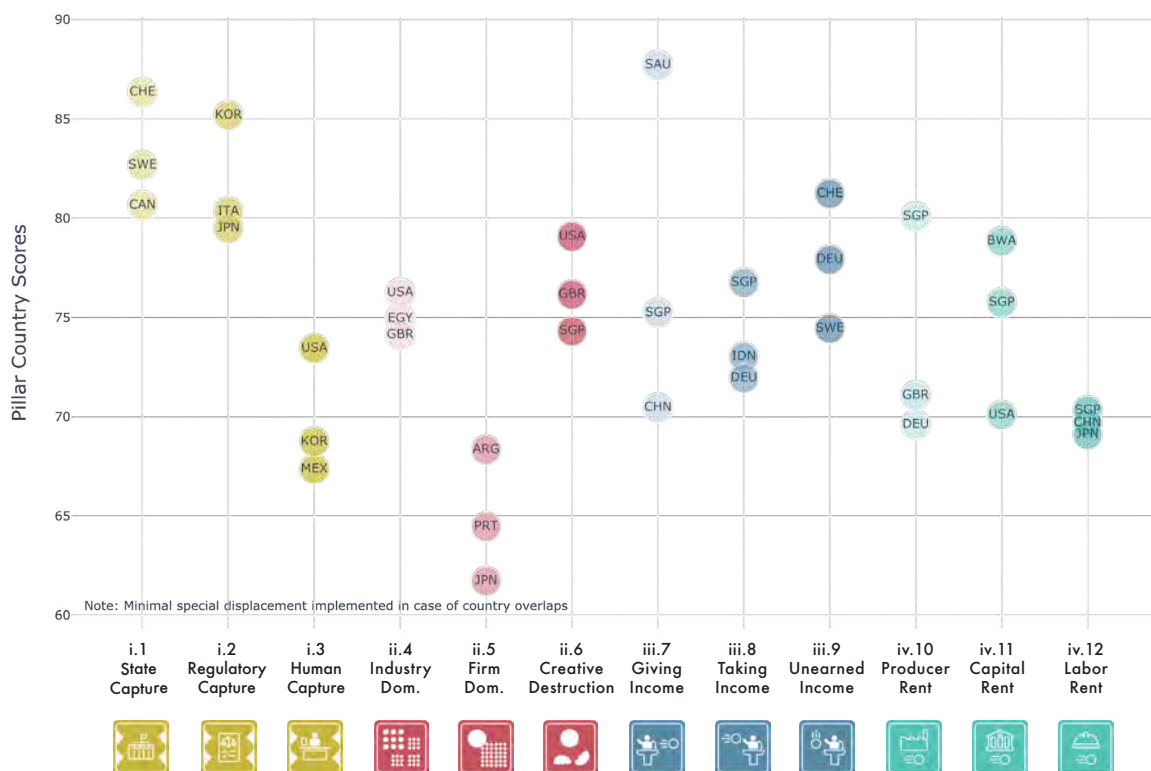
The variation in scores between the top 3 scoring countries by Pillar is consistently small. For instance, the Creative Destruction (ii.6) Pillar shows a closely fought race run by the United States, Great Britain and Singapore. However, there are 2 clear exceptions illustrated by the graph. In the Producer Rent Pillar (iv.10), Singapore outperforms the rest with outstanding Value Creation by producers and suppliers in goods and services markets. Saudi Arabia has a trailblazing score for Giving Income (iii.7), yet this has to be put into perspective due to missing data.

3 notable performances which deserve special attention are the successes in Capital Rent (iv.11) by Botswana, Human Capture (i.3) by Mexico, and Firm Dominance (ii.5) by Argentina, despite the overall rankings in the aggregate Index. Whilst Botswana's score might be affected by a lack of availability of data, Argentina dominates the Indicators that measures market capitalization and revenues as percentages of GDP, indicating a lower potential for rent seeking by large firms. Mexico's high scores for *Collective Bargaining Coverage* (CBC, i.3) and *Unionization rate* (UNI, i.3) will perhaps be short lived, given the introduction of a law allowing workers to form independent labor unions.

Success within a Pillar is not restricted to a certain type of country. Taking a deep dive into Industry Dominance (ii.4), for example, we see that the U.S. leads in *Top 3 industries exports as % of GDP* (IEE, ii.4), and the United Kingdom gets its boost from *Top 3 industries as % of GDP* (IRE, ii.4), despite the heavy weight of financial services. Egypt, by contrast, scores well in *Top 3 industries as % of VA* (IVA, ii.4), in which the U.S. and U.K. score 29th and 31st respectively.

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Visual 42: Highest performing countries (3) by Pillar



Highest improvement potential

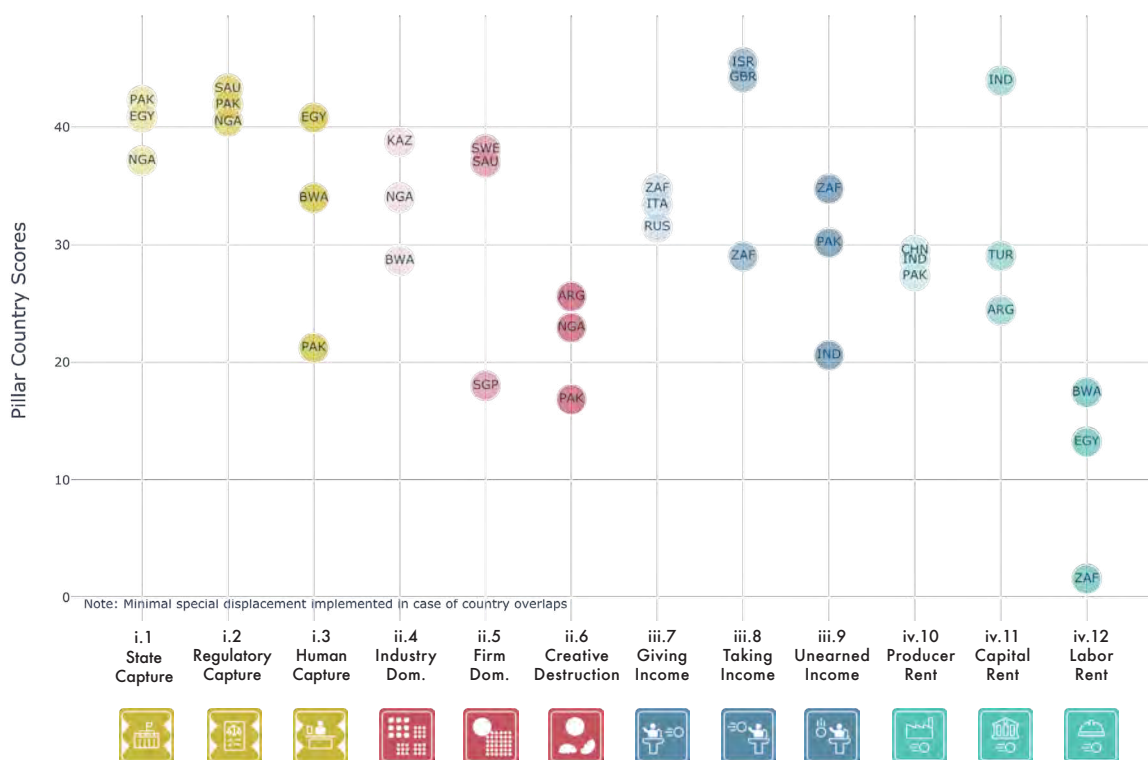
The raison d'être of this index is to identify areas in which the business models of country elites could be improved to create more value. In Visual 43, the countries with the greatest potential for such progress are shown by Pillar, providing a number of enriching insights. For instance, in some areas, such as Producer Rent (iv.10), Pakistan, India and China, while all sharing borders, have arrived at their low scores though very different political economy routes. Here, especially further to anticipated opening up and liberalization, China and even India, could see its overall scores improve markedly in the coming years.

The purpose of this specific graph is to trigger elites to transform existing business models towards increased Value Creation – they and their countries are poised to benefit the most from such changes. Indeed, a number of overall highly scoring countries are identified here as having great room for improvement. Even Singapore, which ranks first for its stellar performance in the Index, finds itself lagging in Firm Dominance (ii.5). Great Britain, one of the top countries in the overall EQx, also finds itself in the bottom 3 for Taking Income (iii.8), mostly due to its tax policies.

This chart is particularly revealing in terms of political leadership for Pakistan and South Africa, as the countries feature in the bottom 3 of all Pillars making up the Sub-Indices Political Power (i) and Political Value (iii) respectively. Pakistan might have a relatively easier job, since its main challenge is to address potential future Value Extraction, meaning elites can pre-emptively tackle and amend the rules that allow the capture of the state, of business regulation, and of jobs. By contrast, South Africa is already in the midst of political Value Extraction, with urgent reforms needed at the government level itself to redress the vast rents associated with Giving Income (iii.7), Taking Income (iii.8) and Unearned Income (iii.9).

A particularly interesting point exemplified by this display of the Giving Income Pillar (iii.7), is that countries may score similarly poorly but for different underlying reasons. Whilst Italy's score is decreased by its high *Regional redistribution as % of government budget* (REG, iii.7), South Africa trails in *School life expectancy* (EDU, iii.7), and Russia's performance is skewed by a low *Global Health Security* (GHS, iii.7) score. In short, concrete policy implications must be sought at the Indicator level.

Visual 43: Lowest performing countries (3) by Pillar



4.4 Special Regional Analysis: North East Asia

The Elite Quality narrative linking the economies of China, Japan and Korea

One of the most fruitful ways to use the EQx Index is through cross-country comparison. Cross-country analysis is particularly informative in cases such as China, Japan and Korea, which could be said to capture the same economic model at different stages of development, alluding to a time series analysis.

The Index shows China at a historic turning point, as leaders of the country well know. It highlights how China has benefited from inefficiencies and rent extraction during its fast growth period, ranking 12th, with a similarly middling performance on both Sub-Indices, at 19th on Power, and 10th on Value. The precedents set by its North-East Asian neighbors show that these scores will have to improve as China's growth slows, and suggests that delayed reform comes at a cost.

Korea, which still enjoys relatively fast GDP growth, ranks at 9th overall, but recent elections have shown dissatisfaction with the system, with "economic democratization" even becoming a campaign slogan. In contrast, Japan has had to reform to curb both power and rent seeking as its economy slowed, meaning that the growth in the size of the pie was no longer big enough to allow for such wealth extraction. All the same, curbing rents and power has not been enough to prevent GDP growth slowdown, and Japan lags many developed economies in our sample, in 10th place for Power and 6th for Value. Together, this all suggests small differences in power and rent can create a significant drag on activity.

Korea's performance suggests that China could get away with allowing rent extraction to linger on, even as its economy slows. Chinese growth could easily fall below 5% on a structural basis in the next few years. While this is low by historical standards, the Korean precedent suggests that the size of the pie would still be growing rapidly enough for elites to continue carving an outsized share for themselves, while the rest of the country can be bought off with the remainder. Japan's performance, however, suggests that this would be a perilous path; there seems to be a limit to Value Extraction capacity, as the growth in the pie slows. However, leaving it too late to curb power and rent could stunt long-term growth.

Can the shifting of political power to business be stopped in the transition process?

President Xi Jinping's anti-corruption drive suggests that the Chinese authorities are somewhat aware of the task at hand. But the recent increase in Party power, and deviation from previous Party convention on term limits, could be storing up trouble for the future. Political Power is already the biggest drag on China's overall performance, with a rank of 24th out of the 32 surveyed countries. That power could turn out to be damaging as growth slows, tempting politicians to seek to carve out a bigger share of the pie, where previous data suggests that officials have refrained from using the full extent of their power to maximize rents.

The ranking for Korea and Japan on Political Power is of much higher quality, at 1st and 2nd places respectively. We are unconvinced, however, that power hasn't simply transferred from politicians to business leaders through a privatization process, with industrial organization little changed. Our Index suggests this is a problem in Korea, with a middling performance on Economic Power, and with the Economic Value performance dragged down by a number of key Indicators across Pillars. High Industry Dominance (ii.4), coming in 28th of the 32 surveyed countries, also demonstrates this point, reflecting the power of the export sector lobby. Japan performs better in this sense but falls down on the Indicator *Top 3 industries as % of GDP* (IRE, ii.4). Our index also unveils the concentration of industry revenues in the Firm Dominance (ii.5) Pillar, with Japan and Korea ranking highly in these Indicators. On the face of it, Korea's number 1 ranking on *SMEs per 1,000 people* (SME, ii.5) within this Pillar should be lauded, but we fear that the large number of SMEs merely reflects the dual nature of the labor market; in black and white, those that cannot obtain employment in the mega firms then turn to starting their own small businesses. These small businesses, however, are not the drivers of innovation, but often micro businesses, run by older age people, in the low productivity catering sector, and are a driver of high "household" debts in Korea. This should serve as a warning to China to strengthen efforts to avoid a dual labor market.

China receives an encouraging above average rank on Industry Dominance (ii.4), though the relatively poor performance from Korea should alert the authorities to the potential for slippage here. The Creative Destruction (ii.6) Pillar will be of paramount importance to maintaining sufficient GDP growth as the old growth model recedes to make way for the new. If the elites, whom currently hold power, cling onto it, or don't manage to transfer their resources, then the remnants of the old model will stifle the full establishment of the new. China's performance is above average here.

Facing down the demographic cliff?

Japan's experience is also informative as far as demographics go, with China facing the challenge of rapid reform to cater for the ballooning ranks of the old age population as the working age population dwindles. Japan ranks 25th on the Giving Income (iii.7) Pillar, its lowest quality performance, thanks to high *Subsidies and transfers as % of GDP* (NT, iii.7) and *Regional redistribution as % of government budget* (REG, iii.7), probably thanks in part to its aged rural population. Like Japan, the older population in China is well represented in rural areas, with the need for reform even more pressing due to the land ownership system. In China, the older farmers don't technically own the land which they work, potentially depriving them of an exit into retirement. Left untackled, these factors could exacerbate

the already grave challenge of organizing fiscal transfers in a massive country, with many provinces tied to the old-guard model at risk of being left behind.

Where is China headed on openness?

China's worst performance is in the Producer Rent (iv.10) Pillar, ranking 30th due to the relatively high tariff barriers, other barriers to entry, and a relatively closed capital account. The authorities in the last few years have made the critical realization that tariffs on imports are generally bad for consumers and hinder the transition to private consumption-led growth. The trade war with the U.S. may have slowed down the process of reducing tariff barriers, as China retaliated against measures taken by the Trump administration. We expect to see progress on this front, as well as on capital inflows, in the near future, though another flare up of tensions and a tit-for-tat escalation is a real threat.

Admittedly, China and the U.S. have secured a Phase One trade deal, but much of this was focused on the low-hanging fruit. China's purchase commitments seem likely to do damage to the international trading system, with imports from the U.S. displacing those from elsewhere simply by fiat. The knottier issues remain unresolved. If anything, the period since the financial crisis has given the world a false sense of security, with China playing a greater role in driving global

Visual44: Japan, Korea, China - Power and Rent Sub-Indices, Regional Comparison



growth. But this contribution was fueled by an unsustainable debt build up. China now faces the burden of a multi-year deleveraging process, during which, it is likely to need to rely more on external demand. The temptation, therefore, will soon be to continue skewing resources towards the export sector, which essentially equates to rent extraction. Our Index suggests that Japan and Korea, predecessors in this sense, did not manage fully to avoid this temptation.

With the authorities already taking steps to increase foreign involvement in China, there seems to be less movement on allowing Chinese capital to flow out and gain the benefits of diversification. For now, the recent announcement that the benchmark deposit rate will remain unchanged, since October 2015, is also an ill omen that the authorities intend to keep Chinese savers locked up at home, subsidizing the industrial sector, a factor not fully picked up yet by our Index.

Capturing capital rent extraction in the North East Asian model...

Future iterations of the Index will work on refining the Capital Rent (iv.11) Pillar, in which China appears to perform well. There might, however, be some misgivings as to this result, as some Indicators are in their preliminary stages, and the Pillar does not yet include the full list of planned Indicators. Whilst this may matter less for developing countries, in the case of China it impacts its performance, boosting it to a better position in the ranking. In short, the Indicators *Neutral interest rate (deviation from optimum)* (DNI, iv.11) and *Inflation (deviation from optimum)* (DOI, iv.11) are both calibrated for developed markets, which could give China an advantage; with the assumed neutral interest rate and optimal inflation rate lower than the likely reality, China's undershooting is not picked up. In the future, we may also need to think about the differences across countries in how interest rates and money growth interact.

Another Indicator in the capital rents front is *Currency appreciation* (CUA, iv.11). China performs very well here, largely thanks to appreciation early in the sample period. We may want to consider capturing intervention, rather than the pure moves in the currency, which can reflect necessary structural adjustments between a country and the rest of the world. Measuring intervention would be difficult though, as the North East Asian case demonstrates. China now uses state-owned banks to intervene, generally to support the currency at this stage, rather than merely relying on the central bank.

In any case, the Index accurately paints a picture of China at a turning point. The deleveraging China must now undergo probably entails real effective depreciation, meaning the country is likely to join its North East Asian neighbors on this front over the next decade. Japan's direct intervention, however, would be minimal. But the operative part of its Abenomics program was effectively to depreciate the yen, through a flood of Bank of Japan created money, so looking at pure yen depreciation is justified here. Korea's situation is equally complicated. It's 23rd place performance partly reflects a sharp drop during the financial crisis. This was due to large amounts of short-term dollar debts built up in the years before 2008, largely as a result of hedging by the export sector. Should that macroprudential failure be penalized? As we noted above, the Index picked up excessive industry concentration, and the strength of the export lobby. So maybe this penalization is fair, reflecting the hazards of elites becoming too dependent on one business model. At the same time, historically, the country has tried to keep the currency on a cheap footing to support this export sector, at the expense of domestic consumers.

The future inclusion of asset inflation deviation from optimum as an EQx Indicator would also likely pull China down the ranks on the Capital Rent Pillar, and again will show China at a turning point. The effects of its closed capital account and previously loose monetary policy likely will show up here. Similarly, data on housing affordability probably would probably damage China's score in the Political Value area.

... and capturing labor market rents

All 3 countries perform well on the Labor Rent (iv.12) Pillar, but picking up rent extraction here is tricky, and may require more country-specific thinking. Poor quality data in China's case is difficult to get around. Japan's quasi-feudal labor market, meanwhile, performs well on our current metrics, but harbor Value Extraction in reality, for instance on the intergenerational front.

*Frey Beamish,
Chief Asia Economist at Pantheon Macroeconomics*



4.5 EQx, Ultimate Signal of Medium-term Growth (with Implications for Economic Responses to Covid-19)

Further to statistical assessment, the properties and robustness of the EQx dataset and its aggregated markers enable the pursuit of falsifiable hypotheses relevant to various research questions within the fields of economics and management science, and possibly other fields like political science or even ethics.

An initial question for testing is the establishment of EQx as a tentative leading indicator for economic growth. The underlying assumption is that elite business models based on Value Creation (rather than extractive rent seeking activities) generate broad and sustainable economic growth. 'Medium-term' time frames to be evaluated could range from 3-year to 15-year time horizons. EQx constructs and data would thus be introduced to econometric models of growth, either as a single variable, or better, decomposed into its Pillars at different levels of aggregation. In fact, depending on their exact focus and data availability, several growth regressions could benefit from our Index's ability to meaningfully aggregate or disaggregate different components of Power and Value Creation. As econometric model adjustments are developed by the extended EQx research team, individual EQx components like Sub-Indices or Pillars and their respective weights might be finetuned according to predictive contribution. Candidate dependent variables worth exploring in the modeling context include human development, competitiveness, total factor productivity (TFP) or innovation.

Visual 45 below underscores an interesting relationship: the higher the EQx Country Score (i.e. the more prevalent the Value Creation business models and the lower their rent seeking antagonists), the higher the levels of economic development in terms of real GDP per capita.

Beyond the correlation (correlation coefficient 0.807), much is revealed by considering the individual countries' residuals below the common intercountry line. China, the U.K. and Korea have a large vertical. These countries' Elite Quality on aggregate is the highest relative to their GDP per capita. This visualization points to the idea that Elite Quality is a signal for falsifiable long-term economic growth performance.

The big question is whether these residuals result from cumulative temporary deviations from a long-term relationship common to all countries and represented by the line, or whether they mirror the "fixed-effects" of socio-cultural characteristics of the country that cannot disappear in the medium-term. In other words, are the EQx Country Scores associated with negative vertical distances in Visual 45 (countries sitting below a hypothetical common trendline) a 'signpost' for higher future income levels (and higher economic growth rates)? Interestingly, Singapore sits above the trendline, meaning that it could perhaps regress, to the still astonishing high level of about USD 85,000 (PPP). The signal from China on account of Elite Quality is one

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Visual 45: EQx's correlation with GDP per capita PPP - 2018 data (The World Bank), lagging causality?
Correlation coefficient = 0.807, R-squared = 0.651
Note: Minimal spatial displacement implemented in case of country overlap



of USD 45,000 GDP per capita (PPP), close to 3 times its current level. In Europe the U.K., Poland, Israel, Germany or Portugal are also set to grow their purchasing power GDP.

On the other hand, Argentina and Turkey point to substantial negative growth ahead, if the large positive distances (to the trendline) persist. Furthermore, Italy, France and Sweden might stagnate, albeit these countries are already relatively and very prosperous. The previous discussion about time-horizons leads to the 'if' and 'when' question, i.e. will all or most countries ultimately transition towards the trendline and how long will the shift take? In other words, how forward-looking is EQx?

The determination of signaling effects, and the potential hysteresis (where historical elite business models endure and determine national development trajectories) of Elite Quality bring forth practical policy dimensions. Can inflection points that redirect economic and human development trajectories be detected? EQx is designed to draw from financial markets and other dynamic data; the real-life EQx data subset, properly modelled and interpreted, could be the core signals which, however weak, anticipate larger future movements of economic variables.

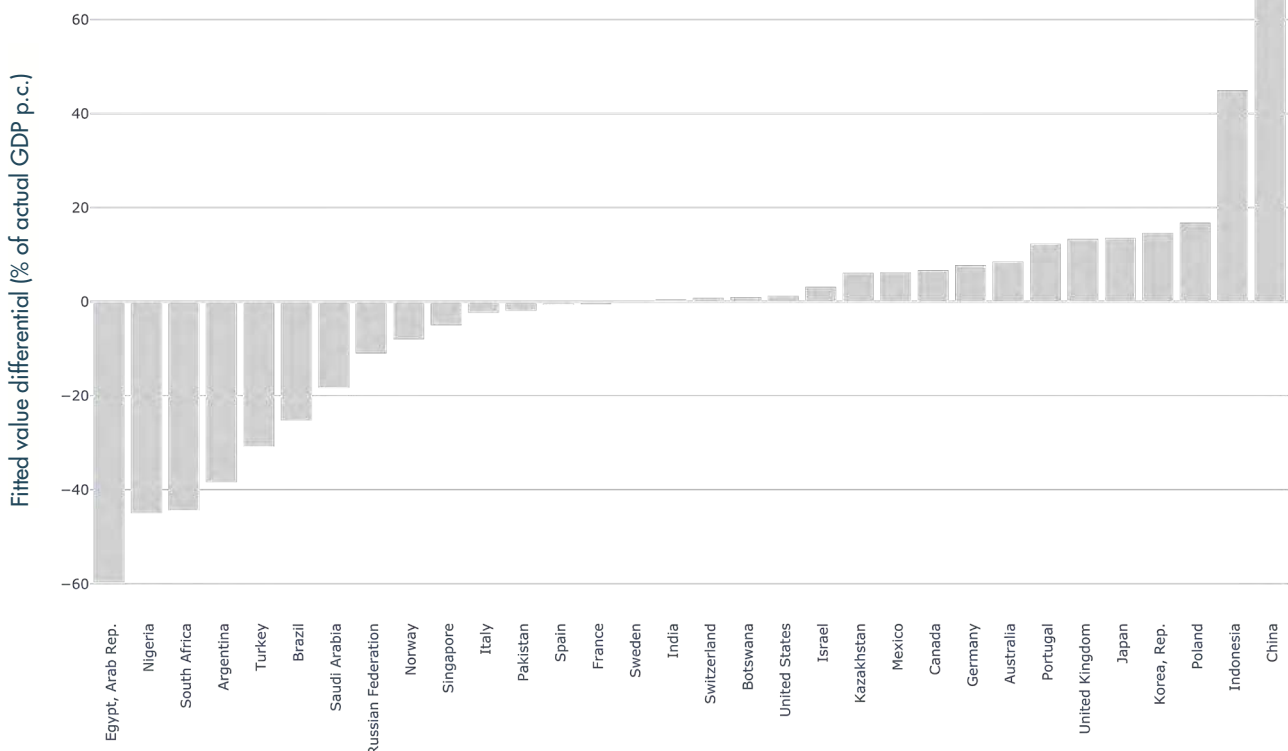
A case in point of great topicality is the dissimilar policy responses to the Covid-19 crises. Any response, ranging from

helicopter money and looser monetary policies, to 'Coronabonds', or to specific industry rescue packages and subsidies, will lead to updated Value Creation vs Extraction Configurations (see Visual 17). That is, to new proportions of inclusive vs extractive business models in the economy. The EQx2021 report will aim to capture the effects of Covid-19 policies in terms of Value Creation and hence long-term economic prospects.

In summary, weak signals for conceivable economic trajectory inflection points might, once properly modelled, call for revising a country's medium and long-term growth prospects. After all, emerging elite business model configurations are the central – albeit often overlooked – fact of any political economy. Their effects certainly require longer horizons to fully play out in the economic and social spheres. For this very reason, EQx plans on initiating an econometric modelling research program to capture different economic growth and political economy aspects. We will enlarge the dataset by increasing the number of countries and years, so that we are able to mobilize a variety of methods, ranging from static and dynamic panels, to instrumental variable estimations, to important causation methods such as the propensity score, along the lines of important recent studies (such as Acemoglu, Naidu, Restrepo, & Robinson, 2019).

Visual 46: Fitted value differential as indication of future growth prospects (based on Visual 45)

Note: Fitted value differentials are calculated as the difference between the fitted value and the actual GDP per capita value, as % of the actual GDP per capita value



5. Today's Call to Elites

In times of crisis, Elite Quality is paramount. During the final stages of the 18-month preparation of this Report, the world has been confronted by the Covid-19 health emergency. This Call to Elites attempts to provide a framework to tackle the evolving economic and social crises.

1. Coordination. Elites are scarce and critical coordination capacity. Without elite coordination capacity a nation cannot successfully hope to prosper, innovate, or tackle a crisis.

2. Choice. Elites have the choice to configure their business models between 2 poles: Value Creation and Value Extraction.

3. Policy. Optimal policies for economic and human development are those that crystalize in institutions that incentivize Value Creation business models. Rules with teeth must close doors to Value Extraction and rent seeking, because these constitute value transfers away from the original value producers and eventually lead to stagnation and in the extreme, to social breakdown.

4. Transparency. It is extremely difficult to assess at the micro or firm level, and even for the elites themselves, whether and to what degree a given operation or business model is value creating or extracting. An important reason for the obscurity is that both models are profitable and generate wealth. While elites and non-elites alike are keen on frameworks for transparency, elites seeking sustainability and the long-term perspective are expressly interested.

5. Diversity. Countries experience different levels of Elite Quality. There will be debates about the right Elite Quality levels. For instance, it is argued that countries in initial stages of development should tolerate rent seeking models to enable capital accumulation and finance elite coordination capacity. Once the economy develops, those elites should transition to Value Creation models. On the other hand, the richer a country is, the higher the demands on Elite Quality: operating on the efficiency frontier leaves scant margin for the allocative inefficiencies accruing from Value Extraction business models.



6. Crises. In times of economic and social upheaval, the economic pie is bound to shrink. Elites will reassess their business models, and it is likely that estimations of their own power position play a role when examining options such as to double down on Value Extraction or on Value Creation.

7. High-quality elites. To overcome a crisis situation, the nation's elites must employ their coordination capacity to invest in and expand Value Creation models. A country blessed with high-quality elites will *ceteris paribus* navigate through the crisis with the lowest amount of social loss and non-creative destruction possible.

8. Low-quality elites. A second and understandable response, is for elites to move to preserve or even enlarge their pre-crisis income levels. Elites will leverage and stretch their political economy power to the limit for Value Extraction purposes. Referencing the Keynesian analogy of 'sticky wages', we call pre-crisis level income preserving elite behavior 'sticky'. The implementation of rent seeking business models in times of crisis are redistributive and especially aggravating, since non-elites will see their incomes proportionally decline to a greater extent than they otherwise would have done.

9. Elite narratives. Enlightened and competitive elites will increasingly invest in Value Creation business models and develop narratives to articulate their choices. The EQx project supplies facts and analysis for the public discourse and debate.

Value Creation responses of high-quality elites to a crisis will eventually resolve any crisis. Low Elite Quality responses, however, will worsen the predicament, and if grave enough, as for instance during the French harvest failures of 1788, can destabilize the overall political economy and even change the course of history. An overbearing risk of the Covid-19 crisis is that the large Keynesian and monetary support packages will induce increased Value Extraction business models, where interest groups compete for the pork doled out. Workers in health care, the front lines of retail and logistics, and in public safety engaged in selfless and high-risk Value Creation – it would be a social tragedy if rescue packages, subsidies, 'Coronabonds' or helicopter monetary policies were to be used to grease Value Extraction business models. Should a narrative of "war profiteering" take hold in some of the political economies most affected by Covid-19, upheavals like the George Floyd protests would just be a prelude for 2021, the year which could become the 21st century's fatidic 1789.



6. Exhibits

6.1 EQx Forthcoming Research Questions

The EQx2020 Report's Country Scores and Global Rank are part of a cross-disciplinary research project. Both macro-, meso- and micro-level research questions derive from the Elite Quality conceptualization and the measurements of the Index. A set of fundamental and inclusive research questions are outlined below.

Fundamental research questions

Predictability: As discussed, Elite Quality is purportedly an independent variable leading to economic and human development, a leading indicator for mid- or long-term economic growth. The core of the EQx research project is to test falsifiable hypotheses by empirical means. In this context, econometric models might be developed to address reverse causality issues at the highest of standards of economics. By highest of standards, we mean the issues tackled in the econometric works of people like the recent Nobel prize winners Banerjee and Duflo; we cannot run experiments, but our causal inference could reach a similar reliability based on observational data.

62 **Longitudinal study:** Can we compare countries to themselves over time? The annual EQx is a global comparative index. That is, every country is ranked and qualified in relation to

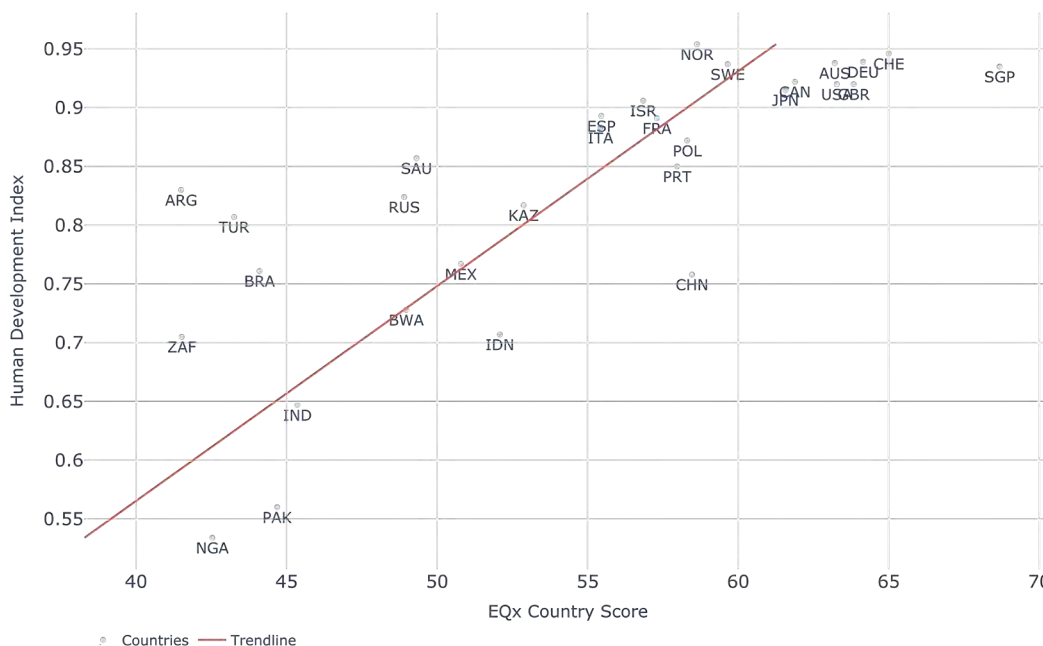
other countries. At the same time, we know that scoring high or low in the Global Rank is not as important as improving a given country's Elite Quality over time. Research with longitudinal panel data will address – at the individual country level – the progress towards higher/lower levels of Elite Quality. The EQx2021 Report plans to first address the question by presenting a benchmark comparison capturing pre-2007 Great Recession data.

Theoretical diligence: Is Elite Quality an internally consistent and falsifiable construct which explains that which established theories do not? Does EQx and its supporting methodology truly measure Elite Quality as conceived? The question of whether Value Creation business models for the national aggregate are properly measured will be theoretically diligenced for the 4 levels of the Elite Quality architecture, including for each Indicator.

Extended research questions

International business: Elite Quality captured by EQx could well be a relevant contextual factor for a variety of firm decisions on internationalization, such as foreign market entry mode choice. Elite Quality could be determinant of foreign

Visual 47: EQx's correlation with the *Human Development Index* – 2018 (UNDP, 2019)
Correlation coefficient = 0.778, R-squared = 0.605



direct investment (FDI) performance, and might have a signaling effect for host countries wishing to attract FDI.

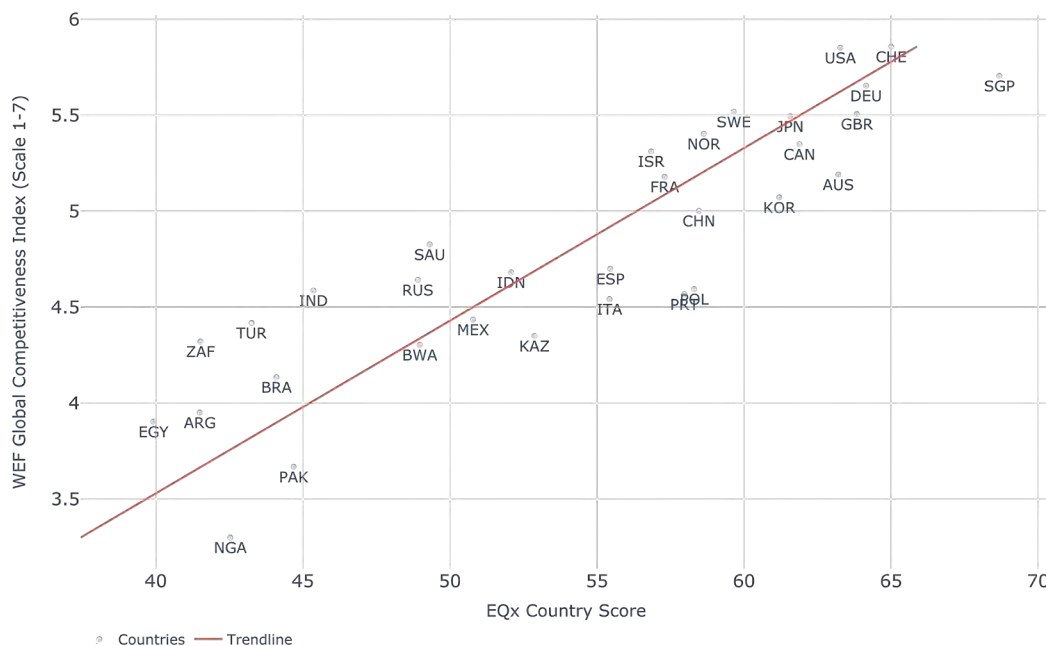
Business models: While the EQx Index is built primarily on macro datasets measuring Value Creation on the aggregate, a transition (back) to the micro-level will be made. Ample literature exists on Value Creation at the level of organizations. The idea is to utilize existing EQx concepts and approaches to establish whether firm (or industry) profits are the result of Value Creation or of extractive business models.

Corporate governance: The agency of boards, especially those at leading and system-relevant organizations, is increasingly being scrutinized from a stakeholder perspective. Assessing a business model's Value Creation might in the future be part of Corporate Social Responsibility (CSR). Along similar lines, the Environmental, Social, and Governance (ESG) investor perspective might reference EQx as it measures the sustainability and societal impact of business models associated with specific investment decisions.

Selected research questions for the EQx project team

- (i) Future EQx Reports plan to propose **mid- and long-term economic growth predictions.**
- (ii) Development of an **EQx Liquid indicator** to assess how changes in financial market and other 'real-time' data impact growth, risk, economic forecasts and general human welfare indicators.
- (iii) What is the overall "state of elites" in the world? An **EQx World Score** plans to answer this question by establishing an aggregate Elite Quality metric that takes into account the scores of all nations. Whether the EQx World Score is on a rising or on a falling trend will be studied. The impact on the World EQx of events such as Covid-19 and related policy responses also merits inquiry.

Visual 48: EQx's correlation with the WEF *Global Competitiveness Index* (WEF, 2018)
Correlation coefficient = 0.883, R-squared = 0.779



6.2 Methodological Note

This brief provides a synopsis of methodology steps (Steps 3 to 6 and 8, as in Visual 9) and reference parts of this report (Sections 2.4 Methodology Introduction and 2.5 Statistical Assessment). For a full methodology discussion consult the latest version of the EQx Methodology Paper.

Dataset collection and transformation (Step 3)

As basis for the EQx's 72 Indicators, datasets are collected from renowned international organisations. By using these various datasets and sources, the EQx aims to capture and measure all relevant aspects of Elite Quality. Section 7.2 lists the data source for each Indicator. Datasets can be categorized, according to whether and how they are transformed before yielding EQx Indicators. For instance, some Indicators are obtained directly from the original data (e.g. Indicator *Institutional quality* (DBI, i.2) uses the final score of the World Bank *Ease of Doing Business Index*). Other Indicators are obtained after some basic transformation of the source dataset, e.g. by setting absolute numbers in relation to the countries' number of inhabitants or GDP. Another set of Indicators is obtained after more complex transformations, implying data cleaning and more extensive data transformations, as was the case with the *Top 3 Industries as % of VA* (IVA, ii.4) Indicator.

Whenever possible, the most recently available data is used to compute EQx Indicators. That is, if available, the Index uses 2019 or 2020 data. Considering the geographic coverage of the EQx, the future aim is to measure Elite Quality for as many countries as possible, even if severe limitations exist in pursuit of this objective. For the EQx2020, Index values are computed for a set of 32 countries.

Imputation of missing data (Step 4)

Fortunately, the datasets considered for the EQx are generally characterized by relatively good completeness. However, roughly 10% of Indicator-level datapoints are missing. The EQx approach to missing values is designed to avoid systematic upward or downward biases as a result of missing values. That is, a lack of data should not penalize or favour any country but should solely influence the accuracy of its score.

High data quality is achieved through 2 angles. First, minimum requirements in terms of data availability are defined. Datasets are only included in the EQx analysis if they cover a minimum of 30% of the countries under consideration (for the EQx2020 this corresponds to 9 countries) and provide recent

information on countries' Elite Quality, i.e. by 2016 or later (although there might be some exceptions to this rule). Additionally, Pillars need to be based on a minimum of 4 Indicators.

Secondly, the EQx implements an "available-case analysis" (Little & Rubin, 2002, p. 54), where Indicators are not omitted when having missing values, but are used if they fulfil the above minimum requirements. In cases where the most recent data is not available for a specific country, missing values are imputed from the latest available data for this country, up to 3 years prior to the most recent year. When an Indicator is missing for a country entirely, the weight of the missing Indicator is split between the remaining Indicators of the same Pillar, proportionally to their weight. The EQx methodology thus builds on the premise that Indicators within the same Pillar measure similar aspects of Elite Quality. For the EQx2020, a country's Index score is derived from a minimum of 40 Indicators in the case of Botswana and, on average, from 61.7 Indicators.

An obvious concern is that missing values are not missing completely at random but based on a systematic pattern (OECD, 2008, p. 24): data availability might be related to a country's Elite Quality. This could represent an important endogeneity bias for the EQx. However, we found that differences in EQx scores are not significant with respect to the number of Indicators. Furthermore, a positive relation between country scores and data availability would not necessarily be an indicator for bias: provided the existing Indicators are unbiased, Index scores would not be biased, but less precise. The state of Elite Quality would be depicted using less, but nevertheless correct information. We are confident that this argument would apply here, since the EQx uses data of renowned and trustworthy international organisations.

Still, data constraints might hamper the cross-country comparability of EQx country scores: some Indicators stem from different years, and some Indicators cover a heterogeneous 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. Reassuringly, a range of robustness tests suggest that the EQx ranking is largely robust to modifications in key modelling assumptions.

Normalization of Indicators (Step 5)

Because the Indicators 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). In a first step, a logarithmic transformation is applied to some source datasets (12 of the 72 EQx Indicators are based on a log-transformation) when this is deemed to improve the distribution of the data and thus yield more meaningful Indicator scores. Then, before aggregating Indicator values to Country Scores, data is standardized, i.e. converted to a common scale (with mean zero and standard deviation one) by calculating z-scores ($z_{c,i}$). This improves the comparability of datasets with large differences in scales and units, as is the case with EQx Indicators. The standardization is done using the 95% trimmed mean and standard deviation, in order for the standardization process to be less susceptible to outliers. In a further step, the datasets are re-scaled such that the Indicator scores all range between 0 and 100 ($x_{c,i}^n$). Lastly, if necessary, Indicators are transformed such 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.

Weighting and Aggregation (Step 6)

By weighting the individual Indicators, varied relevance can be attributed to them. As outlined in section 2.4, Casas’ (2020, forthcoming) framework provides a clear structure to the Index. The weights applied at each level (Indicator, Pillar, Index Area, and Sub-Index level) emerge from 2 approaches: either, weights are allocated by a group of experts, or, weights are directly deduced from the theoretical framework presented by Casas.

Indicator and Pillar weights are determined by a group of experts in the course of a Budget Allocation Process (BAP). The BAP is a participatory method where experts are provided a budget, e.g. N points, that they allocate to an Indicator or Pillar. Intuitively, experts “pay” more for Indicators or Pillars they want to stress (OECD, 2008, p. 32 citing Billharz, Matravers, & Moldan, 1997). The average of the experts’ allocations yields the individual Indicator or Pillar weight.

Index Area and Sub-Index weights are determined by conceptual deliberations formalized in the EQx White Paper. The resulting relative weighting between the Sub-Indices Power and Value is established as 1:2. Within each Sub-Index, the weight between the Political and Economic Index Areas is established as 1:2, as well.

Furthermore, the EQx applies a linear aggregation scheme. This implies a 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 in consequence, a full compensability is intended. A similar reasoning applies for 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). In consequence, Index Areas and Sub-Indices are linearly aggregated as well, to ensure a full transmission of the relative weights as implied by the theoretical foundation.

$$z_{c,i} = \frac{x_{c,i} - \mu(X_i)}{\sigma(X_i)}$$

Indicators standardization formula (z-score), based on dataset trimmed mean $\mu(X)$ and standard deviation $\sigma(X)$

$$x_{c,i}^n = \left(\frac{z_{c,i}}{4} + 0.5\right) \times 100$$

Calculation of final Indicator Country Score, ranging from 0 to 100

Statistical Assessment (Step 8)

The EQx Methodology Paper discussed a range of robustness tests. There are 2 reasons for this: firstly, to validate the EQx set-up, and secondly, to assess how sensitive the country ranking is, *ceteris paribus*, to changes in key modelling assumptions. The tests generally confirm the robustness of Country Scores and meaningfulness of the EQx Global Rank. We find that Country Score and the Global Rank are not driven by individual Indicators, different levels of data availability or the chosen normalization method. They also remain largely stable when applying a range of alternative weighting and aggregation schemes. The EQx Methodology Paper including the comprehensive sensitivity analysis is open for critical input.

Additional insight into the reliability of the EQx was obtained by replicating the entire construction process on a separate platform. Namely, the EQx is calculated using Microsoft Excel, a widely used spreadsheet software, as well as using the Index Management Platform IMP, a custom Python-based platform developed by partner dxFeed.

Visual49: EQx weighting, overview table
Note: Based on the EQx Methodology Paper

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Aggregation level	Weighting allocation method	EQx Weights
Sub-Index weights		within EQx
Sub-Index I: Power	Conceptual Deliberation 1	34%
Sub-Index II: Value	Conceptual Deliberation 1	66%
Index Area weights		within Sub-Index (within EQx)
<i>Sub-Index I: Power</i>		
Political Power	Conceptual Deliberation 2	34% (11.6%)
Economic Power	Conceptual Deliberation 2	66% (22.4%)
<i>Sub-Index II: Value</i>		
Political Value	Conceptual Deliberation 3	34% (22.4%)
Economic Value	Conceptual Deliberation 3	66% (43.6%)
Pillar weights (within Index Areas)	Budget Allocation Process	each Pillar receives own weight, see EQx Methodology Paper
Indicator weights (within Pillars)	Budget Allocation Process	each Indicator receives own weight, see EQx Methodology Paper

6.3 EQx Continuous Development Plans

The 2020 EQx2020 Report you have in your hands is the first ever release of the EQx Index. As a result, it has an experimental character, and while its production was guided by the perspectives and approaches of the Methodological Paper (see sections 2.4, 2.5 and 6.2), a multi-faceted review process has since commenced.

The release of the EQx2020 Report has started the first phase of the review process, which will close with the publication of the full EQx2021 Report, at which time the second phase will begin. This second review phase will be an extensive, in-depth, year-long peer reviewed methodological assessment. The EQx project expects to benefit from the inputs received from academia, business practitioners and policymakers.

The review process aims at diverse areas of action:

a) Relevance. For EQx to become an accepted heuristic for Elite Quality by segments of the general public, policy-makers, institutions or elites.

b) Transparency and openness. Implementation of transparency principles for EQx, and open index production processes capable of incorporating critical insight and outside contributions.

c) Theoretical assessment. Continuous strengthening of the theoretical foundations for the EQx Index and its aggregated levels, as well as construct validity.

d) Statistical assessment. Continuous general validation of EQx results and the Index's robustness.

e) Macro-level research. Initiation of formal research projects in the area of economics. This includes, for instance, the development of econometric models that test the relationships and the purported predictive power of EQx over selected proximal dependent indicators (e.g. institutional quality) and distal dependent indicators (e.g. medium-term economic growth, human development).

f) Micro-level and meso-level research. Initiation of formal research projects in the areas of international business or corporate governance. This includes, for instance, testing the relationships between EQx datasets and FDI performance and internationalization models across countries, industries or firms, or assessing corporate governance in terms of firm Value Creation vs Value Extraction.

g) Indicators conceptual diligence. Theoretical evaluation of existing and candidate EQx Indicators in terms of their fit as an expression of Power and Value (Creation vs extraction), and conceptual validation of the assignment of Indicators in EQx Pillars.

h) Indicator dataset quality. Continuous updating of existing EQx Indicator datasets and assessment of data quality. Of importance too is the identification as well as the production of datasets for candidate Indicators that conceptually fit the Pillars.

Lastly, we emphasize that for meaningful application of the EQx methodology, the quality of the input data sources is essential. The EQx Indicators are the bedrock of the Index, and the tables in the next section 6.4 describe these in detail.

TLA	Indicator Name	A. Indicator Description - What we measure	Dataset source	B. Indicator Rationale - Why we measure	Value Creation/Extraction
Sub-Index I: Power / Index Area (i): Political Power					
Pillar (i.1): State Capture					
COR	Political corruption	This Indicator is based on the political corruption subset of the Varieties of Democracies Database. The measure "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 and influencing law making and that affecting implementation" (VDEM, Website).	Varieties of Democracies (V-DEM)	<i>Political corruption</i> is a direct measure of Value Extraction facilitated by State Capture anchored in Political Power. It is one of the most blatant and direct forms of rent seeking, as corruption is theft. <i>Political corruption</i> pre-empts Value Creation business models from emerging.	Extraction
MOB	Social Mobility	The intergenerational mobility database measures the differences of economic mobility across generations. The main focus is on the mobility of education by measuring the share of individuals in the 1980s cohort who are born into the bottom half and who have reached the top quartile in education.	The World Bank, GDEM Database	The social and economic mobility of the population is an essential Indicator of Political Power. Across countries, the possibility to climb the economic ladder varies significantly. <i>Low Social mobility</i> is a reflection of both State Capture and lack of political will to invest in measures that enable the less privileged within society to advance, such as education. Elite status is less challenged and elite rotation is thus impeded, preventing new Value Creation agents from emerging, while existing elites maintain a stronghold on the top positions of the social ladder. With higher elite incumbency levels, competitive pressures for elite Value Creation decrease, thus facilitating rent seeking and Value Extraction business models.	Creation
PDE	Political decentralization	<i>Political decentralization</i> examines the self-governance of local governments. EQx uses the political decentralization subset of the World Bank decentralization indicators. This subset assesses the degree of decentralization at the legislative and executive levels, as well as the provisions for direct democracy.	The World Bank, Policy Research Working Paper	With <i>Political decentralization</i> and more power for subnational governments, Political Power is spread across a larger number and diversity of actors, and therefore State Capture becomes more difficult. Local governments are likely to be "more accountable to local citizens and more appropriate to local needs and preferences" (Johnson, 2003, p. vi) than far-flung, centralized governments. Through a greater, direct voice, citizens interests and their Value Creation models are better represented and more likely to be implemented. Value Extraction, on the other hand, is more likely with centralized governments as the interests of local citizens are disjointed with that of government. More distributed power and lower levels of power accumulation impede rent seeking activities by political and economic elites. As a counter argument, high Political decentralization can also be inefficient and lead to overlap specially in larger polities and thus decrease value. *An optimal level might be established in the future.	Creation
ADE	Administrative decentralization	This Indicator is based on the administrative decentralization subset of the World Bank decentralization indicators. This subset 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" (WB, Working Paper: p.17).	The World Bank, Policy Research Working Paper	With <i>Administrative decentralization</i> , administrative power is spread out and more sensitive to implementing rules according to local needs, with an additional checks and balances layer to avoid State Capture and the implementation of Value Extraction business models. More distributed power and lower levels of power accumulation impede rent seeking activities by administrative and economic elites. As a counter argument, local state administration might be captured by local forces and compromise the implementation of inclusive rules and regulations. *An optimal level of <i>Administrative decentralization</i> moderated by the inclusive/extractive nature of the country's institutions (and probably more differentiated from decentralization than Political decentralization) might be established in the future.	Creation
PGL	Political globalization	<i>Political globalization</i> is measured by using the political dimension of the KOF Globalisation index. It encompasses factors such as the numbers of embassies and international NGOs, as well as the participation in UN peacekeeping missions. Moreover, it comprises variables relating to membership of international organizations and international treaties.	ETHZ, The KOF Globalisation Index	The higher the level of <i>Political globalization</i> , the more constrained the Political Power of national elites in the context of the sovereign state becomes. International norms and accountability to supra-national institutions like the WTO limit their Power. International institutions are assumed to be inclusive.	Creation
WPI	Women's Power Index	The <i>Women's Power Index</i> measures the access to political power at the state's top echelons. "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).	The Council of Foreign Relations (CFR)	The higher the levels of gender equality in leading Political Power positions, the higher the diversity of interests, business models and constituencies that will a priori be represented and considered for institutional sanction in the political economy. The <i>Women's Power Index</i> is most effective when combined with other measures such as Social mobility or Government responsiveness to change, jointly constraining the potential for State Capture by narrow elite groups.	Creation

TLA	Indicator Name	A. Indicator Description - What we measure	Dataset source	B. Indicator Rationale - Why we measure	Value Creation/Extraction
GRC	Government's responsiveness to change	This WEF <i>Global Competitiveness Index</i> Indicator 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.	World Economic Forum, The Global Competitiveness Index	<i>Government's responsiveness to change</i> is a determining factor with respect to incentivizing Value Creation business models. A state free from change-resistant vested interests is open to new possibilities, models and interest groups inspired and enabled by emerging trends and disruptions. It is in such an environment that Value Creation opportunities are most recognized and enabled from a regulatory perspective.	Creation
Pillar (i.2): Regulatory Capture					
DBI	Institutional quality	The World Bank <i>Ease of Doing Business Index</i> serves as a proxy to measure institutional quality. "A high ease of doing business ranking means the regulatory environment is more conducive to the starting and operation of a local firm" (WB, Website).	The World Bank, Doing Business Index	The World Bank's benchmark index of "domestic business regulatory environments" measures Institutional quality by examining the regulations affecting local non-elite SMEs, and the regulations that "enhance business activity and those that constrain it". It is a measure of Political Power and Institutional Capture as high-quality institutions are inclusive, support globalization and FI, protect non-elites and forestall the capture of regulators by elites implementing Value Extraction business models.	Creation
CRO	Crony-capitalism	This Indicator measures the wealth accumulated by a nation's billionaires from activities in industries classified as "Crony" by the Economist, i.e. "susceptible to monopoly or requir[ing] licensing or highly depend on the government" (The Economist, 2016).	Forbes [Billionaires list] & The World Bank [GDP]	In Wikipedia <i>Crony-Capitalism</i> is defined as a measure of the "trend in the number of economic rent seekers. The assumption behind is because of the favorable political policies set by the government officials, the tycoons are increasing their wealth and interest. As a result, they get a larger part of people's fruits of labor, instead of generating more wealth for the whole society". ¹ Large rent producing industries are heavily regulated. When 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 Political Power. Otherwise institutions and their regulators would limit returns of these activities, pre-empting the large rents that convert Political Power into Economic Power.	Extraction
EXP	Expropriation risk	"The risk of expropriation encompasses all discriminatory measures taken by a host government which deprive the investor of its investment without any adequate compensation; (...) events of embargo, change of (legal) regime and denial of justice are included. (...) The Indicator does not only assess the risk attached to expropriation as such, but also the functioning of legal institutions in the host country and the probability of a negative change in attitude towards foreign investments" (The Global Economy, Website).	Credendo	Expropriation is a transfer of Value from one subset of the political economy to another affected through institutions that have been captured by the extractive elites. High <i>Expropriation risk</i> reflects high levels of Institutional Capture by elite rent seekers causing deadweight social losses when the business assets in question are transferred. Also, expropriation as an exercise of Political Power lowers the incentives for Value Creation business models in the economy, as it questions the essential institution of private property. Thus, foreign firms and investors with the potential to increase Value in the economy, but whom are even less protected than domestic non-elites, are wary of entering unholy alliances with local elites and stay away.	Extraction
PMI	Protecting Minority Investors	This World Bank <i>Ease of Doing Business</i> Indicator "measures the strength of minority shareholder protections against misuse of corporate assets by directors for their personal gain as well as shareholder rights, governance safeguards and corporate transparency requirements that reduce the risk of abuse" (WB, Website).	The World Bank, Doing Business Indicators	Corporate elites can expropriate Value from more distributed groups if <i>Protecting Minority Investors</i> is not assured by institutions. Shleifer and Vishny (1997, p.759) point out that with weak protections "large owners gain nearly full control and prefer to use firms to generate private benefits of control that are not shared by minority shareholders". The Political Power of a specific elite subset - large shareholder interests and top management of corporations - succeeds in a Regulatory Capture form that pre-empts the efficient allocation of capital to potential Value Creation projects and causes the transfer of Value from distributed minority investors to concentrated interests.	Creation
ECR	Ease to Challenge Regulations	This WEF <i>Global Competitiveness Index</i> Indicator is based on the survey question: "In your country, how easy is it for private businesses to challenge government actions and/or regulations through the legal system" (WEF, Website). The WEF Executive Opinion Survey captures the views of more than 16,000 business executives in 140 countries.	World Economic Forum, The Global Competitiveness Index	<i>Ease to Challenge Regulations</i> by private businesses implies regulatory capture through the legal avenue. Businesses successfully defeat in courts regulations enacted to limit their rent seeking, such as rules that foster competition or otherwise keep Value Extraction activities in check. A counter argument is that the legal system could serve as a check to balance the Power of political elites. *An optimal level might be established in the future.	Extraction
Pillar (i.3): Human Capture					
UNI	Unionization rate	<i>Unionization rate</i> , i.e. the trade union density rate (%), represents the total membership of (independent) trade unions in a nation as a percentage of all employees.	International Labor Organisation, ILOSTAT Database	The <i>Unionization rate</i> points to the Political Power of unions and their political influence and bargaining power. Unions see insiders, a labor elite, representing the interests of certain - not all - workers, and not the unemployed. The higher the <i>Unionization rate</i> , the higher the likelihood that unionized employees, civil servants etc. engage in Value Extraction. A dominant position of unions is associated with intra-labor rent seeking (by setting minimum wages above the market equilibrium, strengthening workers' protection against firing even when engaged in unproductive, Value Extraction behavior, etc.). As a counter argument, low <i>Unionization rates</i> allow for the exploitation of worker surplus by business elites, especially under certain socio-economic situations where labor is unprotected and disallowed from collective action. *An optimal level might be established in the future.	Extraction

TLA	Indicator Name	A. Indicator Description - What we measure	Dataset source	B. Indicator Rationale - Why we measure	Value Creation/Extraction
PSE	Public sector employees as % of total employment	This Indicator is computed as public sector employment in general government sector (defined in System of National Accounts, SNA) plus employment of public corporations, minus employees in public health and education, as % of total employment. The values are obtained by the normalization of the Index "Public administration and defense" by the population.	International Labor Organisation, ILOSTAT Database	Excessive numbers of public sector workers in non-health and non-education areas reflected in <i>Public sector employees as % of total employment</i> point to Political Power of elite labor interest groups. These interest group are extractive when labor markets are distorted and economic productivity suffers. The cost of excessive public sector workers is paid for by taxes or government borrowing, that is by the rest of the working class. As a counter argument, there exists a certain number of tasks in the economy that are most effectively carried out by the public sector. * A tentative optimum is suggested at 1.5% (pending further research).	Non Linear
CBC	Collective Bargaining Coverage	"The collective bargaining coverage rate conveys the number of employees whose pay and/or conditions of employment are determined by one or more collective agreement(s) as a percentage of the total number of employees" (ILOSTAT, Website).	International Labor Organisation, ILOSTAT Database	<i>Collective Bargaining Coverage</i> refers to the bargaining power of employees or groups of employees. The higher their bargaining power, the higher their ability to exert dominance over the political economy. Collective Bargaining Coverage as a reflection of Human Capture and potential Value Extraction is similar to the Unionization rate (UNI, i.3) and might prevent exploitation of workers by corporate elites. However, Unionization rate "only measures the extent of unionization and tells us very little about the influence or bargaining power of unions. Collective bargaining may still play a very significant role and collective agreements cover a high proportion of workers in countries with low trade union density, as is the case in France." (ILO, website). *This Indicator might be subject to an optimum (EQx further research project).	Extraction
GSI	Global Slavery Index	The <i>Global Slavery Index</i> 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 "refers to situations of exploitation that a person cannot refuse or leave because of threats, violence, coercion, abuse of power or deception" (GSI, Report (2018), p. 7). It is an umbrella term that encompasses phenomena such as forced labor, human trafficking and slavery like practices (e.g. forced marriage).	The Minderoo Foundation Pty Ltd and the Walk Free Foundation	Modern slavery is an intolerable form of rent extraction where wealth is transferred from the modern slaves to those whose Value Extraction business models benefit from exploited labor or from wages below market equilibrium. Moreover, the <i>Global Slavery Index</i> goes beyond forced labor and also measures Human Capture in family settings (forced marriage) and in despicable trade activity (human trafficking).	Extraction
WBL	Women, Business and the Law	The <i>Women, Business and the Law index</i> measures "gender inequality in the law. The dataset identifies barriers to women's economic participation" by analyzing "laws and regulations affecting women's economic inclusion" (WB, Website).	The World Bank	Laws and regulations affecting women's inclusion are a blatant form of value extraction, limiting competition in the labor market. These barriers to Value Creation, with the consequent capture of half of the human capital in the economy, are all the more detrimental because they are institutionally explicit and formalized.	Creation
Sub-Index I: Power, Index Area (ii): Economic Power					
Pillar (ii.4): Industry Dominance					
IEE	Top 3 industries exports as % of GDP	This Indicator reflects the sum of the exports of a nation's 3 top exporting industries divided by the country's respective GDP.	United Nations, Comtrade Database [exports] & The World Bank [GDP]	The relative size of an industry measured by <i>Top 3 industries exports as % of GDP</i> , indicates Industry Dominance in the national economy. This power can be derived from Value Creation competitiveness, historical origins, geography (e.g. natural resources or maritime access), or it can derive from Economic Power such as privileged access to resources, and is thus an indicator of concentration on the basis of export and of future Value Extraction. Diversified exports are an indicator of inclusive and broad Value Creation in the economy. A counter argument sees the rationale of specialization in the international market context, especially for smaller countries, even though these ultra-dominant exporting elites might develop an extractive model at home to complement their intentional Value Creation one. *An optimal level might be established in the future.	Extraction
IRE	Top 3 industries as % of GDP	This Indicator reflects the sum of the revenues of a nation's 3 biggest industries divided by the country's respective GDP.	UNdata, Accounts Official Country Data	<i>Top 3 industries as % of GDP</i> reflects the Economic Power of leading industries (without providing any indication of their competitiveness as for instance <i>Top 3 industries exports as % of GDP</i> (IEE, ii.4) does). This measure of Industry Dominance is an indicator of concentration on the basis of the size of their activities, which being domestic afford increased leverage over the national political economy and thus of future potential Value Extraction.	Extraction
ECI	Economic Complexity Index	The <i>Economic Complexity Index</i> sorts countries on the amount of productive knowledge implied in their export structures, i.e. "how diversified and complex their export basket is" (ECI, Website).	The Observatory of Economic Complexity (OEC)	The <i>Economic Complexity Index</i> is a measure of inclusive Value Creation as it measures the diversity of specialized knowledge and organizations throughout the economy, reflecting distributed Economic Power. Elites in countries of high economic complexity are value creators and their cash-flows do not depend on Economic Power but rather on the rich, diverse and broad ecosystems to which they contribute.	Creation

TLA	Indicator Name	A. Indicator Description - What we measure	Dataset source	B. Indicator Rationale - Why we measure	Value Creation/Extraction
IVA	Top 3 industries as % of VA	This Indicator reflects the sum of the value-add induced by a nation's 3 top industries divided by the country's total value-add. Value-add is the net output of a sector after summing all outputs and subtracting intermediate inputs.	UNdata, National Accounts Estimates of Main Aggregates	<i>Top 3 industries as % of VA</i> reflects Economic Power of leading industries. It indicates more industry competitiveness than <i>Top 3 industries as % of GDP</i> (IRE, ii.4) but less than <i>Top 3 industries exports as % of GDP</i> (IEE, ii.4). This measure of Industry Dominance is an Indicator of concentration on the basis of added value and profitability in the domestic political economy and thus provides the resources for future potential Value Extraction.	Creation
Pillar (ii.5): Firm Dominance					
PRO	Top 10 firms profitability	This Indicator measures the average profitability (profits divided by revenues) of a country's top 10 companies in terms of profits.	ThomsonOne	<i>Top 10 firms profitability</i> is an Indicator of Firm Dominance in the economy, which might accrue from Economic Power. The larger the profitability of the nation's top companies, the higher the likelihood that dominance is the result of supracompetitive pricing or other types of Value Extraction anticompetitive conduct. Findings (for the last 20 years in US) show that "profitability has risen for firms in those industries experiencing increases in concentration levels." (Grullon et al., 2019). This measure of Economic Power might correlate with future rent seeking.	Extraction
SME	SMEs per 1,000 people	This Indicator is based on a subset of the MSME Database recording the number of formally registered small and medium-sized enterprises (SMEs) per 1000 people in an economy.	SME Finance Forum, MSME Economic Indicators	<i>SMEs per 1,000 people</i> is a measure of a distributed economy with a diversity of Value Creation models. SME business models must rely on Value Creation; their low Economic Power levels don't afford them many possibilities of Value Extraction. As a counter argument, SMEs have been found to be less efficient than large firms.*An optimal level might be established in the future.	Creation
ATX	Antitrust exemptions	<i>Antitrust exemptions (ATX)</i> is a subset of the OECD Product Market Regulations (PMR) Database and assesses the commonplace of exemption to competition laws in a nation's various industries.	OECD, Product Economic Regulation Statistics	<i>Antitrust exemptions</i> point to monopoly power left unaddressed by institutions. When exemptions abound, Firm Dominance is able to suffocate voices in the political economy that advocate for the elimination of monopoly rents and related Value Extraction. As a counter argument, there has been a long-standing legal debate (in the U.S.) about what constitutes monopolistic competition, with one position centering around consumer welfare and prices, more than on dominance.*An optimal level might be established in the future.	Extraction
BIW	Billionaires' wealth as % of GDP	This Indicator measures the sum of a nation's billionaires' total accumulated wealth (as of last day of calendar year) as a percentage of GDP.	Forbes [Billionaires list] & The World Bank [GDP]	<i>Billionaires' wealth as percentage of GDP</i> shows Firm Dominance by depicting the relative weight of elite firm and asset owners relative to total national income. A billionaire is the narrowest of coalitions as Firm Dominance is traceable to a single individual. Such powerful individuals and the descendants of founder families might switch over time their business models from Value Creation to Extraction if they don't manage to innovate and incorporate into their empires the possibilities afforded by emerging technologies.	Extraction
FKG	Top 10 firms market cap as % of GDP	This Indicator reflects the sum of the market capitalizations of a country's 10 largest firms - defined by market capitalization (as of last day of calendar year) - divided by its GDP.	ThomsonOne	The relative size of leading firms measured by <i>Top 10 firms market cap as % of GDP</i> indicates the level of Economic Power of large firms. Such Firm Dominance can potentially be converted into future Value Extraction.	Extraction
FRG	Top 3 firms revenues as % of GDP	This Indicator reflects the sum of the revenues of a country's 3 largest firms - defined by revenues - divided by its GDP.	ThomsonOne	The relative size of leading firms measured by <i>Top 3 firms revenues as % of GDP</i> indicates very high Economic Power by leading firms, and their high systemic relevance within a country's economy. Such Firm Dominance can potentially be used in the future to extract value. As a counter argument, such giants may benefit from economies of scale and be national champions delivering public goods like innovation, highly paid jobs and knowledge spillovers.*An optimal level might be established in the future.	Extraction
FRR	Top 30 firms revenues as % of GDP	This Indicator reflects the sum of the revenues of a country's 30 largest firms - defined by revenues - divided by its GDP.	ThomsonOne	The relative size of leading firms measured by <i>Top 30 firms revenues as % of GDP</i> indicates the level of Economic Power of large firms. Such Firm Dominance can potentially be used in the future to extract value. As a counter argument, such giants may benefit from economies of scale and be national champions delivering public goods like innovation, highly paid jobs and knowledge spillovers.*An optimal level might be established in the future.	Extraction
LIB	Lerner Index banking sector	The <i>Lerner Index</i> is defined as "the difference between output prices and marginal costs (relative to prices)". This Indicator is focused on the banking sector, therefore "prices are calculated as total bank revenue over assets, whereas marginal costs are obtained from an estimated translog cost function with respect to output" (WB, Website).	The World Bank	The banking sector has a very important function within an economy, as its incentive is to allocate capital to the risk adjusted highest expected return projects in the economy, which theoretically are associated with future Value Creation. The <i>Lerner index banking sector</i> showcases the competition in the banking market and is therefore an important measure of Firm Dominance. Not only would excessive, non-competitive Economic Power distort Value Creation in the banking industry, it would do so at the general economy level.	Extraction

TLA	Indicator Name	A. Indicator Description - What we measure	Dataset source	B. Indicator Rationale - Why we measure	Value Creation/Extraction
Pillar (ii.6): Creative Destruction					
TUL	Listed firms turnover, long run 15 years	This Indicator measures the long-run turnover rate (i.e. replacement rate) of firms in the leading stock exchange indices of the respective countries. The average turnover of the last 15 years is calculated.	Thomson Reuters Eikon	The leading listed companies represent the nation's corporate elites. Their economic dominance is reflected by the length of their tenures in the national stock market indices. <i>Listed firms turnover, long run 15 years</i> measures the Creative Destruction in the top rungs of the corporate world. The higher the turnover, the greater the new Value Creation at the expense of less efficient incumbent firms over the long-run. The assumption here is that incumbent firms are not as innovative, and the counter argument is evidence of large innovators who have passed the test of time. *An optimal level might be established in the future.	Creation
TUS	Listed firms turnover, short run 3 years	This Indicator measures the short-run turnover rate (i.e. replacement rate) of firms in the leading stock exchange indices of the respective countries. The average turnover of the last 3 years is calculated.	Thomson Reuters Eikon	The leading listed companies represent the nation's corporate elites. Their economic dominance is reflected by the length of their tenures in the national stock market indices. <i>Listed firms turnover, short run 3 years</i> measures the Creative Destruction in the top rungs of the corporate world. The higher the turnover, the greater the new Value Creation at the expense of less efficient incumbent firms over the short-run. The assumption here is that incumbent firms are not as innovative, and the counter argument is evidence of large innovators who have passed the test of time. *An optimal level might be established in the future.	Creation
ENT	Entrepreneurship	The level of <i>Entrepreneurship</i> is captured through the <i>GEDI Index</i> , which measures "the entrepreneurial attitudes, abilities and aspirations of the local population (weighted) against the prevailing social and economic infrastructure" (GEDI, Website).	The Global Entrepreneurship and Development Institute (GEDI)	This Indicator evidences institutional and social support for new ventures with Creative Destruction and disruption potential. High <i>Entrepreneurship</i> levels mean that incumbents have low Economic Power so they cannot prevent being disrupted. This Indicator is one measure of Schumpeterian Creative Destruction par excellence in an economy. A counter argument takes issue with the broad definition of entrepreneurship as it includes the last resort variety, which often is an indication not of Creative Destruction but of an underdeveloped economy. *An optimal level might be established in the future.	Creation
VCK	VC finance	This Indicator measures the venture capital (VC) investment in high-growth venture companies divided by the total investment (I) in an economy.	Main: OECD.Stat & Preqin	<i>VC finance</i> funds entrepreneurship and disruptive Value Creation business models which foster Creative Destruction and the renewal of elites. This Indicator is one measure of Schumpeterian Creative Destruction par excellence in an economy. There is a counter argument that sees VC finance as being agnostic in terms of Value Creation/Extraction - that is it will fund business models as long as they generate wealth. *An optimal level might be established in the future.	Creation
RND	R&D % GDP	This Indicator measures the investments in research and development (R&D) divided by a country's GDP. "R&D expenditures includes both capital and current expenditures in the four main sectors: Business enterprise, Government, Higher education and Private non-profit" (WB, Website).	UNESCO Institute for Statistics	<i>R&D as % of GDP</i> is a key indicator of government and private sector efforts to obtain competitive advantage in science and technology. The higher the investment in R&D the more likely innovative products and services will replace and creatively destroy old ones, and with them incumbent organizational structures.	Creation
BTS	Barriers to start-ups	This Indicator is derived from the average (equal weighting) of 2 subsets of the OECD Product Market Regulations (PMR) Database: Barriers to entrepreneurship (BTE) and Administrative burdens on start-ups (ABS).	OECD, Product Economic Regulation Statistics	Regulatory barriers to entry (e.g. licensing) may be based on legitimate rationale (e.g. consumer protection), yet incumbents in many markets will lobby to make <i>Barriers to start-ups</i> more cumbersome and expensive than needed. This reflects the use of existing organization's Economic Power into extractive rules that pre-empt Creative Destruction and the creation of new value by limiting entry and the erection of obstacles to entrepreneurship.	Extraction
ENR	Firm entry ratio	<i>Firm entry ratio</i> is defined as the number of new companies per 1,000 working-age people (15-64).	The World Bank, Doing Business Indicators	A high <i>Firm entry ratio</i> indicates an economy open to aggregate productivity shocks seized by innovative new firm entrants at the expense of incumbents. The replacement processes are a mark of Creative Destruction as it weakens existing elites and is an important factor for total productivity growth.	Creation
EXR	Firm exit ratio	<i>Firm exit ratio</i> measures the death rate of companies, i.e. the "number of enterprise deaths in the reference period (t) divided by the number of enterprises active in t" (OECD, Website).	OECD, SDBS Business Demography Indicators	A high <i>Firm exit ratio</i> 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 relate to firm entry as much as they reflect dominant players achieving greater Economic Power (similar to M&A), a process which might be accelerated by economic downturns with certain Value Creation firms having comparatively less access to rescue packages (e.g. on account of smaller size), as might be case for the Covid-19 crises. *An optimal level might be established in the future.	Creation

TLA	Indicator Name	A. Indicator Description - What we measure	Dataset source	B. Indicator Rationale - Why we measure	Value Creation/Extraction
Sub-Index II: Value, Index Area (i): Political Value					
Pillar (iii.7): Giving Income					
SNT	Subsidies and transfers as % of expenses	Subsidies and transfers 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". Expenses are understood as "cash payments for operating activities of the government in providing goods and services" (WB, Website).	International Monetary Fund, Government Finance Statistics Yearbook (retrieved from the World Bank)	Subsidies and other forms of government mandated redistribution represent direct wealth transfers, Giving Income. <i>Subsidies and transfers as % of expenses</i> measure Political Value (Value obtained or taken away by political means) and the allocation of resources away from value creators to lower economic (even if legitimate) value uses, potentially starving off Value Creation processes from resources. A counter argument sees transfers and subsidies not only in humanitarian terms, but as an investment by government in future Value Creation by agents who do not have access to resources via market processes. *An optimal level might be established in the future.	Extraction
REG	Regional redistribution as % of government budget	Regional redistribution measures government wealth transfers between a country's geographical areas.	Fraser Institute	<i>Regional redistribution as % of government budget</i> represents Giving Income liable to rent seeking through the political process, as states redistribute income across geographical elites and to non-elites. Political Value is shifted from high Value Creation regions and elites to less efficient ones, thereby compromising overall allocative efficiency. A counter argument sees regional distribution not only in humanitarian terms, but as an investment by government in future Value Creation by elites in geographies who do not have access to resources via market processes. *An optimal level might be established in the future.	Extraction
EDU	School life expectancy	<i>School life expectancy</i> reflects the "total number of years of schooling (primary through tertiary) that a child of school entrance age can expect to receive" (UNESCO, Website).	UNESCO Institute for Statistics (UIS. Stats)	The higher and more effective a government education program is in the framework of Giving Income, the more competitive the labor markets and the more opportunities to develop Value Creation business models on the basis of human capital. This maximizes future Value Creation while future rent seeking behaviors ought to decrease because a higher educated public has a greater understanding of Value Extraction models.	Creation
GPS	Expenditure on general public services as % of GDP (dev. fm optimum)	This Indicator considers the general public services subset of the Classification of the functions of Government (COFOG) and reflects the government's expenditure on general public services divided by the respective country's GDP. It encompasses public expenses for the legislative and executive organs, 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, health, culture, education and social protection.	Eurostat, Classification of the functions of government (COFOG) Database	The government must provide certain public services crucial for its citizens. If, however, it covers too extensive a range of services, these might be offered inefficiently, opportunities for rent seeking will appear and the private sector will suffer from competition, encumbering the economy's growth. Political Value ceases when <i>Expenditure on general public services as % of GDP</i> goes beyond (or stays below) a certain threshold. * An optimum is suggested as 1.3% - the level of Singapore - and results in a v-shaped function for this Indicator.	Non Linear
GHS	Global Health Security	The <i>Global Health Security Index</i> provides a comprehensive assessment of the global health security and related capabilities in a country, with a focus on the preparedness to address "infectious disease outbreaks that can lead to international epidemics and pandemics" (GHS Website).	GHS Index by the NTI, JHU and EIU	<i>Global Health Security</i> indicates Political Value created as part of Giving Income. Health security directly enables the operation of Value Creation business models in the economy by protecting human capital and ability to generate value of elites and non-elites alike.	Creation
COV	Covid-19 safety	The <i>COVID-19 Safety Index</i> "assesses countries based on 76 parameters to determine the countries by health safety ratio, treatment efficiency and risk level during the COVID-19 pandemic. Some of the parameters included #COVID19 cases and deaths, geographic size and demographics, hospital capacity, medical expertise, and GovTech e-government systems and defense capabilities" (DKG, Website).	Deep Knowledge Group	<i>Covid-19 safety</i> indicates Political Value created as part of Giving Income. Covid-19 safety directly enables the operation of Value Creation business models in the economy by protecting human capital and ability to generate value of elites and non-elites alike.	Creation
Pillar (iii.8): Taking Income					
DCT	Corporate tax rate (dev. fm optimum)	The <i>Corporate tax rate</i> reflects "the highest statutory corporate tax rate at central government level" (KPMG, Website).	KPMG	A deeply studied and debated issue in society, and for EQx's Taking Income Pillar, is the appropriate <i>Corporate tax rate</i> . <i>Corporate tax rates</i> that are too low can foster a variety of rent seeking behaviors, including companies free riding on public goods (roads etc.) paid for by other sources of government revenue like income tax. <i>Corporate tax rates</i> that are too high discourage productive investments. Deviation from an optimal tax rate on both sides sees the emergence of Value Extraction processes that hinder Value Creation maximization. * A tentative optimum (pending further research) is suggested at 30%, resulting in a non-linear function problem.	Non Linear

TLA	Indicator Name	A. Indicator Description - What we measure	Dataset source	B. Indicator Rationale - Why we measure	Value Creation/Extraction
DKI	Delta capital gains tax vs income tax	This Indicator measures the difference in taxation on financial and human capital (labor), by taking the delta between the individual capital gains tax rate and the individual income tax rate.	PWC [Capital Gain Tax] & KPMG [Personal Income Tax]	Value Extraction (and free riding) takes place when financial and human capital are taxed differently, in terms of Taking Income. In <i>Delta capital gains tax vs income tax</i> , when capital gains tax is higher than income tax then investors are comparatively penalized, and their Value Creation incentives are discouraged. In the opposite case, when income tax is higher than capital gains tax, then investments in human capital are comparatively penalized and related Value Creation is discouraged. * A tentative optimum (pending further research), sees both forms of investment, human and financial, equalized, resulting in a non-linear function problem.	Non Linear
HOM	Homicide rate	A country's <i>Homicide rate</i> measures the number of homicides per 100,000 people per year.	United Nations Office on Drugs and Crime (UNO-DC)	<i>Homicide rate</i> is a proxy for internal peace (and has as counterpart Indicator that measure external peace). The lack of internal peace compromises the ability of the political economy's agents to develop Value Creation business models. Furthermore, absence of domestic security is a failure to deliver inclusive Political Value. Crime falling disproportionately on non-elites is a tax on citizens, hence this Indicator is part of the Taking Income Pillar. Lastly, homicide is an ultimate form of Value Extraction as a measurable economic loss accrues in a context of moral suffering.	Extraction
INE	Top 10% share of pre-tax national income	This Indicator 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 the pre-tax labor income and the pre-tax capital income.	World Inequality Lab, World Inequality Database (WID)	<i>Top 10% share of pre-tax national income</i> is a measure of inequality. Excessive or structural inequality might reflect rigged rules of the game that act as a disincentive to investment in Value Creation activities including investment in new business, 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 reflecting Value Extraction so as to enrich and increase the precision of the Taking Income pillar. * The measures of inequality might require an optimum and further research might be needed to reflect both arguments in a balanced fashion.	Extraction
FDE	Fiscal decentralization	The degree of <i>Fiscal decentralization</i> 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).	International Monetary Fund (IMF)	<i>Fiscal decentralization</i> means Taking Income from where value is generated, 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 of measures or policies implemented by local governments which could lead to both: competitive Value Creation or to excessive competition and a race to the bottom rent seeking game. We take the former position.	Creation
DTR	Tax revenue as % of GDP (dev. fm optimum)	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" (WB, Website). Tax revenue are divided by the respective country's GDP.	International Monetary Fund, Government Finance Statistics Yearbook & World Bank and OECD GDP estimates (retrieved from the World Bank)	A deeply studied and debated issue in society, and for EQx's Taking Income Pillar, is the appropriate <i>Tax revenue as % of GDP</i> . Tax revenue that is too high can foster a variety of rent seeking behaviors for the beneficiaries of those unearned income flows while penalizing tax-paying value creators. Tax revenue that is too low in relation to national income will see the government unable to perform their duties, such as education, health or security. * A tentative optimum (pending further research) is suggested at 12%, resulting in a v-shaped function for this Indicator.	Non Linear
BRD	Battle-related deaths per 100,000 people	<i>Battle-related deaths</i> 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" (WB, Website). The measure is adjusted to a country's population.	Uppsala Conflict Data Program (retrieved from the World Bank)	<i>Battle-related deaths</i> is a proxy for external peace (and has as counterpart Indicator that measures internal peace). The lack of external peace compromises the ability of the political economy's agents to develop Value Creation business models. The absence of external security as Political Value means a tax on citizens, hence this Indicator is part of the Taking Income Pillar. War has also served as a rent seeking mechanism for various groups of elites throughout history. Lastly, battle-related deaths, like homicides and any unnatural loss of human life, is Value Extraction where a measurable economic loss accrues in a context of moral suffering.	Extraction
Pillar (iii.9): Unearned Income					
DUT	Dutch disease propensity	This Indicator 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" (WB, Website).	The World Bank	<i>Dutch disease propensity</i> sees one export-intensive sector based on partially earned or Unearned Income - i.e. natural resources - distorting the economy (e.g. via higher exchange rates hurting the exports of other industries). Since rights for natural resources are granted by the political process and the Dutch disease causes Value Extraction in the economy by the natural resource exporting elites, hurting alternative Value Creation activity, it is considered to be of negative Political Value.	Extraction

TLA	Indicator Name	A. Indicator Description - What we measure	Dataset source	B. Indicator Rationale - Why we measure	Value Creation/Extraction
SOE	State ownership, control and involvement in business	This Indicator is derived from the average (equal weighting) of 6 subsets of the OECD Product Market Regulations (PMR) Database which reflect the state involvement and control in the business sphere: State control (STC), Public ownership (POW), involvement in business operations (IBO), Scope of state-owned enterprises (SCP), Direct control over enterprises (DCB) and Government involvement in network sectors (GIN).	OECD, Product Market Regulations Statistics	<i>State ownership, control and involvement in business</i> is an indicator of immense resources in hands that did not directly participate in the underlying Value Creation other than through political and institutional intervention. SOEs and companies closely tied to the political sphere obtain rights, investments and other state resources that generate income streams and can create opportunities for Value Extraction. The state also crowds out potentially more efficient private sector value creating companies. As a counter argument, Value Creation might be better served if industries with high profitability (natural resources), natural monopolies or requiring large investments (infrastructure or technological development) are state owned. *An optimal level might be established in the future.	Extraction
EPI	Environmental Performance Index	"The EPI ranks countries on 24 performance indicators across ten issue categories covering environmental health and ecosystem vitality. These metrics provide a gauge on a national scale of how close countries are to meeting established environmental policy goals" (EPI, Website).	Yale Center for Environmental Law & Policy	The <i>Environmental Performance Index</i> measures the depletion and spoiling of natural resources such as forests, fisheries, fresh air, biodiversity and water quality. Such activities are in fact 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 impeded too by forestalling the ability of younger generations to make use of these fundamental resources.	Creation
DBT	Government Debt as % of GDP	"Debt 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)" (GE, Website). The level of debt is then divided by the respective country's GDP.	The Global Economy	<i>Government debt as % of GDP</i> measures a future extractive burden on taxpayers. Debt is Unearned Income for the state that will have to be redeemed by future generations of taxpayers (or via indirect means like inflation) which often have no voice when this obligation is undertaken. Debt means that government spending is encouraged to be higher than it would otherwise be with consequent rent seeking opportunities, and the extra state income is not always used to support Value Creation activities but rather transfer and redistributive activities. Counter arguments against austerity are solid and numerous in the policy and academic domains as debt might be appropriate in emergency situations such as wars or economic crises helping to smoothen out cycles, social suffering and providing Keynesian stimuli to kick start the economy. *An optimal level might be established in the future.	Extraction
Sub-Index II: Value, Index Area (iv): Economic Value					
Pillar (iv.10): Producer Rent					
TRF	Trade freedom	Trade freedom is assessed through the <i>Index of Economic Freedom</i> which measures the "absence of tariff and non-tariff barriers that affect imports and exports of goods and services" (HF, 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.	The Heritage Foundation, Index of Economic Freedom	<i>Trade freedom</i> encourages exports, one of the highest Value Creation activities in the economy and one which reflects global competitiveness and encourages innovation. Lack of Trade freedom negatively affects producer Value, creating distortions in the market for goods and services, i.e. rent seeking protectionism by domestic producers. Since Ricardo's discussion on comparative advantage, free trade has been accepted as an undisputed Value Creation mechanism. Counter arguments are, however, on the rise and at the moment the world seems to be experiencing a worrisome trend towards de-globalization and fragmentation. *An optimal level might be established in the future.	Creation
BTE	Barriers to entry	This Indicator is derived from the average (equal weighting) of 6 subsets of the OECD Product Market Regulations (PMR) Database which represent a barrier to entry in business: Licenses and permits system (LPS), Communication and simplification of rules and procedures (CSR), Administrative burdens for corporations (ABC), Administrative burdens for sole proprietor firms (ABP), Legal barriers (LBR); Barriers in network sectors (BEN).	OECD, Product Market Regulations Statistics	<i>Barriers to entry</i> reduce Economic Value, as they serve incumbent elites' business models who benefit from often 'hidden', always protectionist Producer Rent. Obstacles to entry raise the cost of new entrants and novel Value Creation models.	Extraction
FDI	FDI net Inflows as % of GDP	"Foreign direct investment (FDI) are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor" (WB, Website). FDI inflows are divided by a country's GDP and the average over the 3 last available years (2016-2018) becomes the Indicator score.	International Monetary Fund	<i>FDI net Inflows as % of GDP</i> comparatively measures a country's attractiveness to FDI. Lower levels of FDI are a form of Producer Rent protectionism by domestic investors who have limited foreign competition and Value Creation models on their home turf.	Creation

TLA	Indicator Name	A. Indicator Description - What we measure	Dataset source	B. Indicator Rationale - Why we measure	Value Creation/Extraction
BTF	Barriers to FDI	Barriers to foreign direct investment (FDI) are measured through 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, discriminatory screening and approval mechanisms or restrictions on the employment of foreigners as key personnel.	OECD, FDI Regulatory Restrictiveness Index	High Barriers to FDI enable Producer Rent protectionism by domestic investors who have forestalled foreign competition and Value Creation models on their home turf.	Extraction
EGL	Economic globalization	Economic globalization is measured by the economic dimension of the KOF Globalisation Index. The measure includes both trade flows 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.	ETHZ, The KOF Globalisation Index	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 in a domestic economy.	Creation
DHC	Health Care as % of GDP (dev. fm optimum)	This Indicator is based on the Current Health Expenditure (CHE) as % GDP subset of the WHO Global Health Expenditure Database. Health expenditures include expenditures for healthcare goods and services but do not include capital expenditure (e.g. buildings, machinery).	World Health Organization, Global Health Expenditure Database (GHED)	Health care as % of GDP refers to a basic human right and its investment ought to be effective and devoid of extractive activity. The deviation from an optimal spending level is problematic. Spending too little means Value Extraction at the individual level as health issues remain unduly addressed with dire personal consequences. Spending too much on the other hand represents rent seeking in the form of higher prices (for hospitalization, insurance, administration, drugs, etc.). * An optimum has been implemented for this Indicator and it has been adjusted for national income levels in a v-shaped function. For Low/Middle/Upper Middle/High income countries the optimum (pending further research) is respectively, 5%, 6.5%, 8% and 12%.	Non Linear
OFB	Open for Business	This Indicator is based on the Open for Business subset of the U.S. News Best Countries 2020 Ranking and includes factors such as "bureaucracy, cheap manufacturing costs, corruption levels, favorable tax environment and transparent government practices" (USN, Website).	U.S. News, Best Countries Ranking	Open for Business is an Indicator reflecting mainly Producer (Value/) Rent. While not dissimilar to the Institutional quality Indicator, it has a stronger more direct connection the actual activities of economic agents, and hence the inclusion in the Economic Value Index Area. Low levels represent protectionist Value Extraction by national elites and openness sees inclusive Value Creation incentives in the economy.	Creation
Pillar (iv.11): Capital Rent					
DNI	Neutral interest rate (dev. fm optimum)	A measure of the (unobservable) neutral interest rate is derived from the following formula: $k\% + (M1 \text{ growth} / \text{GDP growth})$ with "k%" corresponding to Friedmann's "k" set at 2%. The resulting measure yields an interest rate consistent with long-term growth and determined by the supply and demand for savings (which depend on the money supply from central banks (M1)).	OECD [M1] & World Bank national accounts data [GDP growth]	An interest rate deviation below/above the natural price of money is extractive and sees Capital Rents. The natural price of money, also called Neutral interest rate or Knut Wicksell's (1898) natural interest rate R-star (R*) depicts the rate at which investment fully absorbs saving at full employment (Rachel & Summer, 2019). To operationalize this disputed concept in a simple fashion, we take the increase/decrease in the monetary base effected by central banks that adds/subtracts to/from the supply of capital and leads to an equilibrium price of money (interest rates lower/higher than the free market counterfactual) deviating from the natural rate, causing rents to be extracted (e.g. for those benefiting from asset de/inflation or from access to capital by non-market mechanisms). * The optimum in the formula $[(M1 \text{ growth} / \text{GDP growth}) + k\%]$ sees an (unadjusted at this stage) Friedman's k monetary policy rule of 2% (pending further research).	Non Linear
DOI	Inflation (dev. fm optimum)	Inflation is a measure of the annual percentage change in the Consumer Price Index (CPI). The CPI reflects the change in the cost of goods and services which are representative of a private household consumption. This Indicator is based on the inflation subset of the WEF Global Competitiveness Index.	World Economic Forum, The Global Competitiveness Index (GCI)	Inflation and deflation have distributional effects - Value Extraction for those on the losing side of price changes - between borrowers and lenders and constitutes a Capital Rent. For instance, high inflation provides a rent to borrowers at the expense of lenders. * The optimum inflation is treated as a U-shaped function "to capture the detrimental effects of high inflation and deflation, countries with inflation rates between 0.5% and 4% receive the highest possible score of 100. Outside this range, scores decrease linearly" (GCI Report 2018, p.636).	Creation
CUA	Currency appreciation	Currency appreciation is assessed through a currency's real effective exchange rate (REER). "REER is a measure of how fairly a currency is priced against a basket of its most highly traded peers" (Bruegel, Website). REER therefore reflects the evolution of a country's purchasing power over time, determined by the appreciation or depreciation of its effective exchange rate.	Bruegel	Currency appreciation or depreciation has distributional effects and constitutes Capital Rent. Currency depreciation sees Value Extraction from a nation's majority, holding local currency as their purchasing power declines, to a hedged minority.	Creation
GOL	Gold demand as % of GDP	Gold demand encompasses the demand (in tons) for gold bars and coins and for jewelry. The measure is then divided by a country's GDP.	World Official Gold supply and demand Statistic	Gold is an unproductive store of Value, as the noble metal is rarely used in the credit system or as means for productive investment, tying up capital. Thus, Gold demand as % of GDP reflects a Capital Rent that makes minimal contribution to Value Creation in the economy.	Extraction

TLA	Indicator Name	A. Indicator Description - What we measure	Dataset source	B. Indicator Rationale - Why we measure	Value Creation/Extraction
DMA	M&A as % of Investment (dev. fm optimum)	The M&A deal value in a country is measured by summing up all M&A deals in the respective year with a value greater than USD 100m. The deal value is then divided by the total investment (I) in the respective country.	Thomson Reuters Eikon [M&A] & OECD [Investment]	Excessive M&A as % of investment in the national economy is an indicator of rent seeking companies using M&A as market-dominance plays. The counter argument is that M&A rewards Value Creation and cleans up Value Extraction models, while it leads to further Value Creation as assets are transferred from lower to higher value uses. * The optimal M&A as % of Investment is set at 8% (pending further EQx research).	Non Linear
Pillar (iv.12): Labor Rent					
UEM	Unemployment rate	Unemployment rate "refers to the share of the labor force that is without work but available for and seeking employment" (WB, Website).	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 causing unemployment for vulnerable suppliers of labor (the young, the old, non-union workers).	Extraction
LFP	Labor force participation rate	The labor force participation rate is a measure of the labor force divided by the total working-age population. The former refers to the economically active portion of the population, the latter refers to people aged between 15 and 64.	OECD	Low Labor force participation rate reflects disincentives for Value Creation by labor. The causes might be various, from wages that are too low or idle alternatives that are too attractive (e.g. high unemployment benefits). There might also be barriers to participation in labor markets (e.g. for females) or factors that reflect direct Value Extraction (e.g. under-employment, exploitation).	Creation
WLP	Delta real wage vs labor productivity increases	The delta between real wage and 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 of labor productivity.	OECD	Delta real wage vs labor productivity increases indicates possible Value Extraction in two dimensions. On the one hand, increases in wages above labor productivity indicate Labor Rent in favor of labor (also referred to as "Baumol's cost disease" (Baumol & Bowen, 1966), i.e. the tendency for wages to increase despite stagnating productivity in labor-intensive industries). On the other hand, increases in wages below productivity indicate Labor Rent by firms employing labor. * The optimal score is when wage increases equal productivity increases (even if there is a counter argument that attributes part of the labor productivity increases to investments in capital stock or innovation, and agency not related to labor per se).	Non Linear
LDR	Labor dependency ratio	The labor dependency ratio is a measure of the number of dependents to total employment. Dependents are defined as "persons aged 0 to 14 + persons aged 15 and above that are either outside the labor force or unemployed" (ILO, Website).	International Labor Organization (ILOSTAT Database)	A high Labor dependency ratio can reflect an ever-increasing aging population relying on a proportionally decreasing base of taxpayers, this being a form of intergenerational Labor Rent. There is a risk that taxpayers supporting the previous generation will not get the same benefits from the next generation, meaning that a large segment of population would have less resources for Value Creation.	Extraction
YUN	Youth unemployment rate	"Youth unemployment refers to the share of the labor force ages 15-24 without work but available for and seeking employment" (KOF, Website).	The World Bank (retrieved from The Global Economy)	The most vulnerable segment of political economies that permit Labor Rent are the young. This subgroup is value extracted by older elite workers in labor unions, who, by causing labor to be more expensive, reduce its overall demand with disproportional effects on outsiders. Youth unemployment rate is worrisome as research shows that extended periods of unemployment can have lasting impact for the individual in terms of future employment and Value Creation potential.	Extraction
GWG	Gender wage gap	"The gender wage gap is defined as the difference between male and female median wages divided by the male median wages" (OECD, Website).	OECD	A gender pay gap reflects compensation of female workers less than their male counterparts; these then collect unearned income through extraction of the female workers' revenue. By paying females less than their true economic Value Creation, elites use Power positions to extract value, leaving a smaller slice of the economic pie for female workers. In other cases, a gender pay gap reflects females holding on average lower paying jobs than men, which could reflect a glass ceiling (or lower investments in human capital). This also suggests that the potential of females to create value is being artificially hindered by unfair and discriminatory competition with males and / or biased employment business models, in turn leading to wasted human capital and hence a suboptimal state of the economy.	Extraction

6.5 Indicator Weighting Table

Visual 51: EQx Indicator weighting table

TLA	Variable Name	Within Pillar weight (BAP)	Within EQx weights
Sub-Index I: Power Index Area (i): Political Power			
Pillar (i.1) State Capture			
COR	Political corruption	19.5%	0.8%
MOB	Social Mobility	15.6%	0.7%
PDE	Political decentralization	14.1%	0.6%
ADE	Administrative decentralization	10.9%	0.5%
PGL	Political globalization	12.7%	0.5%
WPI	Women's Power Index	14.1%	0.6%
GRC	Government's responsiveness to change	13.1%	0.5%
Pillar (i.2) Regulatory Capture			
DBI	Institutional quality	32.9%	1.4%
CRO	Crony-capitalism	29.2%	1.3%
EXP	Expropriation risk	19.2%	0.8%
PMI	Protecting Minority Investors	11.9%	0.5%
ECR	Ease to Challenge Regulations	6.8%	0.3%
Pillar (i.3) Human Capture			
UNI	Unionization rate	20.2%	0.6%
PSE	Public sector employees as % of total employment	18.0%	0.6%
CBC	Collective Bargaining Coverage	16.2%	0.5%
GSI	Global Slavery Index	25.1%	0.8%
WBL	Women, Business and the Law	20.4%	0.6%

Sub-Index I: Power Index Area (ii): Economic Power			
Pillar (ii.4) Industry Dominance			
IEE	Top 3 industries exports as % of GDP	22.4%	1.1%
IRE	Top 3 industries as % of GDP	25.3%	1.2%
ECI	Economic Complexity Index	38.4%	1.8%
IVA	Top 3 industries as % of VA	13.9%	0.7%
Pillar (ii.5) Firm Dominance			
PRO	Top 10 firms profitability	13.4%	0.7%
SME	SMEs per 1,000 people	15.0%	0.8%
ATX	Antitrust exemptions	18.0%	0.9%
BIW	Billionaires' wealth as % of GDP	15.6%	0.8%
FKG	Top 10 firms market cap as % of GDP	13.5%	0.7%
FRG	Top 3 firms revenues as % of GDP	5.9%	0.3%
FRR	Top 30 firms revenues as % of GDP	9.7%	0.5%
LIB	Lerner Index banking sector	8.8%	0.5%
Pillar (ii.6) Creative Destruction			
TUL	Listed firms turnover, long run 15 years	7.5%	0.9%
TUS	Listed firms turnover, short run 3 years	9.3%	1.2%
ENT	Entrepreneurship	21.4%	2.7%
VCK	VC finance	21.4%	2.7%
RND	R&D % GDP	10.6%	1.3%
BTS	Barriers to start-ups	15.1%	1.9%
ENR	Firm entry ratio	10.5%	1.3%
EXR	Firm exit ratio	4.3%	0.5%

TLA	Variable Name	Within Pillar weight (BAP)	Within EQx weights
Sub-Index II: Value Index Area (iii): Political Value			
Pillar (iii.7) Giving Income			
SNT	Subsidies and transfers as % of expenses	22.3%	1.8%
REG	Regional redistribution as % of government budget	19.4%	1.6%
EDU	School life expectancy	20.4%	1.7%
GPS	Expenditure on general public services as % of GDP (dev. fm optimum)	13.7%	1.1%
GHS	Global Health Security	8.6%	0.7%
COV	Covid-19 safety	15.7%	1.3%
Pillar (iii.8) Taking Income			
DCT	Corporate tax rate (dev. fm optimum)	12.7%	1.0%
DKI	Delta capital gains tax vs income tax	15.7%	1.2%
HOM	Homicide rate	22.9%	1.9%
INE	Top 10% share of pre-tax national income	10.2%	0.8%
FDE	Fiscal decentralization	13.5%	1.1%
DTR	Tax revenue as % of GDP (dev. fm optimum)	13.3%	1.1%
BRD	Battle-related deaths per 100,000 people	11.8%	1.0%
Pillar (iii.9) Unearned Income			
DUT	Dutch disease propensity	22.1%	1.4%
SOE	State ownership, control and involvement in business	17.6%	1.1%
EPI	Environmental Performance Index	34.2%	2.1%
DBT	Government Debt as % of GDP	26.1%	1.6%

Sub-Index II: Value Index Area (iv): Economic Value			
Pillar (iv.10) Producer Rent			
TRF	Trade freedom	20.0%	2.5%
BTE	Barriers to entry	21.2%	2.7%
FDI	FDI net Inflows as % of GDP	16.8%	2.1%
BTF	Barriers to FDI	10.9%	1.4%
EGL	Economic globalization	12.0%	1.5%
DHC	Health Care as % of GDP (dev. fm optimum)	13.0%	1.7%
OFB	Open for Business	6.0%	0.8%
Pillar (iv.11) Capital Rent			
DNI	Neutral interest rate (dev. fm optimum)	31.31%	4.6%
DOI	Inflation (dev. fm optimum)	22.81%	3.4%
CUA	Currency appreciation	18.42%	2.7%
GOL	Gold demand as % of GDP	9.48%	1.4%
DMA	M&A as % of Investment (dev. fm optimum)	18.0%	2.7%
Pillar (iv.12) Labor Rent			
UEM	Unemployment rate	23.7%	3.8%
LFP	Labor force participation rate	8.7%	1.4%
WLP	Delta real wage vs labor productivity increases	19.6%	3.2%
LDR	Labor dependency ratio	10.1%	1.6%
YUN	Youth unemployment rate	20.5%	3.3%
GWG	Gender wage gap	17.3%	2.8%

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7.2 Data Sources, Indicators references

The first reference is to the source that supplies the data used. A follow up reference might be provided for additional, relevant literature

* Data sources are indicated with an asterisk when the data provider requested a specific citation format:

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- iii.7 • Regional redistribution as % of government budget (REG), uses data from:
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- iii.7 • Expenditure on general public services as % of GDP (GPS), uses data from:
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7.3 End Notes

Chapter 1: Introduction

¹ Narratives are increasingly becoming objects of study in economics, partially as a result of Robert J. Shiller's 2017 seminal Narrative Economics article; in the areas of management and leadership their relevance for effective collective action is increasingly discussed (e.g. Hagel, 2011; Buckup & Casas, 2018).

² The analogy between Value Creation vs rent seeking behavior and the 'pie' comes from "Planet Plutocrat" (The Economist, 2014)

Chapter 4: EQx Country analysis, Authors

The EQx country analysis and special regional analysis presented in chapter 4 are the result of the valuable contribution of several authors. A suggested citation format is presented with the example of France. The individual DOI of each contribution can be found below.

France: Diebold, C., & van der Watt, D. (2020). Country Scorecards, Deep Dive Analysis: France, Able to increase Elite Quality – but no signs it will do so across the board. In Casas i Klett, T., & Cozzi, G. (Eds). *Elite Quality Report 2020: 32 Country Scores and Global Rank* (pp.34-35). Seismo. doi: 10.33058/seismo.30750.01

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Style note

All the terms original to EQx such 'Elite Quality' or 'enlightened elites' when introduced will have single quotation marks. Thereafter the marks will disappear, but the term might be rendered in italics. Terms that depict a component of the EQx index are capitalized as for example Power Sub-Index, Economic Dimension, Political Value Index Area, Creative Destruction Pillar or Indicator. The Pillars are followed by their Pillar Code as in Creative Destruction (ii.6). The Indicators themselves are referred to in italics and are followed by their Indicator Code in brackets as in *Currency appreciation* (CUA, iv.11). Terms that represent proprietary frameworks such as State of Elites framework or Index Area matrix will be capitalized. This Report's citations are based on APA 6th edition standard. All references to indices in the Report are italicized (e.g. *Environmental Performance Index*).

86 Chapter 4: EQx Country analysis, in-text references

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Forthcoming, EQx2021



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The *Elite Quality Report 2021: Country Scores and Global Rank* (EQx2021) is under development and planned for release in 2021. It will feature:

- Value Creation **responses to Covid-19**: Analysis of long-term economic prospects through the unique Elite Quality framework
- **New Indicators** will expand the existing 72 datasets to capture additional evidence of Value Creation in the political economy
- **100+ Countries**, up from the initial 32 country coverage in the EQx2020

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Chief Economist



Camille Zeller
Data Manager



Anton Antonov
Index Platform Manager



Céline Diebold
Statistics Manager



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Research Analyst

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