

Chapter 6

Towards measurements for an elite theory of economic development

The preceding chapters have proposed new relationships between conceptual elements related to the phenomena of elites in line with what conceptual work should be, as per Gilson and Goldberg (2015). These relationships are both grounded in and crafted from the integration of disparate literatures and constitute a general framework that hones in on elite agency. The discrete conceptual elements are integrated into a system, but their refutability necessitates that they are operationalized as measurements to support both research and practice (see Figure P.1). The fundamental idea, relevant for society at large and with practical applications for policymaking and firm strategy, is the primacy of value creation. Yet, as has been repeatably stressed in this book and formalized in the ‘all elite agency creates and transfers value’ (realist) inference (see Figure 8.7), first-order value creation and second-order value transfers co-exist in every (elite and non-elite) business model (the impulse from Chapter 2 onwards has been to quantify the proportion of value transfer-IN/OUT). Eccles (2024) notes that: “Almost all companies produce negative externalities, even those that have both strong ESG performance and a positive impact on the world”. In aggregating value creation and value transfers as fundamental inputs at the elite system level, the balance between the two becomes germane to economic and human development.

To ascertain the overall development potential of a nation and the impact of the national elite system—the central sub-system of a political economy (see Figure 3.8)—requires that elite quality, the critical emergent property, be operationalized. The initial measurement choice is a global comparative composite index of elite quality. This chapter therefore advances the theoretical foundations for nation-level sustainable value creation (SVC) measurements and starts with a review of a comparative index—the Elite Quality Index (EQx)—designed to capture the aggregate micro-level agency of individual elites, the eventual objective being its empirical validation. This index, if robust (OECD, 2008; Santeramo, 2017; Casas, Cozzi, Diebold, & Zeller, 2020; Diebold, 2022), will together with other SVC measurements be reflective of the current state of meso-level national elite systems, a heuristic relevant to international macro-level analysis and, once validated, possibly an input for the econometric approaches used in economic forecasting and macroeconomic modeling.

Section 6.1 opens this chapter by establishing the existence of an elite quality measurement gap. The impact that elite business models have on institutions and development (Figure 4.2) requires an SVC measurement for nations. Section 6.2 presents the operationalization of the meso-level index based on the EQx2024 version, reviewing its architecture and constituent elements, including the indivisible *indicators* that signify and quantify inclusive value creation and extractive value transfers in the politi-

cal economy. Narratives and frameworks to interpret the globally comparative EQx are offered in Section 6.3, while Section 6.4 considers the limitations of the EQx measurement. Section 6.5 presents additional elite quality measurements that are both complimentary and go beyond the EQx, including the meso-level ‘Perceptions of Elites Survey’ (‘PEz’) for both elites and non-elites, and the country-specific Elite Quality Rating (EQr). Section 6.6 changes the analytical perspective to advance and operationalize firm-level SVC measurements (like the VCr, see Chapter 2) that mirror elite quality by establishing its constituent elements, the indivisible *metrics* that express and quantify the extractive and inclusive value transfers of the business model. Micro-level ‘SVC Metrics Self-assessment Survey’ instruments for firms: the ‘Self-assessment Value Creation Position’ (‘self-VCp’), the ‘Self-assessment Value Creation Rating’ (‘self-VCr’), and the 360-degree principal and stakeholder ‘Perceptions of Value Creation Survey’ (‘360-VCz’) complete the measurement toolbox. Finally, it is stressed that risk origination and risk transfers are critical for all of the SVC measurements suggested for the ETED.

6.1 Is there a measurement gap?

Preceding chapters have developed the link between institutional change and elite agency. Institutions are already being measured at different levels of aggregation, often for policy-making purposes. Kunčič (2014, p. 135) identified over “30 established institutional indicators” categorized into three groups—legal, political, and economic—to describe “the complete formal institutional environment of a country”. The *Ease of Doing Business Index* (The World Bank, 2020) became “a major resource for academics, journalists, and policymakers”, and “has passed from being a data source and research tool to playing a role in the political economy of development policy” (Besley, 2015, pp. 99–100). In the same vein, a “World Institutional Quality Ranking” would establish “whether a country is improving or worsening its relative institutional environment” (Kunčič, 2014, p. 135). Specific institutional quality variables are extensively collected and widely used in economic reports and analysis by governments, central banks, and the finance industry. Core statistics on economic growth, inflation, or employment, are often complemented by other measurements describing the political economy or its sub-systems, including indices on economic competitiveness, such as *The Global Competitiveness Report* produced by The World Economic Forum (Schwab & Zahidi, 2020), or on innovation, such as the output pillars of *The Global Innovation Index* produced by the World Intellectual Property Organization (WIPO, 2021).

This work’s overarching ‘sustainable value creation’ framework, with its focus on the business model, requires that elite agency, the microfoundation of institutional formation and change (see Section 4.2), be quantified and aggregated. This connects with the literature on institutional quality as a leading cause of human and economic development (e.g., Acemoglu & Robinson, 2013a). Consistent with the view of this inquiry that elite agency is paramount, Brezis and Temin (2007, p. 5) note in their literature review

that: “this small group called the elite has numerous effects on the world economy”. What attempts have then been made to operationalize “the elite”? The answer is relatively few given its importance, and the emphasis is usually on institutional aspects. For example, the “Weberianness Scale” (Evans & Rauch, 1999, p. 748) measures the “meritocratic recruitment” of state elites, claiming that elite Weberian characteristics, especially in East Asia, “significantly enhance prospects for economic growth, even when we control for initial levels of GDP per capita and human capital”. Such meritocratic determination of elite status is consistent with North, Wallis, and Weingast’s (2006) open access social orders,¹¹⁸ brings Schumpeterian creative destruction to politics, while describing the value creation possibilities in the political economy. Overall, progress has been made in developing data sets that link theory to measurements of elites and their agency since Kerbo and Della Fave (1979, p. 5) observed that while “empirical data have been considered for elite backgrounds, elite interlock, elite unity, and elite influence on public policy [the] interpretation of the data continue to be problematic”. For instance, the Swiss elite observatory database “has more than 40,000 entries about political, economic, administrative and academic elites in the 20th and 21st century”¹¹⁹ and has been used to ascertain transitions of elite coordination models (Bühlmann, Beetschen, David, Ginalska, & Mach, 2017). The *World Elite Database* (WED) is “an international consortium of 70 social scientists founded in 2022” that goes a step further by studying populations “to systematically describe, compare and explain national economic power structures” (Bühlmann et al, 2025, p. 2).

The elite business model perspective central to this inquiry is, however, seldom central to global comparative measurements of institutions and elites. Some notable exceptions do exist, such as *The Crony-Capitalism Index* produced by *The Economist*, which drew from the ideas of Gandhi and Walton (2012) and measured the national aggregate wealth of billionaires active in “rent-heavy industries” (such as casinos, timber, oil, steel, real-estate, defense, or telecoms services) that are “vulnerable to monopoly or that involve licensing or heavy state involvement” (*The Economist*, 2014). As an invaluable—albeit narrow—proxy for the sustainable value creation of national elite systems, the measurement could have been expanded, for instance, by comparing self-made vs inherited billionaires (the former more likely to be value creators) or self-made female vs male billionaires (again, the former are the more probable value creators). Crony capitalism is “an ideology supporting substantial state interference in the allocation of resources; institutions and practices that facilitate rent-seeking” (Klein, Holmes, Foss, Terjesen, & Pepe, 2021, p. 9) that requires

118 The design of educational institutions for meritocratic elite recruitment is a mark of open social order, but might end up achieving the opposite if an institution is captured by incumbent elites. When the French President circulated the idea to close the Ecole Nationale d’Administration (ENA) it appeared consistent with public perceptions of entrenched, unimaginative, and extractive elites. See *The Financial Times* article: “Macron to close training school of French elite” (Abboud, 2021).

119 See the Swiss Elite Database website: <https://www2.unil.ch/elitessuisses>

“collusion among elites” (Pei, 2016, p. 21). It is an omnipresent risk for all political economies—from China to the most advanced capitalist countries—and it is not unusual for the rentier elite coalitions to be broad-based with non-elite beneficiaries such as local professions, alcohol distributors, or taxicab syndicates (see Mellor and Carpenter’s *Bottleneckers*, 2016). Gandhi and Walton’s proposal to operationalize the concept in order to address the danger it presents to the economic and social fabric (e.g., Stockman, 2013; Holcombe & Castillo, 2013; Klein, Holmes, Foss, Terjesen, & Pepe, 2021) ought to be a component of any measurement of elite quality.¹²⁰

Despite its discontinuation after just two iterations, it is worth reflecting on the findings, interpretations, and practical implications of the initial *Crony-Capitalism Index*. The closer to a score of 100, the worse the levels of crony capitalism were deemed to be in a country. In its first edition, in 2014, the worst performer (i.e., the economy most prone to crony capitalism) was the Hong Kong Special Administration Region (SAR), with a score nearing 80 out of 100. That score was drastically worse than second-worst placed Russia, with a score close to 20 (the fifth-worst placed territory was Singapore with a score close to 15). Interestingly, in the second edition (*The Economist*, 2016), Hong Kong was purged from the list altogether and the SAR data merged with China’s, resulting in that country’s ranking falling from being the 4th best to a middling 11th position. The discontinuance by the World Bank of its *Ease of Doing Business Index* due to data manipulation allegations sent shock waves across the world, with Jeffrey Sachs (2021) blaming it on “Anti-China hysteria” and Joseph Stiglitz (2021) calling the affair a “hatchet job” of a geopolitical nature. These developments point to how global indices irritate some and ruffle feathers. They also reveal that the international political economy of measurements often overshadows the political economy measurements themselves.

The dearth of elite agency measurements that can then be linked to development is due to a variety of reasons such as the cross-disciplinary nature of the concept, weak theoretical foundations, and elite fallacies (see Table A4.1) associated with public controversy. The first two chapters of this book partially address these issues by defining elites in terms of elite business models and elite agency in terms of value creation and value transfers (in reference to this work’s ontological assumption). Elites operate the highest residual income generating business models that produce varying degrees of sustainable value creation (as in the VCr). The novel claim that this inquiry makes is that the value creation and transfers of micro-level elite business models is directly and indirectly observable, computable, and, when aggregated at the meso-level as elite quality (as in the EQx), sheds light on the prospects for development.

¹²⁰ The Crony-Capitalism Index, based on Gandhi and Walton’s methodology, lives on as the ‘CRO’, one of the 146 indicators used for the EQx2024 (Casas-Klett & Cozzi, 2024, p. 141). See: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4779686

The elite quality of an elite system is an essential independent factor at the beginning of a causal chain that leads to degrees of economic and human development performance. Essentially, elite quality is derived from the rent-seeking literature (see Section 5.2.1) and conceptually close to constructs like Turchin’s “wealth pump” (2023).¹²¹ Importantly, elite quality as a ‘phenomenon’ at the system level has a nature that precisely conforms to O’Connor’s understanding of emergence since it “is at once grounded in and yet emergent from the underlying material structure with which it is associated” (1994, p. 91). Elite quality emerges from the sustainable value creation of elite business models seeking to maximize profit. Elite business models, which are neither uniform nor homogenous but are all embedded in the complex national elite system, interact with each other and co-evolve. Elite quality then emerges as an antecedent of institutional quality. In this theoretical paradigm, institutional quality refers to the inclusive/extractive rules (for business models and intra-elite contests) that enable or constrain elite business models. The premise is that elite agency causes institutional change (see Proposition 14) and is thus ultimately responsible for the definitive dependent variables in the economy, those describing human and economic development. This reasoning is depicted in Figure 6.1.

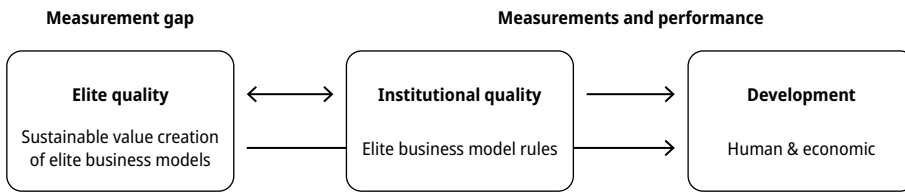


Figure 6.1: The relationship between elite quality (independent variable), institutional quality, and development performance (dependent variables).

The initial SVC measurement of elite quality is a synthetic composite index (Freudenberg, 2003; Ivaldi, Bonatti, & Soliani, 2016) similar to indices measuring other discrete economic phenomena such as the previously cited examples of competitiveness or innovation. The EQx is a global comparative ranking that highlights the relative elite quality

¹²¹ Technically, the various extractive activities of a business model consolidate into a single “wealth pump”. Business models are the analytically relevant object at the micro-level from both the VCA and the macro-level economic development perspectives. When an examination of the political economy takes the general non-elite viewpoint, one might think of a single wealth pump for a nation, which is what the elite quality conceptual element does. When the sum of all pumps is conceived of as such an outsized device, the inimical effects of transfers on general welfare become more apparent. While distinct from the ‘national business model’, elite individuals can be beneficiaries of multiple business models and hence derive their residual income from multiple pumps. The ‘net value extraction’ component of the value chain (see Figure 2.7) can be considered an operationalization of a given organization’s wealth pump.

of a specific country (in relation to other countries), while a longitudinal dataset, the ‘Panel-EQx’ (‘PEQx’, see Casas-Klett, Cozzi, Diebold, & Tonn, 2024, pp. 32–35)¹²² highlights its evolution. A composite or “aggregated index comprising individual indicators” (Nardo, Saisana, Saltelli, & Tarantola, 2005, p. 4) aims to provide insights for both research and practice and is beneficial due to its “ability to integrate large amounts of information into easily understood formats and are valued as a communication and political tool” (Freudenberg, 2003, p. 2). The benefits of such a measurement also emanate from the fact that “rankings are seen as a form of information intermediation, as comparative orderings, or as a means for surveillance and control” (Rindova, Martins, Srinivas, & Chandler, 2018, p. 2175). An index that describes the sustainable value creation of elites will invite debate, as “measurements are not neutral: they affect behavior and vice versa” (Mazzucato, 2019), an assertion that is in the vein of the ETED.

The annual EQx, first released in 2020, has been undergoing comprehensive development and validation (Diebold, 2022). Based on relevant literature, the preparatory and initial steps described here (following the index construction methodology of the OECD, 2008) have established the conceptual index architecture that operationalizes many of the ideas associated with elite agency, sustainable value creation, and elite quality presented in this inquiry. Finally, it must be emphasized that the EQx is a meso-level measurement that uses macro-level data series (indicators) as proxies for elite agency. More intricate and refined bottom-up micro-to-meso approaches for computing elite quality that use consolidated micro-level SVC measurements based on firm data (metrics) are also proposed later in this chapter (Section 6.5.2).

6.2 The EQx operationalization of elite quality: A four-level conceptual architecture

This section discusses the Elite Quality Index (EQx), the comparative SVC measurement for the ‘sustainable value creation of nations’ in both conceptual and methodological terms, starting with the two sub-indices (6.2.1) and the two index dimensions (6.2.2). It then takes a step back to present the overall index architecture (6.2.3) before delving into the four index areas and the 12 pillars, each of which have their own indicators (6.2.4). Finally, the weighting methodology is discussed (6.2.5). Each subsection introduces specific EQx terms, a vocabulary that is summarized in Table A3.2.

A composite index is built on its multiple data sources. These are conceptually indivisible discrete indicators that jointly make up the index. For the EQx, each of these indicators must represent a quantifiable phenomenon in the political economy that provides evidence of first-order value creation or extraction (i.e., second-order

¹²² Data, featuring country comparison webtools, available at: <https://www.unisg.ch/en/research/research-in-focus/elite-quality-index/>

value transfers). An EQx indicator is a data set reflecting the relative positions of nations and their relevant elite business models along a conceptual ‘elite system value spectrum’ (paralleling the firm-level value spectrum set out in Figure 2.10) that ranges from absolute value creation to absolute value extraction (transfers). When aggregated (see the initial methodology paper by Casas-Klett, Cozzi, Diebold, & Zeller, 2020), these indicators specify in global comparative terms the value creation of the meso-level elite system. Venture capital, school life expectancy, and free trade policies all constitute evidence of sustainable value creation by elite business models. Monopolies, trade barriers, or the existence of modern-day slavery are extractive transfers and proof of the contrary. These six examples point to the diversity and dynamism of elite business models and how they are manifested in society, as well as to the need for clear conceptual categories and a logical structure to meaningfully arrange indicator datasets in the index.

6.2.1 Two sub-indices: ‘Power’ and ‘Value’

The operationalization of elite quality requires an architecture that sorts and logically organizes diverse component indicators. Based on the preceding theoretical discussion and the centrality of sustainable value creation, the key foundational element in this endeavor is ‘value’ which is expressed as two sub-indices: ‘power’ and ‘value’. The data that directly measures present value (its creation or extraction/transfer) is incorporated into the ‘value’ sub-index. Given the forward-looking nature of the index, potential future value (its creation or extraction/transfer) is then measured in the ‘power’ sub-index. Our earlier review of power led to the conjecture that power represents future potential (in probabilistic terms) value transfers, i.e., extraction (see Section 4.5). It is commonly accepted that both political and economic power enable elites to “extract a great deal of such rent from everybody else” (see Wolf, 2019); hence, the ‘power as potential future value extraction’ assumption of the ETED. Power is a predictor of extractive value transfers because it is a pre-condition for ‘value appropriated but *not* created’, one that—and this is critical and relates to the leadership notion of this work—is not necessarily deployed by elites for extractive purposes even if it is abundantly possessed.¹²³ Therefore, in the weighting schema of the index, the ‘power’ sub-index has a lower weight than the ‘value’ sub-index (see Section 6.2.5). Since power is *conditio sine qua non* for extraction, the ‘power’ sub-index is referred to as sub-index I. The ‘value’ sub-index is referred to as sub-index II.

¹²³ Relatedly see the ‘inextinguishable value creation option of elites’ assumption, Section 2.2.1.

6.2.2 Two index dimensions: ‘Political’ and ‘Economic’

Each dataset or indicator incorporated in the index belongs to one of two dimensions: ‘political’ or ‘economic’ (measuring the respective agency of political and economic elites). The ‘value’ sub-index (measuring value creation at present) and the ‘power’ sub-index (measuring probable value creation in the future) in conjunction with the two dimensions, ‘political’ and ‘economic’, produce a 2x2 matrix (Figure 6.2) with four index areas or sectors. All indicators in the EQx are allocated to one of these index areas: ‘political power’, ‘economic power’, ‘political value’, or ‘economic value’ as is represented in the ‘The Political Economy Power and Value Matrix’ of Figure 6.2.

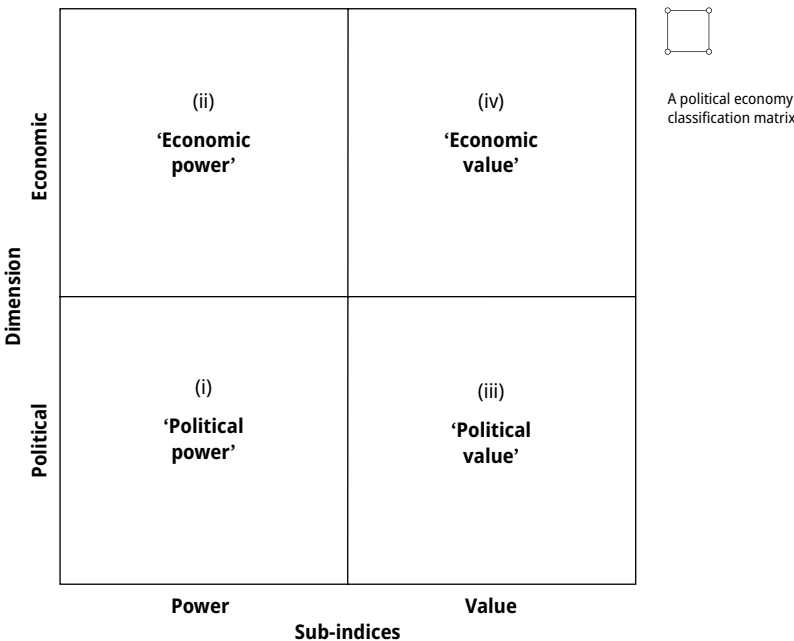


Figure 6.2: The Political Economy Power and Value Matrix.¹²⁴

6.2.3 Index architecture

The index is constructed in four levels. The higher three levels of the index are the result of data that has been normalized, aggregated, and weighted as methodologically appropriate. The EQx aggregate score is given at level 1. The two sub-indices

¹²⁴ Note that the quadrants of Figures 6.2 and 6.4 use roman numerals that are consistent with the EQx architecture’s annotation standards.

(‘power’ and ‘value’) are combined with the two dimensions (‘political’ and ‘economic’) yielding the four index areas discussed in the previous sub-section (see Figure 6.2), all of which are structurally set at level 2. The structure becomes more granular with the level 3 categories. Each of the four index areas has 3 pillars (resulting in a total of 12 pillars at level 3). Each pillar embodies a clear and academically grounded idea that conceptually fits with one of the four index areas of level 2. Each pillar at level 3 then in turn becomes the conceptual home for the level 4 indicators. These indivisible indicators have their origin in datasets taken from multiple sources. Each dataset has a rationale for its materiality in terms of value creation/extraction (see Casas-Klett & Cozzi, 2024, pp. 136–172; Section 6.4.1) and a value creation optima is determined (Section 6.4.2) as the data undergoes methodological refinement to be used as an indicator by the index. EQx indicators constitute fundamental evidence of meso-level value creation/extraction and represent phenomena emanating from elite business models that are relevant for the macro aggregate level. Each indicator is allocated to one of the 12 pillars based on conceptual proximity (this allocation may involve judgment calls as some indicators have a conceptual affinity to more than one pillar). The 12 proposed pillars (3 for each index area) are identified and situated within the architecture in Figure 6.3.

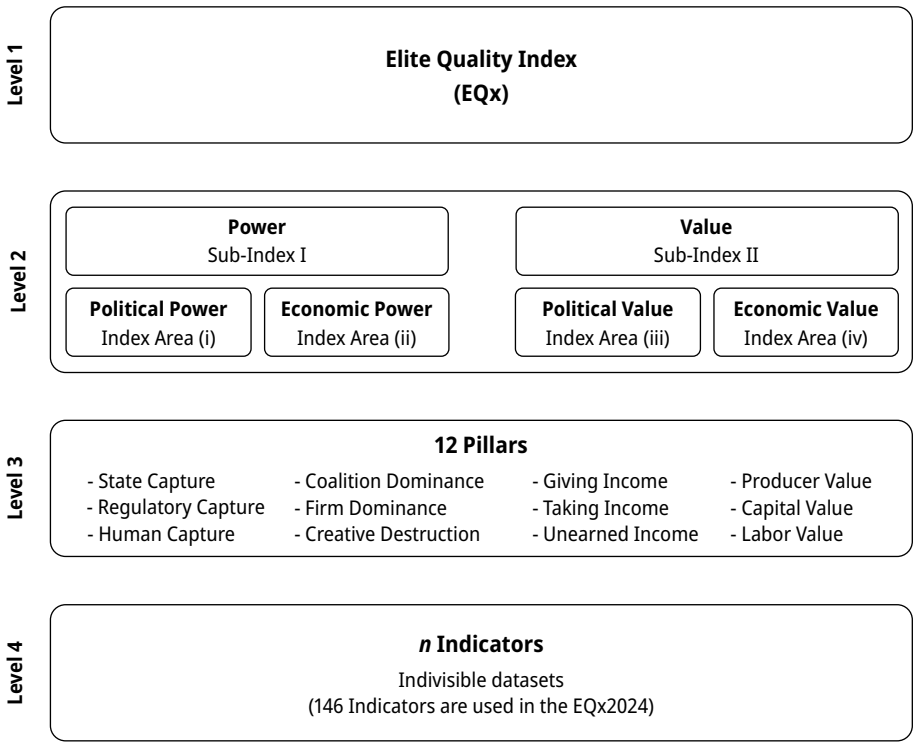


Figure 6.3: The four-level architecture of the Elite Quality Index (EQx).

6.2.4 Index area pillars and exemplar indicators

This section introduces and discusses all 12 of the EQx pillars in the four index areas and provides exemplar indicators for illustration purposes (for actual EQx indicators, see the global elite quality reports, Casas-Klett & Cozzi, 2020, 2021, 2022, 2023, 2024).

Power (sub-index I) is the theme of the first two index areas, representing the ability of elites to realize their preferences (see Section 4.2), and has been conceptualized in this work (see Figure A5.1) as ‘money’, ‘might’, and ‘mind’, the result of wins in the three political economy contest arenas (market, non-market, and narrative market). Once elite coordination leadership secures the “common will” (Arendt, 1970) and ‘the extraordinary lever’ (see Figures A5.3a and A5.3b), underlying power is converted through elite business model leadership into residual income (the flow is described in Figures 4.1 and 4.4). The ‘political’ and ‘economic’ dimensions of the index mean that power is measured through both of these lenses.

The first index area is (i) political power, and its grounding idea, one that clearly lends itself well to operationalization, is the notion of ‘capture’. Associated with the work of Stigler (1971), or Laffont and Tirole (1991), the concept of capture emerges from theories on regulation. Regulation has been viewed as “simply an arena in which special interests contend for the right to use government power for narrow advantage” (Levine & Forrence, 1990, p. 167). Using this notion, the first two pillars are proposed. Datasets that provide evidence of the capture of state apparatus, including the government, are assigned to the ‘state capture’ pillar (i.1). “Elites organize” state capture whose “essence lies in a distinct network structure in which corrupt actors cluster around parts of the state allowing them to act collectively in pursuance of their private goals to the detriment of the public good” (Fazekas & Tóth, 2016, pp. 320–321). Mazzucato and Collington (2023) have created a polemic by arguing that state capture is at present organized by knowledge elites such as McKinsey, Boston Consulting Group, Bain & Company, PwC, Deloitte, KPMG, and EY. This pillar includes indicators such as political turnover, social mobility or corruption. The second pillar is the ‘regulatory capture’ pillar (i.2) that directly addresses the aforementioned capture by zeroing in on the enabling rules. Its indicators include measures of overall institutional quality such as expropriation risk, but also power phenomena associated with institutional change, such as permitting crony capitalism (see Section 6.1). Lastly in the political power index area, the ‘human capture’ pillar (i.3) concerns itself with the power of elite business models over the agency of people. Its component indicators measure diverse facets of power applied in an extractive way over humans through business models that, for example, lack gender inclusiveness, absent academic freedom, or add to modern-day slavery.

For the economic power index area (ii), the constitutive concept is ‘dominance’; that is, a phenomenon that is an anathema to free markets and Smithian competitive processes, and to capitalism as originally described. Concentrations of economic power are obviously expected in non-capitalistic and authoritarian regimes but are

also amply found in ostensibly capitalistic and democratic systems (Wedel, 2009; Zingales, 2012; Standing, 2016; Tepper, 2018; Streeck, 2016). The relevance of these is underscored by empirical “evidence that competition, as measured by increased numbers of competitors or by lower levels of rents, is associated with a significantly higher rate of total factor productivity growth” (Nickell, 1996, p. 724), now a generally accepted understanding (see the work of Geroski, 1989; Lever & Nieuwenhuijsen, 1999). Thus, the economic power index area (ii) first puts forth an Olsonian ‘coalition dominance’ pillar (ii.4) focusing on the influence of agglomerated business models on the power of groups in specific industries or labor market domains. The power of individual organizations is then ascertained with the ‘firm dominance’ pillar (ii.5). The coalition dominance pillar measures economic complexity, unionization rates, or the economic output of top industries as a percentage of GDP, while the firm dominance pillar includes indicators on the profitability of leading firms, such as the prevalence of SMEs, or the relative economic power of billionaires (including self-made billionaires) in an economy. The third pillar in the economic power index area is the opposite of both the above: the anti-dominance Schumpeterian notion of ‘creative destruction’ (ii.6). Evidence of unimpeded Hayekian markets and of the free realization of humanity’s creative and innovative potential is represented here through indicators that measure firm entry and exit ratios, and facets of entrepreneurship such as government support or access to venture capital.

The third and fourth index areas—‘political value’ and ‘economic value’—are concerned with the theme of sub-index II, value, and its creation and transfer. Again, value represents the ability to create something that humans determine is worth appropriating. The political value index area (iii) has three pillars all grounded by the concept of income. The first two pillars focus on income ‘given’ (value created by a political principal benefiting a stakeholder) and income ‘taken’ (value transferred to a political principal that is appropriated from a stakeholder). Transfers are a direct result of intra-elite contests in the non-market arena (through the agency of political elites), and, more indirectly, via narrative market arena outcomes (through the agency of knowledge elites). Indicators therefore conceptually measure how power endowments attained in the power domains of politics and society are utilized for either value creation or value transfers, i.e., extraction.

The first pillar in the political value index area (iii) is termed ‘giving income’ (iii.7) and the analytical emphasis is on political giving i.e., political principal value creation (benefiting non-elite stakeholders). Of importance are the sizes of the underlying transfer amounts and, most critically, what happens to the income allocated in the political sphere from a value creation perspective and in comparative terms. Thus, this pillar measures the positive impact of income transfers and whether these enable further value creation by including indicators on education, Internet infrastructure, or health. Also incorporated are indicators that potentially reflect extractive transfer business models like subsidies, regional redistribution, or expenditure on general public services as a deviation from an optimum. The second pillar is ‘taking

income' (iii.8) and the analytical emphasis here is on non-elite stakeholders that, as a result of power differentials, have to transfer their value (i.e., in SVC measurement terms, their value transfer-OUT to a principal's transfer-IN). This pillar's indicators measure the size and burden of the transfers away from first-order 'producers' that are implemented—or permitted—by elites in the political sphere in delivering or not delivering on their public (giving) mandates. Thus the 'taking income' pillar measures transfers away from those generating value and includes indicators on taxation, such as the delta between capital gains tax and income tax. Datasets on criminal activity such as the homicide rate or the prevalence of substance abuse disorders are also included since it is the responsibility of every state and political elite to eliminate such onerous transfer business models and the elites that benefit from them. The third political value pillar focuses on 'unearned income' (iii.9) and is comprised of indicators pointing to income that the principal beneficiaries have 'not earned' as the value cannot be attributed to their first-order productive agency, but instead secured from transfers facilitated by wins in the non-market and narrative market arenas. Indicators for this pillar include state monopolies and evidence of specific intergenerational transfer phenomena (the beneficiaries of transfer-IN from the current generation at the expense of the next, see Galloway, 2024; Rüdiger & Casas-Klett, 2022; Krznaric, 2020; Stern, 2006), such as debt, and most crucially, environmental degradation.¹²⁵

The fourth and final index area is economic value (iv), which is articulated by market arena concepts. Value is created or extracted in the three markets of the economy: goods and services, capital, and labor. Indicators in these pillars measure both positive value creation and extractive transfer activities in all three markets. The 'producer value' pillar (iv.10) examines the market of goods and services. It includes indicators such as globalization, as well as trade freedom and its opposite, discriminatory or liberalizing "state interventions affecting trade in goods and services, foreign investment and labor force migration" as, for instance, is monitored by the *Global Trade Alert*.¹²⁶ Other indicators in this pillar function on the premise that optima can be developed, such as the optimum size of a given industry in the economy (e.g., real estate, military, or healthcare as a percentage of GDP, where both excesses and deficits point to rent seeking). The 'capital value' pillar (iv.11) addresses capital markets. It

¹²⁵ ETED micro-level sustainable value creation (SVC) measurements (such as the VCp or VCr) incorporate metrics that reflect the 'nature stakeholder' assumption (see Section 2.2.2, Figure 2.5), as do measurements of aggregate sustainable value creation at the meso-level such as elite quality. Elite business models that take unearned environmental resources (such as healthy and fertile soil) engage in extractive intergenerational transfers if they deplete these (turning fertile soil into unproductive dirt through industrial agricultural practices that sap its microbiome). The impact of all these activities on society is stressed by models of stochastic growth on the technological evolution of humankind, with the more extreme of these positing a 90% likelihood of the self-destruction hypothesis within the next 20–40 years, meaning the "catastrophic collapse in human population, due to resource consumption" (Bologna & Aquino, 2020, p. 8).

¹²⁶ See: <https://www.globaltradealert.org>

includes indicators that reflect the valuable services that capital markets provide in the economy, such as unicorns hatched or financial inclusiveness, as well as evidence of capital rents such as when non-market mechanisms determine the price of money (e.g., deviation from a neutral interest rate). Phenomena associated with ‘unemployed capital’ such as share buybacks (where “companies now buy back more stock [. . .] than they issue” Roosevelt Institute, 2019) or ballooning reserve balances with Federal Reserve Banks (Board of Governors of the Federal Reserve System, 2024)¹²⁷ point to transfers as damaging to non-elites as unemployed labor. Finally, the ‘labor value’ pillar (iv.12) relates to the labor markets. It includes indicators that describe labor value creation as well as value transfers, such as the gender wage gap, youth unemployment, or the delta between real wages and productivity increases.

The four index areas are presented in Figure 6.4, each with their own conceptual logic that is consistent with the underlying ideas of the index’s architecture.

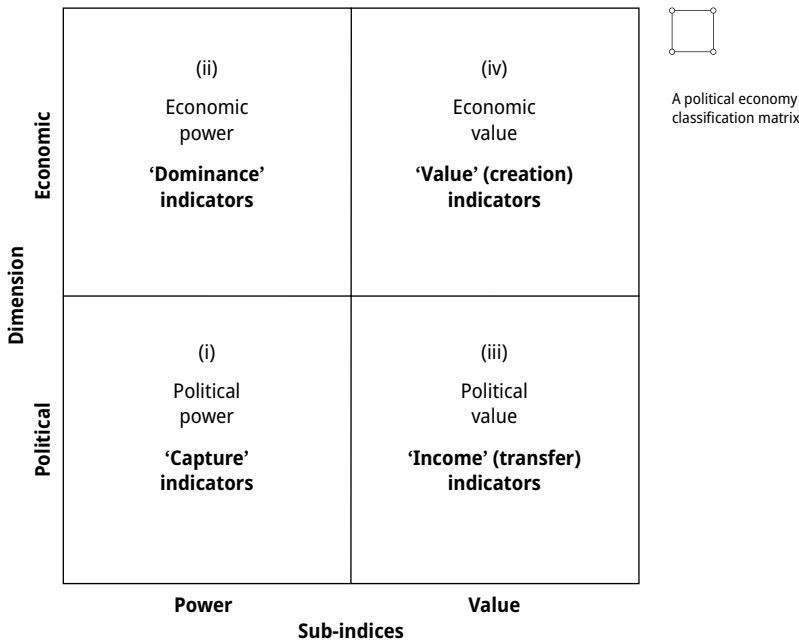


Figure 6.4: The classification logic for elite quality indicators.

The architecture of the EQx can be summarized as follows. Its foundational, indivisible elements are the indicators (level 4), each reflecting a specific value creation or

¹²⁷ The amounts that depositary institutions park at the US central bank have grown exponentially as a result of 2008 monetary policy, from weekly averages of around US\$ 10 billion to balances well above US\$ 3 trillion. See: <https://fred.stlouisfed.org/series/WRESBAL>

extractive transfer phenomenon associated with the elite business models of the political economy and consistent with the ontological assumption of this work that ‘value is created or transferred’ (Figure A5.4c). Every indicator has a conceptual fit within one of the 12 pillars (level 3). Each of the 12 pillars in turn belong to one of the four index areas which result from combining the two ‘political’ and ‘economic’ dimensions with the two sub-indices of ‘power’ and ‘value’ (level 2). The two sub-indices of ‘power’ and ‘value’ then aggregate up to the final EQx index (level 1). Level 3 pillars receive data from the level 4 indicators; level 2 sub-indices and index areas in turn receive data from the level 3 pillars and; the level 1 index is informed by the level 2 sub-indices and index areas. Given that the EQx is designed for policy action and targets weighted structural reform (see Table 7.1), the number of indicators that could be used for the index could potentially grow from the present total of over a hundred to many hundreds on the condition that every dataset reflects a discrete value creation/extraction phenomena in the political economy and does so with a consistent methodology across the countries it covers. In fact, for the EQx to remain meaningful and relevant over time, its constructors must identify and collect data on as many value creation and transfer phenomena as possible. That includes evidence of emerging elite business model realities brought about by fundamental economic shifts (e.g., technology or demographics) and exogenous shocks (e.g., pandemics or wars). However, not all indicators have an equal impact in economic and human development terms, and this leads us to consider a key step in the construction of the index: the weighting methodology.

6.2.5 Conceptual positions on index weighting and methodology

Consistent with the OECD (2008) and as expounded in the EQx methodology paper (Casas-Klett, Cozzi, Diebold, & Zeller, 2020), the weighting of index components is well served by a combination of the budget allocation process (BAP) and the more stable conceptual deliberation method. “The main advantages of BAP are its transparent and relatively straightforward nature and short duration” where experts, ideally “representing a wide spectrum of knowledge and experience to ensure that a proper weighting system”, allocate a “budget” of points “based on their experience and subjective judgment of the relative importance of the respective indicators” (OECD, 2008, p. 96). The BAP is suited for indices where indicators are added (and withdrawn) depending on shifts in reality and the availability of data, as is the case with the EQx. The EQx weighting is discussed in detail the aforementioned paper and in the elite quality reports (Casas-Klett & Cozzi, 2020, 2021, 2022, 2023, 2024), where it is noted that the BAP is used for the weighting of pillars (pillar weights within each index area) and indicators (indicator weights within each pillar).

Conceptual deliberation is a method that has been employed in global comparative indices to establish weighting. For instance, the *Global Peace Index* gives a 60%

weighting for internal peace and a 40% weighting for external peace on the basis that internal peace is correlated with external conflict (Institute for Economics & Peace, 2019, p. 86). In the EQx, conceptual deliberation is used for weighting ‘power’ sub-index I vs ‘value’ sub-index II (conceptual deliberation 1); for weighting the ‘political power’ index area (i) vs the ‘economic power’ index area (ii) (conceptual deliberation 2); and finally, for weighting the ‘political value’ index area (iii) vs the ‘economic value’ index area (iv) (conceptual deliberation 3).

Conceptual deliberation 1 assigns weights to ‘power’ and ‘value’. While power is a pre-condition for value transfers, it is here conceived in terms of potential future value extraction and the ‘present doubles future’ assumption is made. Thus, the ‘power’ sub-index is discounted to half the level of the ‘value’ sub-index, at a 1/3:2/3 weighting (rounded to 33% and 67%). Conceptual deliberations 2 and 3 relate to the split between the ‘political’ and ‘economic’ dimensions and their respective weightings within the ‘power’ and ‘value’ sub-indices. The rationale for this judgment call is partially like conceptual deliberation 1; elite business models in the ‘political’ dimension are deemed to eventually consolidate and grow into the ‘economic’ dimension. Critically, however, the economic sphere has a higher impact on general value creation and the ‘economics doubles politics’ assumption is made. Hence, for conceptual deliberations 2 and 3, the ‘political’ dimension is given half the consequence of the ‘economic’ dimension (for consistency, the 33% and 67% weightings are again applied). Finally, and when there is a strong theoretical case to stress a specific value creation or extraction phenomena, conceptual deliberation weightings for specific indicators (or even pillars) could also be assigned (e.g., for entrepreneurship or risk capital indicators in the creative destruction pillar in light of Schumpeterian theory).

The conceptual deliberation weightings described were established for the original iterations of the Elite Quality Index, are consistent with the logic of the ETED, and will be revisited as necessary. With regard to the BAP weightings, the constructors of the index must periodically confirm or update indicator weightings and so adjust the balance between consequence, data availability, and consistency over time. The addition of specific domain experts to the BAP panel, such as those with specialized knowledge in key areas like labor, innovation, tax, education, or diversity and inclusion, is essential to keep the EQx relevant. Other aspects of the index construction methodology add precision to the measurement and to its conceptual development (see Casas-Klett, Cozzi, Diebold, & Zeller, 2020; and Diebold 2022 for aggregation methods, the normalization process, the imputation of missing data, robustness tests, or detail on the index construction steps).

6.3 Interpreting elite quality: Narratives and frameworks

The EQx provides a position on elite quality for 151 country scores that jointly make up the global ranking. This section discusses how to interpret SVC measurements for nations. The anchor is the sustainable value creation elite perspective of the political

economy that, as a paradigm that diverges from mainstream economics, necessitates discrete analytical tools. This is evident from the narratives and economic prospects for countries that emerge as researchers and pundits interpret EQx scores and connect the four levels of the index architecture (indicators, pillars, index areas/sub-indices, and ultimately, the index itself). Each data point reveals, in global comparative terms, aspects of elite business models that reflect actual or potential future value creation and extraction. The big picture analysis is the fulcrum for institutional change and social and political movements (see Figure A5.12a) that center on elite and elite system transformational leadership (see Table 7.2). New narratives are essential for the advancement of sustainable value creation via the agency of elite business model principals and beneficiaries that materialize in institutional and (de)regulatory measures in the context of weighted structural reform (see Section 7.1.5, Figure 7.1). Critically, the analysis must link the SVC measurements, including the EQx, to ongoing intra-elite contests and the contending models in order to select the right policy options for reform and ground visions of desirable institutional change in winning grand narratives (6.3.1). The State of the Elite System Framework for the political economy is a tool for this purpose (6.3.2).

6.3.1 The EQx supports the analysis of narratives and a big picture view

The postmodern distrust of *metarécits*, or “metanarratives” (Lyotard, 1979) is misguided; grand narratives do matter and are extremely useful in supporting elite business models (see Proposition 14 on institutional change and the narrative market). The EQx can contribute to the benchmarking of such big pictures with its scores in the ‘power’ and ‘value’ sub-indices. “Economic and political institutions (and ideas) serve essentially facilitative, adaptive, obstructive, or destructive roles in economic and social change” (Elliott, 1978, p. 93). Change is often initiated by narratives and their embedded ideas (Figure 3.5) and is overdue if one believes blunt views like “today we have the most unfree market system ever created. It is deeply corrupt because its leaders claim it is the opposite of what it is becoming” (Standing, 2016, p. 1). Welzel suggests that non-elites embracing “emancipative values are readily prepared to measure their elites by the rankings, scores, and evaluations” (2002, p. 292, see also Sections 3.3.2 and 8.1.3), while this inquiry contends that transformation occurs when elites appraise themselves.

The interpretation of elite quality measurements can trigger fundamental political economy questions that may prove overly broad, strategic, and certainly distracting to the politician preparing for the next election, the treasury official dealing with financial upheavals, or the analyst working with newly released economic data. However, far from being impractical, the concrete demonstration of value creation or extraction (transfer-IN/OUT) by elite agency and its location in the political economy landscape—often under the cover of narratives—is meant to support policymakers

focus on the right nooks and crannies of the economy. The fact that a measurement of elite quality can pierce through aggregates and shine a light on micro-level phenomena provides direct connections with the actual experiences and challenges faced by society's diverse stakeholders. Understanding the political economy structures keeping the big picture in place, and how these are driven by specific business models, adds texture and insight to large-scale social or historical analyses. It also supplies the bases for specific legal, (de)regulatory, and institutional changes that flow from this work's applied frameworks for policy (e.g., see Table A4.4). Narratives have the uncanny ability to enter and shape intra-elite contests that determine new business model rules (see Figures 4.3 and A5.12b).

Policymakers, investors, CEOs, and journalists consider longer horizons and require a broad perspective. Elite quality widens the lens and sharpens the focus as its measurements suggest whether an economic system enjoys an "ordered market" of capitalism, or whether "non-market decision-making" based on power and resulting in extraction has become prevalent, as Buchanan (1980, p. 14) once claimed. How much Hayekian competition (1948/1958) is still left in the political economies of capitalist societies, or how much non-elite value creation is found in communist regimes, is inferable from an analysis of the EQx 'power' sub-index and its components. In times of uncertainty—whether caused by inflation, war, or AI—original frameworks and measurements that facilitate a view of the overall direction that a society is heading are helpful for crafting new visions.

The ETED has the Popperian obligation to make its logic falsifiable and, in this vein, it is *a priori* agnostic regarding the grand narratives that materialize in the world's political systems (recounted by Almond, 1956; Hall, 1993) and business systems (see Hall & Soskice 2001; Hall & Gingerich, 2009; Witt, Kabbach-Castro, Amaeshi, Mahroum, Bohle, & Saez, 2018) and the contributions that they make to value creation or transfers. Instead, the approach is to focus on empirical validation through refutable comparative tests of political and business systems (see Figure 8.3) that leverage EQx scores (as well as alternative SVC country-based measurements such as the bottom-up micro-to-meso level Elite Quality Rating, see Table A3.1a). Establishing the degree to which elite value creation and development performance correlates with business and political systems may eventually lead to across-systems learning, but the more immediate and practical objective of the EQx's interpretative work is to provide big picture clarity about key shifts and patterns in the political economy by highlighting putative critical junctures where elite quality (or power, or creative destruction) improves or worsens, along with the incentives responsible for such ascendant or declining trajectories, thus locating the areas of the economy where inclusive reforms would yield the most gains.

6.3.2 The EQx supports the construction of frameworks for the analysis of the political economy

The EQx annually updates its scores and rankings across its four architecture levels, thereby offering opportunities for political and knowledge elites to construct dynamic, responsive policy frameworks to address weaknesses. As a starting point, this inquiry proposes The State of the Elite System Framework for the political economy, a comparative classification system of national elite systems for domestic reform purposes. Here, the two cardinal properties of the political economy, the two EQx sub-indices, are visualized as a matrix: ‘power’ (potential future value extraction) and ‘value’ are placed on the x-axis and y-axis respectively to describe a given political economy in terms of the sustainable value creation of its elite system via four distinct quadrants:

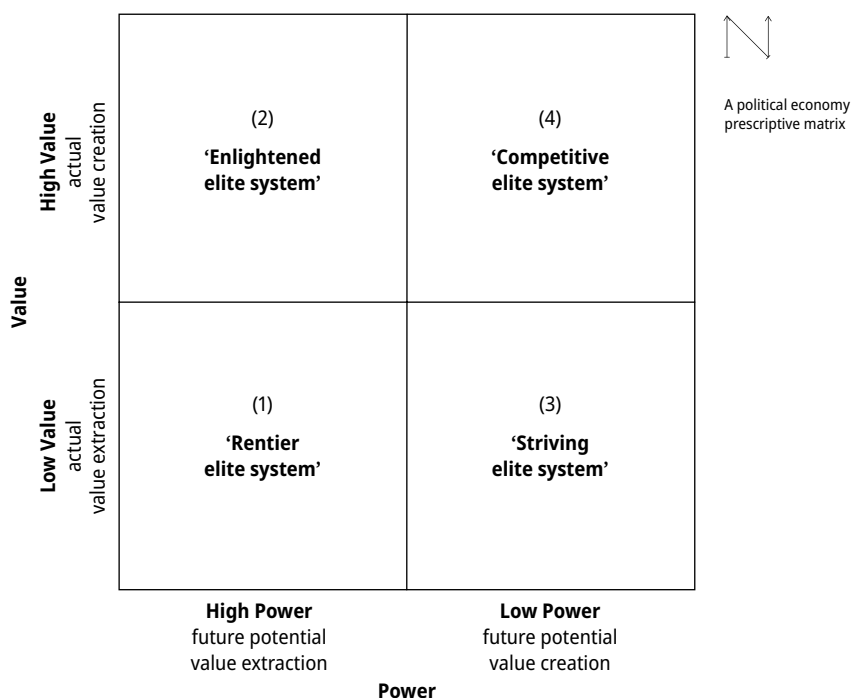


Figure 6.5: The State of the Elite System Framework for the political economy.

Nations whose EQx sub-index scores denote an elite system that is characterized by high levels of value extraction combined with low dominance are deemed to possess a ‘striving elite system’ (quadrant 3). This type of system is found during state formation (e.g., Japan during the Meiji Restoration) or follows state failure (e.g., Libya post-Gaddafi). More positively, the competition for primacy among low-power striving

elite business models can incentivize differentiation, innovation, and the adoption of disruptive technologies (e.g., the beginnings of the industrial revolution or China's rapid growth phase during the 1980s). This is a rare system because of its unstable nature and propensity to chaos due to deinstitutionalized intra-elite contests, even though these might at times foster development and free up value creation potential. If the winners are extractive elite coalitions that manage to consolidate through 'political economy know-how' and use power to secure their value appropriation models, what ensues is regression to a 'rentier elite system' (quadrant 1). That is, countries whose economies are characterized by powerful elites that have legitimized value transfers.

In some nations, highly dominant winners refrain from rent seeking and value extraction models (at least initially) despite their potential ability to implement such practices. This situation typifies the 'enlightened elite system' (quadrant 2) depicted at the top left of Figure 6.5. Singapore, the country that topped the EQx rankings for four out of its first five years can be characterized in such terms in relation to other advanced economies. The 'enlightened elite system' is clearly a desirable human and economic development scenario, with powerful elites investing their coordination capacity and 'the extraordinary lever' into productive activities and value creation business models. Another such positive configuration is the 'competitive elite system' of quadrant 4.

The 'competitive elite system' (quadrant 4) most closely resembles the free market, with Hayekian decentralization and Schumpeterian entrepreneurs emerging and waning in waves on the back of creative destruction processes and elite circulation. At times, such a state also emerges from the productive chaos of a 'striving elite system' (quadrant 3). The system is characterized by an important proportion of new elite business models (e.g., China after its market-oriented reforms and opening-up) or by incumbents whose business models are pushed by newcomers and switch to value creation activities (e.g., the Silicon Valley effect on America Inc.). The 'competitive elite system' scenario is therefore distinguished by the admixture mode of elite circulation (see Figure 1.1), with market-based intra-elite contests utilizing 'knowledge' bargaining power sources, thereby engendering highly productive elite coalitions that trade places in quick succession, all managing to amass wealth from munificent residual income flows during their sustainable value creation tenures. Here, intra-elite competition is institutionalized and in creative tension with elite cohesion as evidenced by a plethora of public goods, positive externalities, and bountiful transfer-OUT by key elite business models. Non-elites also drive sustainable development as they retain the value they create and thus have the incentive to create even more. From a strict economic perspective, long-term growth is maximized and is only limited by human imagination and the capacity to innovate, which, to optimists, is limitless.

The two EQx sub-index scores place each country within one of the four categories of The State of the Elite System Framework for the political economy. It is then the task of the political analyst or scholar to assess the implications of this classifica-

tion for a country and formulate development options and outcomes. Transformational elite leadership (Table 7.2) drives the elite system via structural reforms aimed at elite business model rules that bolster the two upper quadrants (2) and (4).

The EQx is a meso-level aggregate that does not measure the agency of specific elite coalitions. Nonetheless, interpretative analysis can utilize the results across the four index architecture levels to establish the elite coalition landscape and identify specific business models, including the national models (Section 8.1.2), that account for the scores of various index components. Some authors place responsibility for economic outcomes such as stagnation or inequality on the shoulders of the political elite because they determine “the growth process of the economy” (Bourguignon & Verdier, 2000, p. 287), or because “within the Japanese leadership groups, the position of the political elite is central” (Schmidt, 2004, p. 82). Assessments of this kind are too general and do not account for the ‘follow the money’ heuristic of institutional change (i.e., trace the beneficiaries of residual income). Macro-level analyses, informed by the elite theory and meso-level quantifications of the elite system such as the EQx, must seek connections to micro-level business models assessed for sustainable value creation with measurements like the VC_r (see Figure 7.8) for the purposes of designing structural reform that is weighted for value creation and transfers (see Table 7.1). By consulting the architecture (see Figure 6.3) and leveraging data using different levels of abstraction, it becomes possible to map the sustainable value creation landscape of a society. On this basis, an evidence-based understanding of the specificities of elite agency emerges that can be used to build accurate descriptions for a given political economy and potentially model its growth prospects.

6.4 Limitations of the Elite Quality Index

The Achilles heel of any index is the necessary usage of subjective judgments. Various aspects of the operationalization of the index and its methodology are based on such judgment calls (Casas-Klett, Cozzi, Diebold, & Zeller, 2020), including the important weighting procedures just reviewed. Subjective judgments invite controversy and even nomenclature decisions can have an impact on understanding. For instance, the ‘Getting Credit indicator’ used in the World Bank’s *The Ease of Doing Business Index* was criticized for being “named in a potentially misleading way” (Besley, 2015, p. 111). This section now systematically sheds light on the most important limitations of the EQx. These include the controvertible evidence of value creation (6.4.1); the establishment of value creation optima (6.4.2); splitting an elite business model across indicators (6.4.3); and the existence of blind value creation and extraction spots in an economy (6.4.4).

6.4.1 Controvertible evidence of value creation and transfers

For every indicator incorporated in the EQx, a value creation/transfer position is articulated. Each of these positions can be subject to perennial debate about whether the phenomenon captured by the specific indicator actually measures (in the case of the ‘value’ sub-index) or leads (in the case of the ‘power’ sub-index) to value extraction (or to its opposite, value creation). For instance, there has been a raging theoretical controversy over whether competition or monopolies (and the antitrust rules to prevent them) result in higher levels of innovation, as is depicted in the two viewpoints below:

Antitrust enforcement surely keeps prices low and output high, but is it good for innovation? The question arises because the relationship between competition and innovation is the subject of a familiar controversy in economics. One view, often associated with Joseph Schumpeter, argues that monopolies favor innovation. An opposite view, often associated with Kenneth Arrow, argues that competition favors innovation. (Baker, 2007, p. 575)

The EQx puts a value creation premium on competition and considers monopolies to be a form of power and hence a precursor to potential second-order value transfers. These, and all other forms of dominance, are categorized as extraction in the coalition dominance pillar (ii.4). Relatedly, antitrust regulation would reduce monopolistic power and increase competition: in the institutional capture pillar (i.2) this institutional arrangement type is assessed positively. Baker would concur, since “the benefits of antitrust rules and enforcement extend beyond lower prices, greater output, and higher product quality; they also include increased innovation” (2007, p. 602). Yet here, as well as in other indicators, the prescriptive implications directly derived from this theory and hence the EQx’s ontological position—dividing the world into value creation and transfers—are by no means met with universal agreement, as the following reference makes evident:

The lesson for policymakers is that antitrust intervention in product markets may disturb the very incentive structures that lead to rapid technological change. (Nicholas, 2003, p. 1055)

6.4.2 Value creation optima

After a position is taken on whether an indicator’s dataset measures value creation or extractive value transfers, the next question that habitually arises is the degree to which the quantitative manifestations of indicator scores express that position. In this respect, some EQx indicators require the establishment of non-linear optima, ideally anchored in research. For instance, and referencing the discussion in the previous subsection, what is the optimum level for competition in an industry given Aghion, Bloom, Blundell, Griffith, and Howitt’s (2005) inverted-U relationship between competition and innovation? If one were to employ the Herfindahl-Hirschman Index (HHI), a measure used by the US Justice Department’s Antitrust Division for market concentration, one

would settle on a specific number or range between zero and 10,000. Yet, given the HHI measure's "sensitivity to asymmetry" (Calkins, 1983, p. 404), this is by no means straightforward. In another example, whether in Japan (Johnson, 1982), Africa (Herbst, 2000) or China (Zhang, 2022), the point must be found where state capacity contributes to "long-run economic growth" (Dincecco & Katz, 2014, p. 189) and development and where it does not—as in "extreme cases of unproductive spending" by public administrations (Tanzi, 1997, p. 22) once the target of Musk's Department of Government Efficiency (DOGE). Frye and Shleifer, for instance, associate the "helping hand" of state capacity with "organized corruption" (1997, p. 355). When describing the "predatory state", Evans finds that "the efficacy of the developmental state depends on a meritocratic bureaucracy with a strong sense of corporate identity and a dense set of institutionalized links to private elites" (1989, p. 561), meaning that factors like the separation of powers (power relation 4, see Table 3.2) might also have to be quantified and incorporated. State capacity and its funding mechanisms are associated with both value creation and extractive elite business models that rely on transfer-IN. Given these nuances and that both excessive and insufficient state capacity is suboptimal, can an optimal degree of public activities (vs private ones) be established? The EQx researchers must make difficult judgments on the optimum levels of value creation for indicators like taxation, fiscal decentralization, or, more controversially, for equality, with many probably adjusted for factors like income levels.

Whether the decision is on the optimal number of years that patents should be protected for, unionization rates, acceptable inflation ranges, or income and capital tax levels, the impossibility of reaching a scholarly consensus is immediately obvious. The value creation optima judgments are therefore both a necessity and a lasting limitation of the index. The often irreconcilable and diverse viewpoints mean that the EQx will need to be transparent with its epistemological positions on an indicator-by-indicator basis, both as expressions of elite business models and in terms of the value creation and transfer impact described by their quantitative manifestations.

6.4.3 Multiple indicators describe one elite business model's impact on the elite system

A large number of metrics are required to fully describe an individual business model in terms of its sustainable value creation and extractive transfers (for instance, to deduce its VCP/VCR measurements, see Sections 5.3.1, 6.6.1). Likewise, incorporating a particular elite business model into aggregate elite quality might require various indicators that fully capture the impact of its diverse value creation and extractive transfer activities on the political economy and society at large. For example, the business model of policing would be denoted by indicators of police spending as a percentage of GDP (financed by taxes, a transfer) as well as by indicators that convey whether this spending is effective in terms of reducing the homicide rate or organized

crime levels. In the EQx2022, nine indicators point to the multi-faceted phenomena of entrepreneurship: ‘Women self-made billionaires’ (‘human capture’, pillar i.3); ‘Entrepreneurship’, ‘Venture capital finance’, ‘Billionaire’s creative destruction’, ‘Index of Women Entrepreneurs’, ‘Venture capital availability’, and ‘Government support to entrepreneurship’ (‘creative destruction’, pillar ii.6); ‘Unicorns per 1 million people’ and ‘Billionaires self-made as % of total billionaires’ (capital value, pillar iv.11). Each indicator conveys a unique perspective (e.g., is there a glass ceiling in entrepreneurship?) that provides an opportunity for reform and transformational leadership. The need to include various indicators to express the sustainable value creation impact of elite business models at the meso-level elite system level parallels the firm-level ‘value spectrum’ conceptual element (Figure 2.10) where both value creation and extraction activities invariably combine in every single business model. This links to the most uncomfortable paradox of the political economy: that value creation often necessitates value extraction, as is articulated in the ‘alternating value extraction and creation’ conjecture (Section 2.3.1, Proposition 10) and in the ‘all elite agency creates and transfers value’ realist inference of this work’s pragmatic philosophy (Figure A5.4a).

Once multiple indicators have been established for a specific elite business model, isn’t the task of weighting these to ascertain a ‘fair’ meso-level impact almost futile? Healthcare is a paradigmatic example of a treasured public service that enables non-elites to engage in sustainable value creation. Yet, at the same time, public health provision is multifaceted as the healthcare industry’s business model is paid for by extraction from value creators through taxes, regulations, and onerous entry barriers. The US National Health Expenditure Accounts (NHEA) calculated 2021 American health care spending to be \$4.3 trillion, \$12,914 per person, or 18.3 percent of GDP.¹²⁸ That is the annual cost of between four and five US militaries, begging the question of whether and to what extent there is rent-seeking transfer-IN by principals like regional hospital monopolies. Combining multiple indicators to describe a single business model (in this case, health quality rankings and healthcare industry spending as a percentage of GDP), and their respective weights in the index, implies a multi-variable function. How accurately can such functions reflect the proportion of value creation and extractive transfers? The multiple data sources chosen, the conceptual determination of the indicators, and the judgments made on their relative weighting invites impossible debates even when encouraging further research.

¹²⁸ See: <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical>

6.4.4 Blind spot value creation and transfer phenomena

Another limitation of the EQx relates to high-impact elite agency responsible for value creation and extractive transfer phenomena that are only partially described or remain completely unaccounted for. The challenges here might be conceptual and of measurement, as is the case for business models premised on risk transfers that benefit from being “too big to fail” or “too big to jail” (see Hardouin, 2017). A related cause for this first blind spot of the EQx is identifying indicators that can quantify the impact of extractive transfers when these are attributable to legitimate, tax-paying business models, even when these exceed the damage done by criminal enterprises. For example, during the first Trump Administration, the Oval Office established that ultra-extractive opioid elite business models—not all run by illicit enterprises—cost an astounding 2.8% of US GDP (Council of Economic Advisers, 2017). The number of deaths—over 33,000 Americans—has since more than tripled on the back of synthetic opioids like fentanyl. Such complex business models, especially those where principals have a license to operate, are incompletely captured in the index using current indicators (such as ‘Death rate from substance abuse disorders’ in the ‘taking income’ pillar iii.8).

Similarly, while the next two examples are well documented, they are illustrative of the problems in satisfactorily quantifying impact in terms of comparative economic and human development. First, the Hong Kong SAR suffers, as reported in *The Crony-Capitalism Index* (*The Economist*, 2014), from rent seeking that the *China Daily* suggests can be traced to a single business model: “HK is the ‘Least Affordable Housing Market’ for the 10th Year Running” (Lu, 2020). The territory’s Housing Affordability Index score of 20 and over has for years been almost double that of the other most expensive cities in the world. The fact that value is extracted from the young seeking to join the housing ladder is even more galling considering that the Research Office of the Legislative Council Secretariat (2016) reports that 76% of the territory is “non-built-up land”. In 2024, the EQx added the ‘Housing Affordability Index’ indicator (‘producer value’, pillar iv.10), but this does not address the notable price variations across cities in countries like China or the US. A final example comes from the squatter’s paradise of Spain, where the most basic institution, that of property rights, has deteriorated to such an extent that housing ownership is left unprotected by the legal system against extractive transfers by the *okupa*, even if these are *de jure* illegal. Anarchist networks actually operate as elite coalitions that are narrower than their counterparts, the more than 87,000 defenseless owners whose properties they have seized (Institut Cerdà, 2017), as Spanish courts *de facto* side with the occupiers.

A second blind spot is that many key elite business models are localized and thus cannot be represented by the EQx in comparative terms. The three particularly extractive phenomena described above—the opium epidemic in the US, exorbitant real estate prices in Hong Kong, and property taken from its owners by squatters in Spain—are country-specific extractive elite business models that weigh much more heavily on the US, HK SAR, and Spanish economies than elsewhere. Hence, even if data is available for

a sufficiently large number of countries, the weighting of an indicator is problematic since the elite business model does not have the same impact on value creation/extraction across polities (i.e., a housing affordability indicator would have to carry much more weight in Hong Kong than elsewhere). A solution to this problem might be the inclusion of a ‘critical impact indicator’ category in the EQx, possibly to be weighted equally across countries and reserved for the highest value creation/transfer impact elite business model(s) in an economy.

A third and different type of blind spot relates to knowledge elites. At present, the EQx has only two dimensions, ‘political’ and ‘economic’ (see Figure 6.2), and so the specific sustainable value creation agency of knowledge elites is included in the ‘political power’ and ‘political value’ index areas. A more evolved EQx architecture would possess a third dimension referencing the power domain of society, with indicators that describe the sustainable value creation agency of knowledge elites. The resultant six index areas would then mirror the tripartite elite typology of this theory (see their depiction in Figures 2.1 and A5.1). Obviously, knowledge elites and their agency in the narrative market have a discrete impact on value creation/transfer: “To govern, to rule, or to exercise power at all requires an institution or coordinated institutions, organized under and held together by an idea-system, vesting power in and allocating it among stated individuals, for tacitly agreed or overtly stated purposes” (Berle, 1968, p. 202). The idea-system, the “myths” of institutions (Meyer & Rowan, 1977), the “role of ideas” (Hall, 1993, p. 289), the collective consciousness of Hegel’s *Geist* (1807/2018), “ideas” Donaldson (2021), Plato’s “noble lie” (Dombrowski, 1997), the “belief systems” (North, 1994) or simply “beliefs” (Alesina, Cozzi, & Mantovan, 2012), the charisma behind “mobilizational power” (Winters, 2011), Gramsci’s “worldview” (Cox, 1983), Foucauldian discourse and the “narrative construction of reality” (Bruner, 1991), “fictions” and “stories” (Harari, 2015), culture capture (Giblin & Doctorow, 2022, p. 2), “doctrine” (Moore, 1958), or narratives (Abell, 2004; Denning, 2006; Hagel, 2011) legitimize both value creation and extractive value transfer models (see also Proposition 14 on the impact of elite agency on institutional change through narrative markets). Political economy narratives could be addressed in the EQx by first ascertaining their existence (as in Shiller, 2017), and then by assessing the ‘power’ and ‘value’ of the elite business models they enable. Nonetheless, this blind spot is currently left unaddressed and therefore constitutes another evident limitation of the current version of the EQx.

6.5 The development of additional elite quality measurements

The EQx is the flagship measurement of elite quality found in the meso-level elite systems of 151 countries, with five annual reports (see Casas-Klett & Cozzi, 2024) published to date. At the same time, and given the limitations of the EQx, the elite quality conceptual element would benefit from alternative approaches to how it is measured.

In the social sciences, triangulation refers to “the combination of methodologies in the study of the same phenomenon” (Denzin 1978, p. 291, as cited in Jick, 1979, p. 602), that “enhances our belief that the results are valid and not a methodological artifact” (Bouchard, 1976, p. 268, as cited in Jick, 1979, p. 602). Two different measurement approaches are now proposed to overcome some of the limitations of the EQx outlined in the previous section and to enhance the validity of the elite quality conceptual element. The more straightforward of these additional SVC measurements is a survey instrument, the Perceptions of Elites Survey (PEz), which aims to determine non-elite and elite perceptions of elite quality (6.5.1). The second will be the outcome of a large-scale project: the country-specific Elite Quality Rating (EQr), that will aggregate the VCr measurements for available elite business models (6.5.2).

6.5.1 The Perceptions of Elites Survey (PEz)

The first alternative suggested method to measure elite quality is a perceptions survey designed for both elite and non-elite respondents. Tried and tested bases in the academic literature exist for perception surveys; some are experiments that assess perceptions of both public and private performance (see Hvidman & Andersen, 2016), while others determine economic expectations as in how “Americans perceive their near-term futures” (Dominitz & Manski, 1997, p. 261). Governments and their affiliated institutions conduct perception surveys on policy matters as described by the OECD’s (2012b) *Measuring Regulatory Performance: A Practitioner’s Guide to Perception Surveys*. Such research can be very specific, such as the Danish Business Authority’s “burden hunter methodology” which “is an integral part of the Danish better regulation effort”, the findings of which enable “the authorities to focus on simplifying the regulation that businesses perceive as the most costly and burdensome”.¹²⁹ A highly refined survey research industry led by companies such as Nielsen, IQVIA, Kantar, Gartner, Ipsos, Circana, Dynata, Westat, or Intage has for decades assessed public opinion, brand perceptions, and often very specific questions such as physician’s perceptions about a given product.

Elites are also surveyed in academia for their “Europeanness” (Best, Lengyel, & Verzichelli, 2012), on their attitudes (Scholte, Verhaegen, & Tallberg, 2021), for questions of strategic management (Bednar & Westphal, 2006), to gain various insights through interviews and observation (Rodríguez-Teruel & Daloz, 2018), by comparing them across countries (Walgrave & Joly, 2018), or even by using experiments on them (Kertzer & Renshon, 2022). For the purposes of practice, McKinsey Global Surveys run “research with global executives on the pressing business, economic, and manage-

¹²⁹ See: <https://danishbusinessauthority.dk/burden-hunter-hunting-administrative-burdens-and-red-tape>

ment issues they face”.¹³⁰ Indices such as World Economic Forum’s *Global Competitiveness Report* also reference surveys that essentially gauge elite perceptions (see, for instance, “The Executive Opinion Survey: The Voice of the Business Community” by Browne, Di Battista, Geiger, and Gutknecht, 2014).

However, most available surveys on elites do not focus on the value creation and appropriation of their business models. Both the ‘Non-elite Questionnaire’ (1/2) and the ‘Elite Questionnaire’ (2/2) of the Perceptions of Elites Survey (PEz) are designed to precisely address this matter (refer to Tables A3.4a and A3.4b for extracts of the sample questionnaires, each of which feature 10 questions). The PEz project will provide discrete questions for both elite and non-elite respondents, since “the distinction between elites and non-elites is therefore an important aspect of social analysis” (Hoffmann-Lange, 2007, p. 910). Proper “elite identification” can leverage approaches including “the reputational method, the decisional method, and the positional method” (Parry 2005; Putnam 1976, p. 15 ff. as cited in Hoffmann-Lange, 2007, p. 912). Whether using web-based elite expert surveys (see Dahlberg, 2007) or the face-to-face mode (see Maestas, Neeley, & Richardson, 2003), open or closed question types or how to solicit participation, the survey questionnaire design must adhere to best practices for conducting quantitative research, such as those detailed by Vis and Stolwijk (2021) for political elites. As for the conceptual structure, both the elite and non-elite questionnaires used in the survey will adhere to the four-level EQx architecture. In this way, the elite perceptions survey may enhance the ability to refute hypotheses built upon this book’s conceptual elements. With a rigorous design, the avoidance of biases, and caution about interpretation (see Iarossi, 2006), survey findings might prompt political economy debates and stimulate public engagement. Particularly noteworthy are the differences that are likely to arise from employing discrete empirical methods and tools to establish the sustainable value creation of elites. For instance, any divergence in the perceptions of elite and non-elite respondents with regard to elite quality should provide comparative insights and complement the EQx.

The PEz survey’s Non-Elite Questionnaire (1/2) and Elite Questionnaire (2/2) will both garner inputs not readily available in conventional economic data sets on a timelier basis, including, for instance, shifts about whether non-elites perceive value extraction by elites to be on the rise or in decline, even in relation to unfolding events. This would make signs of discontent as exemplified by headlines such as “Biden’s Economy Is Great Everywhere Except in the Polls” (Yglesias, 2023) less perplexing. The PEz will also be able to address different and narrower research questions than the EQx and do so in an international context by dealing with cross-cultural issues (Harkness, van de Vijver, & Mohler, 2003) deemed by the survey designers to be relevant to both the non-elite perceptions of elites and the self-perceptions of elites. At the same time, it can transcend the particular comparative angle of the EQx which, as currently

¹³⁰ See: <https://www.mckinsey.com/featured-insights/mckinsey-global-surveys>

conceived, finds it difficult to assess country-specific matters such as the functioning of the elite separation of powers, specific dynamics in The Seven Intra-elite Power Relations, or the extremely important fluctuations in elite cohesion for a given economy (see Table 3.2). The PEz will also allow the testing of questions related to certain conjectures and propositions put forward in the ETED. For example, the survey might be used to probe perceptions on the degree of elite cohesion or elite/non-elite cohesion, reveal awareness of value creation and the pain points of value transfer activities, pinpoint the connections between the dominant narratives in society by how their relationship to the value creation/extraction of elite business models is regarded, and even link such findings to economic development outcomes. Beyond being a service to the public, the PEz will be a tool for political reformers while academics will be able to tackle and test novel hypotheses. This alternative measurement method will be a step towards triangulation and increases the validity and meaningfulness of elite quality and related constructs for research and for policy purposes.

6.5.2 The country-specific Elite Quality Rating (EQr)

Another noteworthy contribution to the study of the sustainable value creation of nations is the impending Elite Quality Rating (EQr), premised on the sustainable value creation of firms. This highly sophisticated country-specific SVC measurement is meant to be both complementary and an alternative to the EQx index and the PEz survey. Characterized by a 'bottom-up' micro-to-meso approach, this assessment method will aggregate the value creation and transfers of elite business models measured by the VCr (rather than the effects of their agency evidenced at the macro-level, as is the case with the 'top-down' macro-to-meso level indicators used for the EQx). The meso-level aggregate EQr measurement will rely on the sustainable value creation (VCr) of selected elite firms, therefore incorporating the sums of all their value appropriated but *not* created (transfer-IN) and their value created but *not* appropriated (transfer-OUT).¹³¹ As a result, it will offer a comprehensive view of the contribution of elite business models to an economy and society. It will be expressed (like the VCr scores that constitute it) as a digit with two decimal points, where 1.00 reveals that the total value creation and extraction effected by elites is in balance. A score

¹³¹ A suggested 'Elite Quality Position' ('EQp') measurement would conceptually describe a position on the meso-level 'elite system value spectrum'. That would be the weighted average of the 'value spectrum' positions of the pertinent micro-level organizations that represent the elite. Such a meso-level aggregate SVC measurement for nations would narrowly focus on extractive transfer-IN and ignore inclusive transfer-OUT (and is left to further inquiry). Its usefulness for both research and as a tool for economists resides in its potential to highlight macro-level aggregate transfer-IN vs transfer-OUT patterns. The EQp would thus be a weighted average of all the VCp scores in the system, or the sum of the transfer-IN amounts of elite models as a proportion of their total revenues.

over/below 1.00 will manifest an elite system with a net positive/negative value relationship with society at large, where inclusive second-order value transfers (transfer-OUT) are higher/lower than extractive second-order value transfers (transfer-IN). In addition to being industry specific (see Section 6.6.4), the EQR will also be country specific, and so the results would not be valid for international comparison purposes without adjustment.

The actual elite system EQR measurement will be derived from the elite business models that are representative of the sustainable value creation of a nation (though ideally all models would be incorporated in this selection) by aggregating and weighting their associated VC_r scores. It will be possible for the aggregate VC_r components—derived from the sums of transfer-IN/OUT metrics organized into score-card categories and mirroring the four-level EQ_x architecture (see Figure 6.8)—that are implicit in an EQR score to be made explicit (e.g., ‘power’, ‘creative destruction’, ‘producer value’). Once specified, all of the discrete conceptual elements of the EQR would be linked to the value creation/extraction phenomena captured and deduced from the EQ_x. The establishment of causality between concrete elite business models and general value transfers observed in various areas of the economy and society is an ultimate macroeconomic value creation modeling aim in the context of the institutional change imperative of the ETED (see ‘weighted transfers modeling’ in Figure 7.1 and its application in Table 7.1).¹³²

For the purposes of the EQR calculation, the selection of representative elite business models material to the sustainable value creation of a country’s elite system will follow financial criteria such as profits and revenue size, but also the (estimated) monetary impact (e.g., via budget size) of elite coalitions that are not organized as firms such as civil servants, religious establishments, or the military. Each political economy and society has its own specific coalitions. For instance, in Germany, high-impact models include the automotive industry, the banking sector, and the labor unions; in India, the conglomerate models of the traditional business houses exemplified by Reliance Industries, the Tata Group, or the emergent Adani Group,¹³³ the civil service, and the political parties; in the US, the health care industry, Big Tech, Big Oil, Wall Street, and possibly the military-industrial complex; in China, the upper echelons of the CPC, the administrative system, the centrally controlled SOEs in oligopolistic markets and in competitive markets, and to a lesser extent the leading private coalitions in technology or industrial sectors. Each country’s particular elite business mod-

¹³² Perfect ‘weighted transfers general equilibrium’ (WTGE) macroeconomic models (see how ‘WTGE’ relates to the SVC measurements in Figure 7.8) require novel and massive data sets such as electronic payments, social commerce transactions, and even the weights of neural networks in LLMs that control the magnitude of one neurons effect on another, or the movements and exchanges of the future metaverse (see Section 7.1.1 and the speculative discussion in the Epilogue).

¹³³ Even as a relative newcomer, the Adani Group is not free of controversy, having been described by pundits in the Indian media as “the center of India’s shift to oligarchy” (Kant, 2021).

els, including its national business model (see Section 8.1.2), create value and risk to discrete degrees and, as noted above, can range from publicly listed firms, to family dynasties in a patrimonial state, to the custodians of belief systems. In this regard, the EQR could address the country-specific business model blind spot problem expounded on in Section 6.4.4.

Once categorized as ‘elite’ and selected for inclusion in the EQR, the diverse business models in an economy—each with their own VCr—will be assigned respective weights. As suggested, the default approach is a financial size weighting based on the relative magnitude of a business model’s revenue, profit, or budget. Alternative judgments could also be made, such as weightings that adjust for peculiarly inclusive or extractive impacts not captured by the VCr. For instance, in the case of SMEs, one might increase their weighting given the positive impact they have on local communities; in the case of the legal opioid models, one might increase the weighting in line with lives lost to account for the exceptionally high and unquantified ‘cost created but *not borne*’ (see ‘destructive’ transfer-COST, Figure A5.5b, and Section 8.2.1). On the premise that the VCr’s for elite models are available, weighting—whether based on financial size or adjusted for impact—will not be a fundamental methodological challenge for the EQR, as even the default financial size weighting approach is capable of accounting for the shifting dynamics of political economies. That matters, since intra-elite contests bring about the emergence and decline of elite business models—some surging due to AI, inflation, or hosting the Olympic games; others falling behind due to globalization, financial securitization, or war—with such shifts sometimes occurring rapidly due to factors (many exogenous, though rapidly endogenized, see Section 4.3.5) like new technologies, policy choices, narratives with non-elite input, the natural environment, or fluctuating geopolitical realities.

As has already been expounded upon, in order to perform the aggregation, normalization, and weighting of business models to garner a country’s EQR, the VCr for the selected models will need to have been established. Its theoretical foundations, conceptualization, and derived equations have already been examined (see Chapter 2, Section 5.3.1), while the detailed procedural steps for the calculation of its component transfer-IN/OUT metrics are described in the next section.

6.6 Advancing the firm-level sustainable value creation (SVC) measurements that underlie elite quality

The next five sub-sections deal with the inherent causes of elite quality, turning away from the elite system and returning to the firm level. That is, to the SVC measurements and their operationalization, thereby building on the foundations of Chapter 2. Paralleling the indivisible macro-level indicator datasets, the first and pivotal sub-section describes the method for establishing value transfers through the utilization of the indivisible constituent SVC metrics for the essential VCp and VCr firm-level SVC

measurements (6.6.1). Next, four additional SVC measurements based on survey instruments are presented (6.6.2). Three of these are currently at a testing stage and utilize the SVC Metrics Self-assessment Survey instrument to yield the self-VCp, the self-VCr, and, from a subset of the latter's metrics, a discrete measurement for international business, the 'International Business Self-assessment Value Creation Rating' ('IB-self-VCr'). These three measurements mirror the VCp, the VCr, and the IB-VCr (see Section 7.3.1). The fourth measurement is the planned Perceptions of Value Creation Survey (360-VCz), employing the comprehensive two-tier 'Firm Stakeholder Questionnaire' (1/2) and 'Firm Principal Questionnaire' (2/2). Tables A3.5a and A3.5b present extracts of the sample questionnaires, each featuring 12 questions. The subsequent sub-section explains how the EQx architecture is referenced to propose the Business Model Sustainable Value Scorecard, which supports the conceptual determination and weighting of the SVC metrics used to calculate the firm-level SVC measurements (6.6.3). The fifth additional SVC measurement advanced is the 'Sector Value Creation Rating' ('sector-VCr'). This provides benchmarks that enable industry-specific materiality considerations and meaningful comparisons between same-sector firms, as well as pointers for subsequent practical investment or policy action (6.6.4). The fifth and final sub-section calls for risk origination, uncertainty undertaking, and risk transfer metrics to be featured systematically in all SVC measurements (6.6.5).

6.6.1 Value transfers as SVC metrics and inputs for firm-level SVC measurements

This inquiry develops an elite theory of economic development by positing that elite agency, aggregated at the meso-level elite system level, is the transmission mechanism between micro- and macro-perspectives. The EQx that has been described in this chapter is the initial comparative aggregate measurement at the meso-level of the elite system designed to test the relationship between elite quality and developmental outcomes on the premise that elite agency is the endogenous microfoundation of institutional change. The index is based on macro-level *indicators* that provide evidence of aggregate value creation/extraction by elite business models. The sustainable value creation of these business models is evaluated through SVC measurements like the VCr that are based on firm-level *metrics* representing evidence of value creation/extraction by the individual firm. How are these metrics (I) conceptually determined, how are they (II) quantified (to realize the 'quantifiability of value transfers' assumption), and what is the (III) process to incorporate them into the equations for the SVC measurements? Figure 6.6 provides a visual rendition of this three-stage process to establish firm-level SVC measurements and their metrics.

As described in Section 5.3.1 on the conceptualization and operationalization of value transfers, and consistent with the implications resulting from the three assumptions for socio-economic relations (Figure A5.4a), SVC measurements directly or indirectly reference P&L financial statements and so each of their constituent SVC metrics

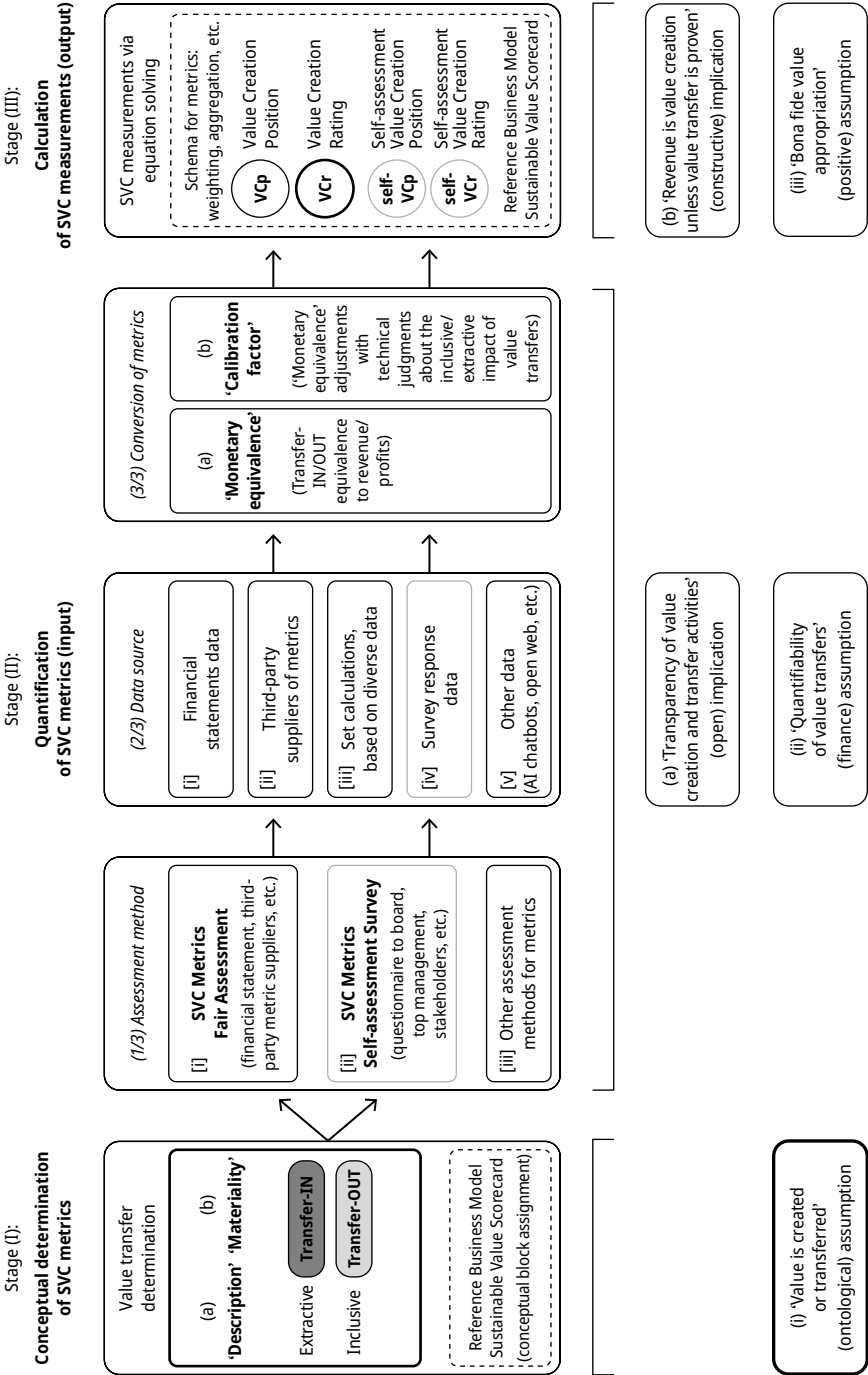


Figure 6.6: The three-stage process to establish firm-level SVC measurements and their metrics.

must do the same. As noted throughout, for transfer-IN (value appropriated but *not* created) it is easier to determine the revenue from value created by stakeholders than it is to determine the savings from ‘cost created but *not* borne’ (even the ‘extractive’ transfer-COST, see Figure A5.5a) that have such an impact on profits (facilitated by negative externalities and activities such as creating pollution that transfer costs away from the principal). As with the transfer-OUT (value created but *not* appropriated) amounts, these costs are also off-book. Transparency is universally understood as the foundation of financial institutions, generates trust in capital markets, and underpins accountability (Kaufmann & Weber, 2010). Hence, in pursuit of the ‘transparency of value creation and transfer activities’ (open) implication for financial analysis (see Figure A5.4b), and after ascertaining that both transfer-IN—including the ‘extractive’ transfer-COST—and transfer-OUT activities have conceptual integrity, are material, and can be described by SVC metrics, the aim must be to quantify and express them all as exact amounts directly derived from (transfer-IN) or indirectly matched (transfer-OUT) with the revenue/profits of the P&L statement.¹³⁴ On this premise, both types of metrics (transfer-IN/OUT) serve as the primary inputs for the four SVC measurements. For the VCp and the VCr the process commences with the ‘SVC Metrics Fair Assessment’; for the self-VCp and the self-VCr it begins with the ‘SVC Metrics Self-assessment Survey’. The next paragraphs describe creating the SVC measurements as a three-stage process: (I) the *conceptual determination of SVC metrics* in accordance with the six categories of The Value Creation and Appropriation Matrix, see Figure 6.7; (II) the *quantification of SVC metrics (input)* in order for them to be integrated as inputs into the SVC measurements, see Tables 6.1 and 6.2 and; (III) the *calculation of SVC measurements (output)*. Figure 6.6 serves a guide going forward, with its numbering and notational logic alluded to throughout this sub-section.

The classification of SVC metrics provided in Figure 6.7 summarizes the value transfer arguments made so far (the second, third, and fourth sextants follow the logic established in Chapter 2, see Figure 2.11) or still to come (the fifth sextant is covered in Section 8.2 on ethics, see also Figure A5.5a) employing a (2x3) matrix that is based on the notions of value creation (on the x-axis) and value appropriation (on the y-axis).

134 The ‘destructive’ transfer-COST (the ‘*negative* value created and *not* appropriated’ in Figure 6.7) of, for instance, legal opioids or the banned (since The Hague Convention) hollow-point bullets (“bullets which expand or flatten easily in the human body”, International Peace Conference, 1899), are indelibly associated with the profits of their respective business models. Yet, unless this cost is institutionalized *per se* as a statutory part of an income statement category (i.e., as an expense incurred through legally mandated penalties for undertaking these activities), its value destruction is not considered a transfer-IN amount and does not function as an input to SVC measurements. The treatment of these negative off-P&L costs therefore contrasts with positive value transfer-OUT amounts where SVC metrics are also off-P&L but *are* incorporated in the VCr. Nonetheless, documenting and quantifying ‘destructive’ transfer-COST metrics as far as is practicable will be undertaken to support ‘value destruction ratio’ calculations (see Sections 8.2.1 and 8.2.2 and Figure A5.5b) and is also of relevance to researchers, investors, or policy initiatives.

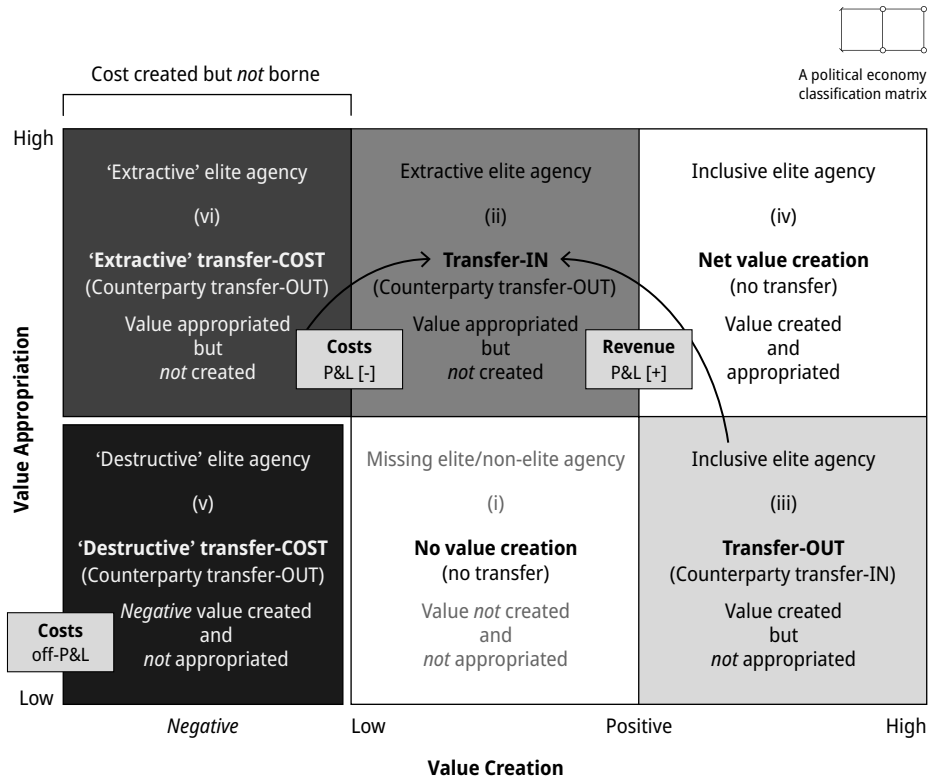


Figure 6.7: The Value Creation and Appropriation Matrix: A framework for the classification logic of SVC metrics.

The operationalization of sustainability through transfer-IN/OUT metrics, including the transfer-COST metrics ('cost created but *not* borne' is further elaborated on in Sections 8.2.1, 8.2.2 and Figure A5.5a), bolsters the assertion that SVC measurements facilitate firm valuations and decision-making that point towards more inclusive futures. For instance, Damodaran highlights the importance of "*strong barriers to entry*", including those of a legal nature, because barriers "create more value when new entrants can be kept out of the business" (2005, p. 43). The pertinent question that the transfer-IN/OUT approach addresses is whether such value is truly a first-order productive activity or should rather be classified as a second-order extractive value transfer (see Table 2.3). Barriers clearly increase value appropriation and hence, in Damodaran's view, the valuation of firms. This is equally the case for all other conventional valuation methods and is encouraged in practice by frameworks like the Morningstar Economic Moat Rating.¹³⁵ The open issue is whether barriers or moats (or competitive monopolies,

¹³⁵ See: <https://www.morningstar.com/investing-definitions/economic-moat>

subsidies, and market concentration) are sustainable if they result in value transfer-IN? The valuation frameworks for sustainable value creation—‘The Five Sustainable Value Creation (SVC) Valuation Frameworks’—are able to account for extractive/inclusive transfer-IN/OUT because the primary input of their functions is the VCr (see the Figure set A5.6). Hence, the conceptual determination of the transfer-IN/OUT metrics that underlie and subsequently quantify SVC measurements like the VCr is integral to business model decision-making when SVC valuations become determinants in capital allocation processes (see Section 5.3.2). That means, for instance, that powerful firms currently benefiting from barriers to entry will, contrary to the stances taken by Damodaran and Morningstar, see diminished SVC valuations because of the effects of transfer-IN metrics. Again, the transfer-IN/OUT SVC metrics classification is in accordance with the logic of The Value Creation and Appropriation Matrix (Figure 6.7).

The first of the three stages (I) to establish SVC measurements is the *conceptual determination of SVC metrics* and hinges on the value transfer materiality of the constituent metrics. SVC metrics are, as per Eccles and Strohle’s “insights from a sociology of quantification and knowledge construction” for ESG data (2018, p. 1), grounded in “Social Origins”. The *raison d’être* of each metric underlying SVC measurements is the economic and human development impact imperative that, on account of the ETED’s operating premises, resolves the value creation and value transfer dichotomy. The dualistic (i) ‘value is created or transferred’ (ontological) assumption, the (ii) ‘quantifiability of value transfers’ (finance) assumption, and the (iii) ‘bona fide value appropriation’ (positive) assumption set out in Figure A5.4a, jointly constitute a call for a conceptually clear and evidence-based discernment of value transfers and their all-important materiality. Single materiality primarily looks at how sustainability (ESG) factors affect profits and are material to investors seeking to maximize these. Double materiality, with its “two dimensions namely: *impact materiality* and *financial materiality*” [emphases in original] where impact materiality takes the principal-stakeholder perspective and looks at extended “*business relationships*” which “include those in the undertaking’s upstream and downstream *value chain* [emphases in original] and are not limited to direct contractual relationships” (European Commission, 2023, Annex I, 3.3, 3.4)

In practice, this statutory position means to Schoenmaker and Schramade (2023, pp. vi, 28) that management ought to “focus on integrated value (which integrates financial, social and environmental value) rather than just financial value” and as a result the “*Responsible company* [emphasis in original] manages and balances profit (financial value) and impact (social and environmental value)”. In line with the earlier discussion, the dual materiality framework of this elite theory of economic development comprehends ‘impact’ as ‘value transfers’. Such transfers are both extractive (the negative value transfer-IN) and inclusive (the positive value transfer-OUT), and their operationalization starts with the lowest indivisible constituents, the SVC metrics, before proceeding upwards to firms, sectors, and the overall elite system. So, what transfers are then material? Hicks (1964, p. 158) provides the decision criteria: “In essence, ‘materiality’ means simply this: if it doesn’t really matter, don’t bother with it.”

Can this theory's approach to materiality address a critical issue that Pazienza, de Jong, and Schoenmaker (2023, pp. 19–20) identify: “The lack of linkage between the ‘how’ to measure and ‘what’ to measure is a primary cause for missing a tested and applicable methodology for measuring corporate sustainability”. This is especially prescient given that the institutional backdrop allows considerable discretion. For instance, the European Sustainability Reporting Standards (ESRS):

do not mandate how the materiality assessment process shall be designed or conducted by an undertaking. This is because no one process would suit all types of economic activity, organisational structure, location of operations or upstream and downstream value chains of all undertakings applying the ESRS. [. . .] In any case, an undertaking shall consider the full scope of environmental, social and governance matters (i.e., sustainability matters) [. . .] material from an entity-specific perspective (EFRAG, 2024, p. 19).

That is, while the “full scope” is to be tackled, including “positive impacts” (European Commission, 2023, Annex I, 3.4), the mandate remains ambiguous regarding the process for the “materiality assessment”. For instance, how quantifiable are the thresholds for the materiality of potential impacts based on “likelihood” and “severity” criteria (EFRAG, 2024, p. 31)? De Cristofaro and Gulluscio argue that evaluations of actual corporate non-financial reports “highlight variety in both double materiality assessments and adoption disclosures, as well as related criticalities” and caution that “this foreshadows a fragmented landscape of materiality analysis disclosure over the next few years that presently requires great attention and increased operational guidance by the international standard setters involved” (2023, p. 1). In contrast, the value transfers conceptual element that underpins SVC measurements, while likewise striving for “the full scope”, seeks hard quantification and monetary equivalence (with revenue or profits) as described in this sub-section and in Figure 6.6, Stage (III).

The unpacking and determination of business model activities as material transfer IN/OUT launches the process of establishing firm-level sustainability measurements. The Business Model Sustainable Value Scorecard (see Section 6.6.3), which parallels the EQx architecture in using conceptual elements like ‘power’, ‘market value’ or ‘creative destruction’, aids the selection and classification of metrics into ‘pillars’ to support their weighting adjustments at the final equation solving stage (III) of the process. Table 6.1 shows how in the first stage (I) value transfer SVC metrics are conceptually determined via their (a) ‘description’, and their sustainable value creation (b) ‘materiality’ to ascertain their extractive transfer-IN and inclusive transfer-OUT using the classification logic of The Value Creation and Appropriation Matrix (Figure 6.7).

This initial stage (I) to establish SVC measurements—the *conceptual determination of SVC metrics*—is completed once the value transfer determination for a sufficient and relevant set of metrics (the number of metrics will likely be in the dozens, though over a hundred will be needed for higher precision SVC measurements) for a specific

sector (see Lydenberg, Rogers, & Wood, 2010; Eccles, Krzus, Rogers, & Serafeim, 2012) or set of firms (e.g., from listed firms in Switzerland to poverty alleviation retail start-ups in emerging markets).

Table 6.1: (continues in Table 6.2): Stage (I) conceptual determination of 10 selected SVC metrics and their transfer-IN/OUT in the three-stage process to establish firm-level SVC measurements (based on Casas-Klett & Nerlinger, 2023, Table 3, pp. 43–45).

Metric			Stage (I): Conceptual determination of SVC metrics	
Ref.	(1) <i>Name</i> (2) Identifier (ID) (3) Category (pillar)		(a) Metric description	(b) Metric materiality
		(b') Value transfer type		
01	(1) <i>Lobbying</i> (2) VCr_rc.LOC (3) Regulatory Capture [i.2]		Lobbying, the “variety of methods to influence government policies” (de Figueiredo & Richter, 2014, p. 164), is a firm expense designed to convert into revenue (and profits).	Lobbying is the exercise of power in the political arena; it can skew competition, lead to regulatory capture and stymie effective public policies. Hence it is potential transfer-IN.
	(b') Transfer-IN			
02	(1) <i>Gender wage gap</i> (2) VCr_hc.GWG (3) Human Capture [i.3]		The gender wage gap is the difference between male and female median wages, divided by the male median wage.	The long-term objective for this metric is a value of 0 (as per the ambition of UN SDG 5). A deviation is a cost reduction, a transfer-IN from and a transfer-COST to female (or, rarely, male) employees.
	(b') Transfer-IN (transfer-COST)			
03	(1) <i>Market concentration</i> (2) VCr_fd.HHI (3) Firm Dominance [ii.5]		In the theory of industrial organization (e.g., Tirole, 1988), market concentration is when a small number of firms control large market shares and is commonly measured by the Herfindahl-Hirschman Index (HHI).	Market concentration affects market competition and reflects market power, which “is a firm having the ability to influence the price at which it sells its product(s)” (Syverson, 2019, p. 25).
	(b') Transfer-IN			
04	(1) <i>R&D expenses as percentage of revenue</i> (2) VCr_RDE_x (3) Creative Destruction [ii.6]		Research and development (R&D) expenses represent all direct and indirect costs related to the creation and development of new processes, techniques, applications, and products with commercial possibilities.	R&D is one of the means for future firm growth and competitive advantage. It generates innovation spillovers (Griliches, 1992) and hence is an inclusive transfer-OUT.
	(b') Transfer-OUT			

Table 6.1 (continued)

Metric		Stage (I): Conceptual determination of SVC metrics	
05	(1) <i>Subsidies</i> (2) VCr_ti.SUB (3) Taking Income [i.8] (b') Transfer-IN	“A subsidy is defined as a ‘financial contribution’ by a government which provides a benefit” (WTO, 1994b). ¹³⁶	Subsidies are a transfer-IN from the government (taxpayer) stakeholder and can be “particularly harmful” (WTO, 1994b).
06	(1) <i>Effective tax rate compared to peers</i> (2) VCr_ti.ETR (3) Giving Income (iii.7) (b') Transfer-OUT	The effective tax rate is defined as the percentage of income at which an individual or corporation is taxed (in comparison to its peers).	Taxes are an important link between firms and the society that surrounds them. A firm paying less/more taxes than its peers is engaged in transfer-IN/OUT.
07	(1) <i>Carbon exposure</i> (2) VCr_ul.CEX (3) Uneared Income (iii.9) (c) Transfer-IN (transfer-COST)	Companies that reduce their emissions to (below) zero are deemed to be sustainable. The Carbon (emissions) exposure is defined as CO ₂ and CO ₂ -equivalent emissions (Scope 1) in tonnes (1 ton is equal to 1000 kgs of carbon dioxide) multiplied by the latest carbon price and divided by revenue.	At least since the 2015 Paris Agreement, carbon emissions from public companies have come under increasing scrutiny. Carbon emissions over zero are a transfer-COST to the nature stakeholder as well as a cost to future generations.
08	(1) <i>Capital expenditures as percentage of revenue</i> (2) VCr_cv.KEX (3) Capital Value (iv.11) (b') Transfer-OUT	CapEx divided by revenue.	CapEx are long-term investments that generate transfer-OUT as financial returns, benefit stakeholders such as workers or communities, and have multiplier effects as part of the economy's investment function. ¹³⁷

¹³⁶ The rules in the Agreement on Subsidies and Countervailing Measures (SCM Agreement) of the WTO (1994b) reference US law (Title VII of the Tariff Act of 1930) and detail the various forms that a subsidy can take: (a) “a direct transfer of funds (e.g., a grant, loan, or infusion of equity)”; (b) “a potential transfer of funds or liabilities (e.g., a loan guarantee)”; (c) “foregone government revenue (e.g., a tax credit)”; or (d) “the purchase of goods, or the provision of goods or services (other than general infrastructure)” (International Trade Administration, U.S. Department of Commerce, n.d.). See: <https://www.trade.gov/trade-guide-wto-subsidies>

¹³⁷ Limits to this rationale might apply to shareholders. See research pointing to “the negative abnormal capital investment/return relation” (Titman, Wei, & Xie, 2004, p. 677).

Table 6.1 (continued)

Metric				Stage (I): Conceptual determination of SVC metrics	
09	(1) <i>Capital expenditures as percentage of debt</i> (2) VCr_cv.KED (3) Capital Value (iv.11)	CapEx divided by total debt.	Debt is first a transfer-IN of value from the future to the present associated with the risk of not realizing returns on capital (e.g., because of malinvestments). ¹³⁸		
	(b') Transfer-IN				
10	(1) <i>Human Rights Score</i> (2) VCr_lv.HRS (3) Labor Value (iv.12)	The human rights score measures a company's effectiveness in respecting fundamental human rights conventions.	Not respecting human rights reduces costs but is an intolerable form of transfer-IN by firm principals from vulnerable stakeholders such as disenfranchised workers.		
	(b') Transfer-IN (transfer-COST)				

The second stage (II)—the *quantification of SVC metrics (input)*—is itself a three-step process that revolves around the data needed to quantify the metrics. It begins with a fundamental choice: the (1/3) *assessment method*. Available methods are currently [i] the SVC Metrics Fair Assessment and [ii] the SVC Metrics Self-assessment Survey, though [iii] ‘other assessment methods for metrics’ such as utilizing AI might be pertinent and feasible in the future. Regardless of the assessment choice, each metric is matched with numerical data to expresses in quantifiable terms the specific aspect of the business activity it describes in value transfer-IN/OUT terms. The ‘quantifiability of value transfers’ (finance) assumption (Figure A5.4b) comes to life during the second choice to be made at this stage: the (2/3) *data source*.

In the case of fair assessment, the data sources will either originate from [i] audited ‘financial statement data’, [ii] ‘third-party suppliers of metrics’¹³⁹, or [iii] ‘set calculations based on diverse data such as public data, financial statements, non-financial information included in integrated reports (Eccles & Spiesshofer, 2015), industry associations, or global institutions like the IMF. In the case of self-assessments

¹³⁸ Limits to this rationale exist, such as taking on excessive debt to finance “empire building” by management (Titman, Wei, & Xie, 2004).

¹³⁹ These include ESG products from MSCI, ISS (Governance and ESG), LSEG (Data & Analytics and FTSE Russell), Bloomberg, S&P Global (Global Market Intelligence and Trucost), CDP, and Morningstar Sustainalytics.

(see the discussion in next section), the sources are [iv] ‘survey response data’ from questionnaires. The raw survey responses are obtained from company executives, directors, or other business insiders that complete these for the purposes of strategizing, public outreach, board reviews, or even executive education (see the discussion in Section 6.6.2 and a sample of the SVC Metrics Self-assessment Survey for firms in Table A3.6). These raw responses are ultimately also converted via data transformation rules applied at the (3/3) *conversion of metrics* step into monetary amounts. Thirdly, there might be metrics that rely on [v] ‘other data’, such as generative AI or open web data.

Table 3.6 shows sample questions for the SVC Metrics Self-assessment Survey. For example, responses to the question ‘Estimate the percentage of the firm’s revenues gained from cartel agreements’ are used to establish the ‘cartel power’ metric; responses to the question ‘Is the firm’s effective tax rate above (+) or below (-) the industry average and what does this tax advantage/disadvantage represent as a percentage of firm revenue?’ are used to establish the ‘effective tax rate in comparison to peers’ metric; and responses to the question ‘Estimate the firm’s R&D expenses as a percentage of revenue’ serve to establish the ‘R&D expenses as a percentage of revenue’ metric. Table 6.2 illustrates the diverse data sources used for the SVC Metrics Fair Assessment. For example, ESG datasets from third-party commercial suppliers inform the ‘gender wage gap’ metric; set calculations with data from various sources yield the ‘carbon emissions exposure’ metric; and data in the financial statement is used to establish the ‘R&D expenses as a percentage of revenue’ metric. Note that the quantification of the metrics derived from the SVC Metrics Self-assessment Survey conducted to establish the self-VCp/self-VCr will differ from those derived from the SVC Metrics Fair Assessment conducted to establish the VCp/VCr, as the latter rely on independent third-party suppliers and set calculations (the invariable divergences between the two versions will be an instructive subject for reflection and analysis).

Once this second step—(2/3) *data source*—to establish firm-level SVC measurements has produced sufficient data pertinent to a minimum set of relevant metrics, the all-important third step—(3/3) *conversion of metrics*—is undertaken. This step requires: (a) establishing ‘monetary equivalence’ and (b) the application of a ‘calibration factor’ based on technical judgments to account for the extractive/inclusive impact of an SVC transfer-IN/OUT metric.

Examples of implementing the conversion of metrics to establish ‘monetary equivalence’ and the ‘calibration factor’ for transfer-IN/OUT are detailed in Table 6.2. For the ‘gender wage gap’, the ‘monetary equivalence’ is arrived at by ascertaining the labor cost savings from lower wages as a percentage of P&L revenue (e.g., 2%), while the ‘calibration factor’ is set at 110% to account for the full cost savings effect plus a punitive component (10%) of this transfer-IN to account for gender discrimina-

tion,¹⁴⁰ for the ‘R&D expenses as percentage of revenue’ metric, the ‘monetary equivalence’ is straightforward as R&D expenses are a line item in the P&L (e.g., 12%), while the ‘calibration factor’ is set at a high rate of 200% to account for the positive spillover effects of the transfer-OUT; for the ‘carbon emissions exposure’ metric, the ‘monetary equivalence’ is arrived at by ascertaining the cost savings achieved for not paying the national carbon price for x metric tons of carbon discharges as a percentage of P&L revenue (e.g., 6%), while the ‘calibration factor’ is set at 100% to account for the full transfer-IN as the price of the carbon offsets needed to reach carbon neutrality. As the three examples reveal, establishing (a) ‘monetary equivalence’ is a daunting data-driven task in the *conversion of metrics* (3/3), and is followed by the need for equally formidable judgments to set the (b) ‘calibration factor’. As Hicks (1964, p. 171) highlights, even accountants must exercise judgments on materiality, while in the case of setting sector-specific indicators, the expert also “relies on subjective judgments” (Lydenberg, Rogers, and Wood (2010, p. 22).

Not applying a judgment for a ‘calibration factor’ would mean that the ‘monetary equivalence’ amount of a given metric is final, thus establishing (with an implicit ‘calibration factor’ of 100%) the transfer-IN/OUT amounts that will be directly set against the firm’s revenue/profits. When a ‘calibration factor’ is utilized it must be consistent across the selected firms in a set (in an industry, a country, or a business model type). As described in the examples above, the factor choices are informed by the sustainable value creation impact of the particular metrics and utilize approaches such as evidence-based conceptual deliberation, or *ad hoc* criteria. For instance, in the case of the ‘R&D expenses as percentage of revenue’ metric, theoretical and empirical evidence of innovation spillovers, economic growth, higher productivity-driven value creation (as suggested by Romer, 1990) and purported multiplier effects, lead to the judgment to double the impact (i.e., a ‘calibration factor’ of 200%). Table 6.2 provides ten instances of the (3/3) *conversion of metrics* on the basis of a metric’s (a) ‘monetary

140 Systematic investigation is needed for a full understanding of the facts surrounding a metric in order establish transfer-IN/OUT amounts. For instance, discrimination must underlie the setting of the ‘calibration factor’ for the gender pay gap. In a “gig” economy business model “with no gender discrimination and highly flexible labor markets”, a gender earnings gap should in principle not exist. Consequently, for any gender wage gap detected as a result of discrimination, the fixed ‘calibration factor’ percentage applied to ‘monetary equivalence’ in order to establish the transfer-IN just described would apply (i.e., 110%: the full cost savings for the firm plus a punitive uplift of 10% for discrimination, see Table 6.2). However, when a gender pay gap is detected—to the tune of 7% in the case of Uber—it “can be entirely attributed to three factors: experience on the platform (learning-by-doing), preferences and constraints over where to work (driven largely by where drivers live and, to a lesser extent, safety), and preferences for driving speed”, the conclusion being that the 7% gap is in fact not “gender discrimination” (Cook, Diamond, Hall, List, & Oyer, 2020). Does this research therefore suggest that an optimum gender earnings gap of 7% should be universally applied for the “gig” economy with the ‘calibration factor’ of 100% applicable in a non-linear fashion, that is, only for gaps that are above or deviate from this benchmark?

equivalence' and (b) a 'calibration factor' that is judged to correspond to fair impact. The conversion of metrics is the last step of stage (II) and provides in monetary terms the raw material for the equation solving in stage (III)—the *calculation of SVC measurements (output)*, based on the equation set in Table 2.4—that completes the three-stage process to establish the sustainable value creation of firms.

Table 6.2: (continuation of Table 6.1): Stage (II) quantification of 10 selected SVC metrics in the three-stage process to establish firm-level SVC measurements (based on Casas-Klett & Nerlinger, 2023, Table 3, pp. 43–45).¹⁴¹

Metric		Stage (II): Calculation of SVC metrics (input)			
		(1/3) <i>Assessment method</i>	(2/3) <i>Data source</i>	(3/3) <i>Conversion of metrics</i>	
Ref.	(1) Name	[i] SVC	[i] Financial	(a) 'Monetary	(b) 'Calibration factor'
		Metrics Fair	statements	equivalence' (the	(a percentage that
	(b') Value	Assessment	[ii] Third-party	criteria to derive	adjusts monetary
	transfer	[ii] SVC	suppliers of metrics	revenue/profits	equivalence)
	type	Metrics Self-	[iii] Set calculations	equivalence)	
		assessment	[iv] Survey response		
		Survey	data		
		[iii] Other	[v] Other data		
		assessment			
		methods for			
		metrics			

¹⁴¹ These 10 metrics are representative of transfer-IN/OUT business model activities and are for the most part used in the *Value Creation Ratings Pilot Report 2024: The Sustainable Value Creation of Firms* (Casas-Klett & Nerlinger, 2024), establishing the VC_r (and VC_p) for approximately one hundred publicly listed firms. They are also appropriate for the questionnaire used for the SVC Metrics Self-assessment Survey to establish the self-VC_p/self-VC_r (and the IB-self-VC_r subset) of participating firms. Setting the 'monetary equivalence' and the 'calibration factor' for metrics is crucial for the determination of VC_p/VC_r and self-VC_p/self-VC_r scores.

Table 6.2 (continued)

Metric	Stage (II): Calculation of SVC metrics (input)			
	(1/3) Assessment method	(2/3) Data source	(3/3) Conversion of metrics	
01 (1) <i>Lobbying</i> (b') Transfer-IN	[i] SVC Metrics Fair Assessment [ii] SVC Metrics Self-assessment Survey	[iv] Survey response data [iii] Set calculations (e.g., from the US, Center for Responsive Politics data)	A lobbying expenses multiplier ¹⁴² (e.g., 3x)	50% (half of revenue generated by lobbying is transfer-IN)
02 (1) <i>Gender wage gap</i> (b') Transfer-IN (transfer-COST)	[i] SVC Metrics Fair Assessment [ii] SVC Metrics Self-assessment Survey	[ii] Third-party suppliers of metrics (e.g., Sustainalytics; MSCI social scores; LSEG Data & Analytics, SODODP016) [iv] Survey response data	Cost savings due to lower wages (e.g., 2% lower labor costs)	110% (full cost savings from lower female wages is a discriminatory transfer-IN)
03 (1) <i>Market concentration</i> (b') Transfer-IN	[i] SVC Metrics Fair Assessment [ii] SVC Metrics Self-assessment Survey	[iii] Set calculations [ii] Third-party suppliers (e.g., Product Segment 1 Sales, LSEG Data & Analytics, WC19501) ¹⁴³ [iv] Survey response data	Price premium vs competitive market price counterfactual (e.g., 10% higher prices)	150% (full price uplift plus an additional 50% to account for transfer-IN due to long-term market distortion effects)

¹⁴² While “a large number of papers show lobbying has positive returns”, isolating the effects of lobbying and quantifying these (and answering questions like “when do the marginal benefits of spending an extra dollar on lobbying begin to be outweighed by the marginal costs?”) requires transaction-related data, natural experiments, and other methodologies, along with advances in theory (de Figueiredo & Richter, 2014, pp. 169, 177, 178, 179). While most pundits “take for granted that the more money an interest group has, the more likely it is to get what it wants”, McKay advocated caution and the need for “further research on the effects of money in policymaking” (2012, p. 908). The ultimate research insight from a transfer-IN perspective is how much revenue each dollar, euro, or yuan spent on lobbying generates for the organization.

¹⁴³ A reference point for the establishment of the HHI for US public firms using third-party data from Compustat can be found in Grullon, Larkin, and Michaely (2019).

Table 6.2 (continued)

Metric	Stage (II): Calculation of SVC metrics (input)			
	(1/3) <i>Assessment method</i>	(2/3) <i>Data source</i>	(3/3) <i>Conversion of metrics</i>	
04 (1) R&D expenses as percentage of revenue (c) Transfer-OUT	[i] SVC Metrics Fair Assessment [ii] SVC Metrics Self-assessment Survey	[i] Financial statement	R&D expenses (e.g., 12%)	200% (double the R&D expenses are a transfer-OUT to account for spillover effects)
05 (1) <i>Subsidies</i> (b') Transfer-IN	[i] SVC Metrics Fair Assessment [ii] SVC Metrics Self-assessment Survey	[iii] Set calculations (e.g., data from WTO, OECD, government records) [v] Other (open web)	Sum of received government subsidies, SCM Agreement definition (e.g., 15%)	67% (1/3 of full monetary equivalence is discounted in deference to rationale for government grant)
06 (1) <i>Effective tax rate compared to peers</i> (b') Transfer-OUT	[i] SVC Metrics Fair Assessment [ii] SVC Metrics Self-assessment Survey	[i] Financial statements [ii] Third-party (Income Taxes, LSEG Data & Analytics, WC01451) [iii] Set calculations ¹⁴⁴	Extra tax expenses/ tax savings due to lower/ higher effective rate (e.g., +/-3%)	120% (full 100% for extra tax/tax savings plus 20% for social cohesion gain/loss assumption)
07 (1) <i>Carbon emissions exposure</i> (c) Transfer-IN (transfer-COST)	[i] SVC Metrics Fair Assessment [ii] SVC Metrics Self-assessment Survey	[ii] Third-party suppliers (e.g., CDP) [iii] Set calculations	Cost savings, based on national carbon price (e.g., 6% of revenue)	100% (full 100% for carbon offsets required)

¹⁴⁴ Set calculations could consist of the combination of Bureau van Dijk Orbis data on income tax expenses for companies and OECD benchmarks (see: https://stats.oecd.org/index.aspx?DataSetCode=CTS_ETR).

Table 6.2 (continued)

Metric	Stage (II): Calculation of SVC metrics (input)			
	(1/3) Assessment method	(2/3) Data source	(3/3) Conversion of metrics	
08 (1) <i>Capital expenditures as a percentage of revenue</i> (b') Transfer-OUT	[i] SVC Metrics Fair Assessment [ii] SVC Metrics Self-assessment Survey	[i] Financial statements	CapEx (e.g., 18% of revenue)	150% (full 100% plus 50% for positive effects on employment, growth, innovation, etc.)
09 (1) <i>Capital expenditures as percentage of debt</i> (b') Transfer-IN	[i] SVC Metrics Fair Assessment	[i] Financial statements [iii] Set calculations	CapEx (e.g., 10% of revenue) times likelihood (e.g., 20%) of overinvestment due to debt financing (e.g., 2% of revenue)	40% (discount on full monetary equivalence based on technical approach adjusting for confidence in overinvestment likelihood estimate)
10 (1) <i>Human Rights Score</i> (b') Transfer-IN (transfer-COST)	[i] SVC Metrics Fair Assessment [iii] Other assessment	[ii] Third-party suppliers (e.g., LSEG Data & Analytics, TRESGSOHRS) [v] Other (open web)	Cost savings from disregarding human rights (e.g., 1.5% of revenue)	100% (full 100% cost saving is transfer-IN)

The calculations for the third stage (III) of the process brings the many SVC metrics together—like the indicators in the meso-level EQx counterpart—and requires technical decisions regarding the aggregation schema, the type of normalization required, and, most critically, various judgments about weighting. Such weightings concern the comparative significance of each metric relative to others and must be made both within a metric category and across categories of metrics. The 12 pillars of The Business Model Sustainable Value Scorecard (see Section 6.6.3 and Figure 6.8) constitute such metric categories. In order to model sustainable value creation as accurately as possible, and just as with the discussion on the functions underlying SVC valuations (in Section 5.3.2), current weighting could be superseded at a later stage by factor models that embody conceptual insights or the fundamental data architecture. These would be functions based on empirically ascertaining the underlying data structures of publicly listed firms that reflect *de facto* weightings of a SVC metric based on mar-

ket performance across the selected firm set. The weighting functions would mirror CAPM formulas, with the estimated beta (the sensitivity measure based on the regression of stock returns) linked to specific transfer-IN/OUT SVC metrics to enable a weighting that references market performance. Further approaches in this regard include the application of the Fama-MacBeth (1973) regression used to assess risk factor premia in order to explain asset returns, and the use of Principal Component Analysis (PCA) to identify and preserve the most important features or patterns of multiple metrics.

The ‘bona fide value appropriation’ (positive) assumption and the derived ‘revenue is value creation unless value transfer is proven’ (constructive) implication (see Figure A5.4b) considers all revenue/profits of a business model to be net value creation until the moment that the transfer-IN sum is ascertained (or that the costs shifted to stakeholders are confirmed). With the aggregation of the transfer-IN amounts from all constituent metrics, a firm’s revenue/profits can be split and allotted to the two value categories necessary for VCp (and self-VCp) calculations: net value creation and transfer-IN. Note that the transfer-IN metrics utilized will include those that represent and quantify ‘extractive’ transfer-COST, as this is the value appropriated but *not* created form of ‘cost created but *not* borne’ (as in Figure 6.7 that sets out the framework for the classification logic of SVC metrics). While these unrealized costs have technically no bearing on revenue, they are essential to profits. In order to achieve inclusive neutrality, a firm would need to generate additional revenue equal to the amount of these costs to offset the extraction. Hence, in the context of SVC metrics, any cost *not* borne that can be linked to the P&L is deemed to be ‘extractive’ and thus equated to a revenue amount that is fit for transfer-IN quantification purposes (metrics that capture ‘destructive’ costs, or ‘negative value created and *not* appropriated’, can certainly be calculated, but as they are off-P&L are not currently inputs for SVC measurements). The sum of all transfer-IN metrics, when matched against the P&L statement and deducted from revenue (or profits, depending on the value appropriation criteria), yields net value creation (see Figure 2.9 and equation (2.3’)).¹⁴⁵

The sum of all transfer-OUT metrics is necessary for the VCr (and self-VCr) calculations. The SVC metrics representing value created but *not* appropriated are all off-P&L and as such rely as much on data as on judgment for their conversion into monetary terms and impact assessment. This differs from their value appropriated but *not* created transfer-IN counterparts where off-P&L metrics are not considered, even when the amounts sadly exceed revenues, as when non-institutionalized ‘destructive’ transfer-COST is shifted to stakeholders (e.g., business models with severe pollution externalities such as those caused by fertilizers and pesticides, or Purdue Pharma’s

145 The visualization provided in Figure 2.8 and the equation (2.3’) in Table 2.4 defines ‘net value creation’ as ‘value appropriation’ minus ‘value transfer-IN’. In contrast, to derive the full ‘value creation’ amount, the transfer-OUT sum is added to ‘net value creation’ as in equation (2.1).

induced opioid addiction business model with its hundreds of thousands of lost or destroyed lives, see Section 8.2.1).¹⁴⁶ The judgments for inclusive transfer-OUT metrics, on the other hand, are rendered to estimate off-P&L value to society at the (3/3) *conversion of metrics* step: (a) ‘monetary equivalence’ is ascertained before amounts are adjusted up or down with the (b) ‘calibration factor’. While always in relation to a firm’s revenue/profits, particularly sustainable firms may well exceed these amounts since the transfer-OUT value created but *not* appropriated can be boundless (e.g., the effects on long-term employment caused by the growth of capital expenditures, or the value spillovers in terms of lives saved from Penicillin or the mRNA vaccines developed by Moderna and BioNTech).

The VCr, advanced in this book as the main firm-level sustainability measurement (this sub-section extends the discussions in Chapter 2 and Section 5.3.1), as well as the VCp, are calculated for an organization in stage (III)—*calculation of SVC measurements (output)*—upon the completion of the two initial stages of the three-stage process (depicted in Figure 6.6). That is, once conceptually suitable transfer-IN/OUT SVC metrics (see examples in Table 6.1) have been determined in stage (I) and quantified in stage (II) through a three-step process (see examples in Table 6.2), stage (III) consolidates these into SVC measurements through the application of normalization, aggregation, and weighting schema. The ensuing transfer-IN/OUT aggregates enable the calculation of the SVC measurements based on equation sets (4.1) and (4.2). Note that some of the SVC metrics used for the VCr relate to the international interests of a firm and are the constituent elements of the ‘International Business Value Creation Rating’ (IB-VCr). This VCr-derived measurement is designed to address matters that are specific to organizations engaged in international business (as is discussed in Section 7.3.1, for instance).

The SVC metrics based output scores of the VCr and other allied measurements, including the IB-VCr or the ‘Sector Value Creation Rating’ (‘sector-VCr’) discussed in

146 Since the value amount of transfer-OUT can be practically unlimited (e.g., penicillin), there is no upper limit to the magnitude of a VCr score. On the other hand, as is recounted in the examples provided in Section 5.3.1, the present calculation of the VCp/VCr limits transfer-IN to a maximum amount equivalent to revenue/profits, meaning that the lowest possible respective VCp/VCr scores are technically set at 0.00 and 0%. It was noted earlier that this is an incorrect reflection of practice and can be a gross underestimation of impact, as the size of the ‘destructive’ transfer-COST (Figure A5.5a) created by the principal and borne by stakeholders can be immense, as the examples adduced in the text illustrate (e.g., legal opioids). An alternative approach would be a quantification that assigns the full ‘monetary equivalence’ and a fair ‘calibration factor’ to incorporate as transfer-IN any ‘destructive’ transfer-COST metrics (*negative* value created but *not* appropriated) in order to account for all the ‘cost created but *not* borne’ by principals and loaded onto stakeholders. When the transfer-IN sum exceeds revenue/profits, the VCp enters negative (percentage) territory. Such an unconstrained transfer-IN approach also impacts the VCr, since when the transfer-IN exceeds revenue/profits the VCr score will likewise be pushed down towards zero and potentially turn negative (unless it is compensated for by an equivalent transfer-OUT sum).

Section 6.6.5, constitute this inquiry's intended sustainability benchmarks for investors (such as asset managers, mutual funds, or insurance companies), issuers (such as corporations or municipalities), intermediaries (such as investment banks), social activists (such as NGOs), political parties (from across the spectrum), institutions and the law (such as politicians and regulators), decision-makers active in the international arena (such as officials in multilateral organizations and MNE executives) and, most importantly, for the transformational leadership of elite business owners and their top executives (discussed in detail in Section 7.2.4 and in the review of the main frameworks for management, policy, and finance in the concluding Chapter 8).

The first global report on the sustainable value creation of firms is the *Value Creation Ratings Pilot Report 2024: The Sustainable Value Creation of Firms* (Casas-Klett & Nerlinger, 2024). Also referred to as the pilot VCr2024, it is an initial exploratory attempt to deliver VCr and VCp scores for over a hundred leading corporations from the world's major economies. The process of preparing the pilot report addressed technical issues such as monetary equivalence weighting, particularly in stages II and III of the three-stage process described in Figure 6.6. The conceptual and empirical micro-meso-macro connection between sustainable value creation at the micro firm-level (e.g., as measured by the VCr) and elite quality at the macroeconomic via meso-level (e.g., as measured by the EQx) is a *leitmotif* of this work (refer to Figure 5.4): elite business models that exhibit sustainable value and risk creation bring about a higher degree of elite quality at the meso-level elite system level and *ceteris paribus* boost the prospects for economic and human development.

6.6.2 Survey-based firm-level SVC measurements

This sub-section delves into the four survey-based SVC measurements and their two respective survey instruments. The SVC Metrics Self-assessment Survey, discussed as part of the SVC metrics data transformation process (Figure 6.6), yields the first Self-assessment Value Creation Position (self-VCp) measurement and the second Self-assessment Value Creation Rating (self-VCr) measurement. A subset of the latter becomes the third measurement, the International Business Self-assessment Value Creation Rating (IB-self-VCr), which is specific to international business. In addition, the Perceptions of Value Creation Survey (360-VCz), a fourth planned firm-level SVC measurement (that does not rely on value transfer-IN/OUT metrics) will be based on a two-tiered instrument made up of the Firm Stakeholder Questionnaire (1/2) tailored to stakeholder type (e.g., employees, suppliers, governments), and the Firm Principal Questionnaire (2/2) aimed at the residual income beneficiaries (e.g., owners, executives, directors).

The SVC Metrics Self-assessment Survey for the firm is a self-audit method to calculate the self-VCp/self-VCr—the VCp/VCr's rudimentary twins—by asking questions to the top management team (but can be extended and adjusted for other principals such as the board or large investors). The survey response data is converted into

quantifiable amounts of value and risk (transfer-IN/OUT) for each of the metrics assessed (see a draft questionnaire in Appendix A3.6). While some questions will seem similar to those of the 360-VCz survey's Firm Principal Questionnaire (2/2) introduced shortly, their aim is not to gauge perceptions but rather to establish hard monetary equivalences because the quantified metrics are devised in relation to P&L revenue/profits. Respondents must come fully prepared to the self-assessment session and conceptually understand each SVC metric. They can answer the surveys either individually or collectively, the latter being appropriate when a team is jointly responsible for the business model and its performance. Again, as most metric questions reference revenue or profits, respondents require recourse to financial statements, internal information, and other third-party data to guide their answers, even though the examination is not as thorough and the self-VCp/self-VCr 'monetary equivalence' not as precise a conversion as the SVC Metrics Fair Assessment used for the VCp/VCr (refer to Figure 6.6).

One motivation to obtain self-VCp/self-VCr scores is to contrast them with their rigorous hard-data VCr/VCp counterparts produced through the SVC Metrics Fair Assessment (meant for external stakeholders such as investors or regulators) and ascertain any divergence between the two SVC assessment methods and the causes of this. The purpose of these more informal self-assessments is primarily internal: to support strategic planning, elicit reflections on transformational leadership, and to provide orientation for actual decision-making on sustainability. While the survey questions are based on metrics and the self-audit process is compact, systematic, and documented, the resulting self-VCp/self-VCr measurements are quick, subjective, and preliminary—somewhat akin to a VCp/VCr heuristic.

As with the SVC metrics of the VCr that produce the IB-VCr (see Section 6.6.1), a sub-set of the self-VCr survey contains discrete questions related to the international business of the organization and specifically inquires about cross-border stakeholder relationships to ascertain value (and risk) creation and transfers. In line with the other self-VCr questions, conversion rules will be applied to the responses to attain 'monetary equivalence' with firm revenue/profits. This sub-set of the survey, the International Business Self-assessment Value Creation Rating (IB-self-VCr) will be designed to address matters specific to international management and governance, including entities like subsidiaries or foreign suppliers, and serve as a preliminary self-assessment for international business sustainable value creation measurements (see the discussion of the IB-VCr in Section 7.3.1).

The fourth and final firm-level survey-based SVC measurement will be generated from a second and somewhat different type of questionnaire: the Perceptions of Value Creation Survey (360-VCz). This multi-rater comprehensive feedback instrument will be comprised of the Firm Stakeholder Questionnaire (1/2) for the different types of external stakeholders and the Firm Principal Questionnaire (2/2) for top decision-makers and beneficiaries of the firm's residual income (see sample extracts in Tables A3.5a and A3.5b respectively). Stakeholders can include customers, suppliers, debt-

holders, dataholders and intelligence providers, media, taxpayers, government, regulators, NGOs, employees, management, and others. Principals include the different types of beneficiaries (see ownership types in Boss, Connelly, Hoskisson, & Tihanyi, 2013) as well as those agents (Jensen & Meckling, 1976) tasked with decision-making on behalf of owners such as board directors and top executives. As a genuine appraisal of perceptions, this questionnaire will not directly draw on or require data from the financial statement's revenue/profits (unlike the VC_r/VC_r with its signaling and external orientation, or the self-VC_p/self-VC_r with its strategic reflection and internal orientation). Since the survey is being designed for use by both principals and stakeholders it actualizes the ideas of the 360-degree performance feedback interventions (DeNisi & Kluger, 2000) that it references. Questions in the 360-VC_z might be more straightforward and unstructured than those in the self-VC_p/self-VC_r as it strives to be an intuitive snapshot of sentiments and diverse perspectives that does not require supporting documents. Yet, despite resting on veritable perceptions rather than metrics' data, the results will have a similar purpose: to support leaders in reflecting on their organization's sustainable value creation impacts while taking stakeholder perspectives into account. In the spirit of consistency, this micro-level tool will have parallels with the Perceptions of Elites Survey (PE_z) introduced earlier in this section and primarily focusing on the elite system. The survey questionnaire categories will patently adhere to the EQ_x architecture and the 12 pillars of the Business Model Value Scorecard (Figure 6.8), and still reference VC_r metrics and EQ_x indicators where necessary. The 360-VC_z will therefore serve as a practical addition to the transformational leadership toolset and, as such, will be suitable for use in several contexts, including engagements with boards of directors or in executive education.

6.6.3 A supporting tool for the determination and weighting of SVC metrics

Firm-level metrics reflecting value creation and risk origination and transfers are the data inputs for producing SVC measurements. Can the prior conceptual determination and the subsequent weighting of these metrics be made for the assessment of VC_p/VC_r and self-VC_p/self-VC_r with a logic that parallels that of the elite quality measurements?

As is denoted by the adoption of the EQ_x 'pillar' categories in Table 6.1 to facilitate the conceptual determination of a metric, the answer to this question is yes. The ETED's sustainable value creation elements aim to be conceptually consistent across the micro- and meso-levels, as is the operationalization of the respective measurements. Therefore, the two EQ_x sub-indices become the two 'sub-ratings' of (I) 'power' and (II) 'value' and remain unchanged; the 'political' and 'economic' dimensions are now termed as 'market' and 'non-market' to articulate the firm perspective and have four associated 'rating areas': (i) 'non-market power'; (ii) 'market power'; (iii) 'non-market value'; and (iv) 'market value'. As the 12-pillar architecture becomes a 12-pillar structure, the nomenclature used for the EQ_x pillars remains intact. As discussed in

Section 6.6.1, the transfer-IN/OUT quantities of the micro-level metrics are based on ‘monetary equivalence’ and a ‘calibration factor’ referencing firm revenue (or profits). Borrowing from practice-oriented literature on business models, “a visual model or artifact” is purposed “to assist strategic managers in thinking about how they can act” (Simonse, 2014, p. 67). The scorecard’s four ‘rating areas’ and 12 ‘pillars’ presented in Figure 6.8 is such a visual model, an applied tool designed to support the determination and the weighting of metrics that comprise the SVC measurements at the firm level (the VCp/VCr and self-VCp/self-VCr). This artifact is essentially also a representation of a firm’s agency in the political economy.

The Business Model Sustainable Value Scorecard				Sustainable value creation (SVC) metrics: Transfer-IN: ‘Value appropriated but <i>not</i> created’ Transfer-OUT: ‘Value created but <i>not</i> appropriated’	
I. Power (bargaining)			II. Value (creation/transfer)		
(i) Non-market Power Capacity to influence non-market and narrative market arenas			(iii) Non-market Value Value creation in the non-market and narrative market arenas		
(i.1) State Capture	(i.2) Regulatory Capture	(i.3) Human Capture	(iii.7) Giving Income	(iii.9) Unearned Income	
			(iii.8) Taking Income		
(ii) Market Power Capacity to influence the market arena			(iv) Market Value Value creation in the market arena		
(ii.4) Coalition Dominance	(ii.6) Creative Destruction		(iv.10) Producer Value		
(ii.5) Firm Dominance			(iv.11) Capital Value		
			(iv.12) Labor Value		

Figure 6.8: The Business Model Sustainable Value Scorecard with its four rating areas and 12 pillars.

The Business Model Sustainable Value Scorecard supports the conceptual determination and classification of SVC metrics, as well as the judgments for their relative weights in SVC measurements after their ‘monetary equivalence’ and ‘calibration factors’ have been established. That is, the scorecard is used in stages (I) and (III) of the three-stage process to calculate firm-level SVC measurements (see Figure 6.6). The 12 pillars of the scorecard facilitate both the organization and the aggregation of a firm’s transfer-IN (including transfer-COST) and transfer-OUT sums, and by doing so establish their relative proportions which become determinant in the VCp/VCr/self-VCp/self-VCr equations.

Besides organizing the SVC metrics—and equally significant—the scorecard offers a wide range of analytical and interpretative opportunities; for instance, by ag-

gregating pillars of firms at the industry level (see the discussion in the next sub-section). This is also a framework to support practice in various ways; for instance, by assisting credit rating agencies that assess the probabilities of debt default, or for financial institutions that provide valuations for equity. The final sub-section of this chapter (6.6.5) focuses on the relationship between sustainable value creation and risk. The aggregation of SVC metrics in the pillars of the scorecard that express risk provide novel information to policymakers aware that risk origination is also the creation of value, while its transfer is exceedingly detrimental to human and economic development.

6.6.4 A sector-specific SVC measurement for industry benchmarking and policy

The VCp and VCr measure value creation relative to value transfers in absolute terms. But when it comes to interpretation, how much sense does it make to compare firms across industries or to a national average? The carbon footprint of the machine-building industry relying on extensive metal welding and mechanical operations that require significant energy consumption is certainly higher than that of the largely digital software industry. But in the VCr calculation, machine builders will offset such extractive transfer-IN with rich transfer-OUT in terms innovation spillovers and future blue-collar employment. That is not so much the case for the producers of cement; all of which will invariably exhibit low VCr scores given their massive carbon footprints.¹⁴⁷ Comparing the VCr scores of firms across industries could therefore be nonsensical. The sustainable value creation solution (note that at the macro policy level, offsets are possible across industries, while at the firm level this happens across the activities of the business model) is to compare cement producer against cement producer. To benchmark such comparisons, the ‘Sector Value Creation Rating’ (‘sector-VCr’), positioned between the micro and meso levels (see Figure 7.8) and based on sector-specific SVC metrics, is proposed. In the prior example, firms that are more invested in producing green cement composites (Wen, Wang, Dai, Shi, Jin, Wang, & Jiang, 2023) will receive scores higher than the sector-VCr that could be an average, a median, or, in stricter versions, set at or above the 51st percentile (for instance, at the 70th percentile). What matters from the elevated double materiality perspective is that firms that score above the median will lift their overall industry benchmark and *de facto* improve the incentive system for the industry. The sector-VCr thus serves as an important reference for narratives that drive transformational leadership at both the elite system and firm levels, as illustrated in Figure A5.12b.

¹⁴⁷ The case of the cement industry points to the need for baselines, to the intricacies of setting these across sectors, and to the conceptual determination and weighting of metrics, especially as according to Smil (2022), cement is one of “the four pillars of modern civilization” (the other three being steel, plastics, and ammonia).

“The Need for Sector-specific Materiality and Sustainability Reporting Standards” is persuasively advocated by Eccles, Krzus, Rogers, and Serafeim (2012, pp. 65, 70) on various grounds such as standardization (“By holding industry constant, one would expect less variation”) or data availability (“if one company can provide quantitative metrics, it should be possible, at least in theory, for the others to do so”), and so “developing sector-specific guidelines on what sustainability issues are material to that sector [. . .] would significantly improve the ability of companies to report on their ESG performance”. The Global Reporting Initiative (GRI) multi-stakeholder approach for sustainability reporting encompasses the GRI Sector Program to “develop standards for 40 sectors, starting with those that have the highest impact”.¹⁴⁸ Khan, Serafeim, and Yoon (2016, p. 10) detail the massive effort behind how SASB (Sustainability Accounting Standards Board) “produced guidance for six sectors (out of a total of 10) that include 45 industries” with standards developed “via a multi-stakeholder process consisting of research supported by Bloomberg technology, data and analytical tools; balanced, multi-stakeholder industry working groups; a public comment period; and review by an independent Standards Council comprised of experts in standards development, securities law, environmental law, metrics and accounting”. Methods to “Create a tailored set of key performance indicators for the most material issues for each sector” have also been proposed (see, for instance, Lydenberg, Rogers, & Wood, 2010, p. 18). The sector-VCr will reference existing industry and sector classifications and utilize them to determine sector-specific SVC metrics.

In short, the sector-VCr will primarily fulfill two functions. First, to assess and benchmark firms within a given sector on the basis of a set of SVC metrics that is material to that industry. These metrics will be established in Stage (I) during the conceptual determination (see Figure 6.6) while also referencing existing practice given that “consensus within an industry” regarding materiality is necessary (Eccles, Krzus, Rogers, and Serafeim, 2012, p. 70). What matters is whether a firm’s VCr is above or below the sector-VCr benchmark (and by what distance). To evaluate firms in relation to others in an industry is valuable to many stakeholders, especially asset managers or policymakers.

Second, and from the macro vantage point, the sector-VCr will assist the formulation of policy, including decision-making on which industries a nation ought to favor or discourage. The measurement could be used to support or to phase out an entire industry as in the cases of the CHIPS (Creating Helpful Incentives to Produce Semiconductors) and Science Act of 2022 (The White House, 2022) or China’s “National Sword” reform of 2018. The latter policy “banned the import of most plastics and other materials headed for that nation’s recycling processors, which had handled nearly half of the world’s recyclable waste for the past quarter century” and because of this “effort to halt a deluge of soiled and contaminated materials [its] plastics imports have plummeted by 99 percent” (Katz, 2019). To China’s government, it was immaterial whether

¹⁴⁸ See: <https://www.globalreporting.org/standards/sector-program/>

recycling processor A or recycling processor B had a higher VCr. The industry's general extraction was deemed substantial—its sector-VCr would have been low—so the plastic waste import elite business models were eliminated.

6.6.5 Incorporating risk origination and risk transfers in all SVC measurements

Corporations that embrace market mechanisms and decry government intervention in the good times should not change the rules when times turn tough. Privatizing profits while socializing risks isn't capitalism: It's rigged roulette. (Williams & Khanna, 2020)

Materiality considerations include sustainability risks (Eccles, Krzus, Rogers, and Serafeim, 2012; Lydenberg, Rogers, & Wood, 2010) and so taking account of sustainability frameworks is a form of risk management and “provides an ‘insurance-like’ benefit” (Godfrey, Merrill, & Hansen, 2009, p. 425). To this inquiry, the most material sustainability risks are those associated with the transfer of risk. ‘Sustainable risk origination’ is as important as value creation. Yet a number of elite business models are deemed to be unsustainable because they are based on risk transfers, such as the bailouts implied above. Given the importance of first-order risk origination and the pervasiveness second-order risk transfers—and the enormous adverse impacts that the latter have on development—‘The Sustainable Risk Framework’ for society is now proposed to think through the risk origination and transfer question. This is also a call for the systematic operationalization of risk origination and transfers, both as metrics for SVC measurements and as indicators for elite quality measurements (the EQx implicitly measures risk, for instance, in the creative destruction pillar). The matrix framework depicted in Figure 6.9 is based on two variables: risk origination on the x-axis (which is a form of value creation and can be either low or high) and value appropriation on the y-axis (also low to high). Taleb places the blame for the 2008 financial crisis on “bankers, master risk transferors” (2018, p. 12) and, in the example provided in the opening quote of this sub-section, the socialization of risks often on the back of bailout culture and ongoing state intervention (Sharma, 2024b) consolidated in narrative markets, equates to ‘unsustainable risk origination’ (quadrant 3). That is, those that undertake risk do not bear the downside (i.e., *negative* value) when their bets do not pay off.

Political economies where risk-takers see no downside when their bets turn sour are characterized by elites that recklessly raise the stakes and so intensify second-order risk transfers. Consequently, genuine first-order risk creators will abscond, and those members of society undertaking little risk and expecting to appropriate the value they create (as workers, farmers, savers, taxpayers, etc.) will see their modest but honestly earned present and future value sucked away to cover the losses of wealthy gamblers who, when their wagers are fruitful, benefit from the fully private gains. Does this mean that risk origination is morally hazardous and ought to be avoided or that the high profits of uncertain bets should be socialized?

Quite the contrary; the nature of risk is such that small amounts of *positive*—and *negative*—value accrue from taking moderate risks, while large amounts of value—along with losses—ensue from “aggressively seeking out and exploiting risk” (Damodaran, 2005, p. 38), large exposure to risk (Markowitz, 1952; Sharpe, 1964), and the undertaking of Knightian uncertainty, no matter how well managed. Without the daring bets of first-order risk-takers engaging in highly uncertain projects in pursuit of new and novel business models there is scant technological, social, or economic development. Without risk there would be none of the value creation underpinning “the best-performing 4% of listed companies [that] explain the net gain for the entire US stock market since 1926” (Bessembinder, 2018, p. 440). ‘Sustainable risk origination’ (quadrant 4) occurs when risky undertakings are successful, value materializes, and the risk-takers reap the residual income associated with value creation. Such an incentive structure supports economic development. Counterintuitively, ‘sustainable risk origination’ also occurs when risky projects fail, because success and failure are two sides of the same coin, two states of a single reality that are joined—not separated—by their respective probabilities. There is no shame in undertaking risky projects and not succeeding, as long as the risk creator bears the losses. Incentives for bearing the brunt of failure insure against reckless gambling and excessive risk origination, sharpen the mind, and activate the ingenuity that liquidates moral hazard. Risk to value conversion is thus bound to increase. Smart and well-managed (Damodaran, 2005) risk-taking by elite business models explains why the US and China have grown faster than Germany and Japan in recent decades.

At the firm level—and referencing Markowitz’s risk/return efficient frontier (1952)—there can be no large profits without large risk exposure unless, of course, the political economy is a “rigged roulette”. A system with ‘unsustainable no-risk origination’ (quadrant 2) has agents that eschew uncertainty yet reap the profits from the risk-taking of others, mostly society at large. For instance, rent seeking, sclerotic bureaucracies, landowners in economies growing on account of social transformations not of their making (e.g., the rapid-growth industrialization phase) that see rapid real estate price rises, or the executives and shareholders of state-owned enterprises or private corporations that benefit from taxpayer-funded risk origination in university and science establishments. Finally, there is the ‘null risk origination’ scenario where there is simply no risk origination and hence no value creation, only stagnation (quadrant 1). This is the case in early social development phases, both at the beginning and the dreaded ‘end of history’. In the context of “rational sustainability”, Edmans spotlights the irrationality of the “‘zero-risk bias,’ which leads people to seek the complete elimination of a risk” (2024, p. 14). This behavioral trait—so fatal for development—has an association with the incentive structure of the political economy (and its freedoms, see Section 8.3) and bureaucratism. Regression paths to zero risk might also occur when ‘unsustainable no-risk origination’ (‘risk *not* originated but *positive* value appropriated’) and ‘unsustainable risk origination’ (‘risk originated but *negative* value *not* appropriated’) in extractive political economies gravitate towards ‘null risk origina-

tion’ (risk *not* created *no* value to appropriate) as is indicated by the paths of arrows [a] and [b] in Figure 6.9 (emanating from quadrants 3 and 2 towards quadrant 1). The path of arrow [a] sees countries where too much ‘unsustainable no-risk origination’ kills animal spirits and paralyzes economic activity, especially non-elite agency. The path of arrow [b] sees countries with too many elite business models engaged in ‘unsustainable risk origination’ experience a proliferation of unsophisticated and hazardous bets. Both routes lead to the gradual disappearance of genuine risk takers. In other words, a state of affairs where risk is not risky and risky projects have no risk-takers, meaning that value cannot be created—the risk version of the ‘extractive escalation dynamic’.

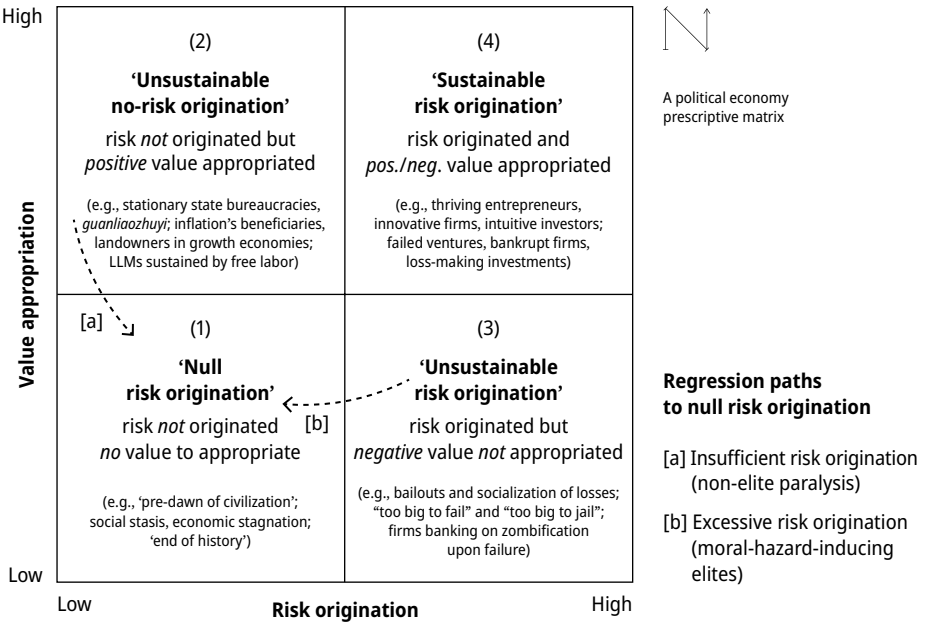


Figure 6.9: The Sustainable Risk Framework for society.

As mentioned in Section 2.3.1 and stressed again here, value and risk are equivalent and represent two sides of the same business reality. While all of the proposals to operationalize elite quality and sustainable value creation discussed so far have focused on measuring value from a revenue and residual income perspective, any SVC measurement that does not explicitly account for risk origination (which is always inclusive) and risk transfer (which is extractive) is incomplete. Damodaran (2005, pp. 38, 39) conveys this idea in discussing valuation frameworks that encourage firms to “exploit uncertainty”, since “risk management is about using risk to advantage”. This inquiry wholeheartedly embraces this position and argues that the undertaking of uncertainty and risk origination activities of elite business models must be understood

by policymakers as contributing to sustainable value creation. Uncertainty undertaking and risk origination activities are to be conceptually determined and operationalized as transfer-OUT metric constituents of the VCr. This position is coherent with Knight's uncertainty (1921/2002), Schumpeter's innovation activities (1911/2003), Markowitz's risk/return (1952), Damodaran's exploitation of uncertainty (2005) or Taleb's "transfer of harm" and "skin in the game" (2018, 2020), and are classed as 'sustainable risk origination' in (quadrant 4). In this state, risk is created and the ensuing *positive* or *negative* value is fully appropriated by the creators. This is the case in the "the decentralized hedge fund space" where "owner-operators have at least half of their net worth in the funds, making them relatively more exposed than any of their customers, and they personally go down with the ship" (Taleb, 2018, p. 13).

Ultimately, 'sustainable risk origination' (value creation) as well as 'unsustainable risk origination' and 'unsustainable no-risk origination' (the latter two constituting value transfers) must be part of elite quality meso-level SVC measurements (EQx/EQr and PEz) and their firm-level counterparts (VCp/VCr and self-VCp/self-VCr/360-VCz). Comprehensive, accurate, and theoretically grounded methodologies to operationalize risk, the creation of uncertainty, and their transfer are a precondition to test the ETED and the robustness of its system. A most consequential aspect of the further research agenda is therefore to identify and select the SVC metrics (at the firm level) and indicators (at the elite system level) that best capture and reflect risk origination and transfers.

Summary of Chapter 6

Towards measurements for an elite theory of economic development

Chapter 6 is the first of the three chapters in Part III of this book that focuses on the ‘Implications’ of the ETED. The conceptual development and abstract foundations of the theory are brought into the realm of practice through several measurements. The first meso-level measurement, the Elite Quality Index (EQx), is discussed in depth to prepare the terrain for economic development policy ideas at the macro-level. Other meso- and micro-level measurements and their implications are then proposed, while the operationalization of sustainable value creation (SVC) measurements for firms is advanced with the discussion of their constituent SVC metrics.

The chapter starts in Section 6.1 by affirmatively answering the question about whether there is an elite agency measurement gap that this work should address. Having established the need for an elite quality measurement—even a simple heuristic would provide novel insights—Section 6.2 proceeds to introduce the initial actualization of aggregate value creation in a national elite system. The EQx is a global comparative measurement tool with a four-level architecture. The index (level 1) and the two sub-indices of ‘power’ and ‘value’ (level 2) are discussed (6.2.1), and the two index dimensions, ‘political’ and ‘economic’ are then explained (6.2.2). These elements form a matrix, ‘The Political Economy Power and Value Matrix’ (Figure 6.2), with four index areas that, taken together, conceptually anchor the architecture of the EQx (6.2.3). The next sub-section (6.2.4) explains the 12 EQx pillars (level 3), provides exemplar indicators (level 4), and synthesizes the conceptual logic for the classification of indicators into the four index areas and their constituent three pillars (Figure 6.4). The indicators of the (i) ‘political power’ index area follow the logic of ‘capture’; those of (ii) ‘economic power’, the logic of ‘dominance’; those of (iii) ‘political value’, the logic of ‘income (transfer)’; and those of (iv) ‘economic value’, the logic of ‘value’ creation. The section closes by expounding on the weighting methodology used in the EQx (6.2.5).

Section 6.3 discusses the interpretation of the results of the EQx through the elite agency sustainable value creation perspective of the political economy. First, the big picture possibilities (6.3.1) that are important for crafting narratives distinct from those offered by existing macroeconomic models are considered. ‘The State of the Elite System Framework’ for the political economy (Figure 6.5) is then proposed to classify national elite systems (6.3.2). The purpose of this interpretation is to support elite system transformational leadership.

Section 6.4 then considers some of the limitations of the EQx. These include the fact that in the absence of scholarly consensus, the EQx will need to take positions one way or the other on the value creation/extraction of certain phenomena such as monopolies, surely inviting controversy (6.4.1); the establishment of value creation optima (6.4.2); the need for multiple indicators to fairly account for the value creation/

extraction impact at the meso-level of elite business models (6.4.3); and blind spots in a global comparative index where value creation/extraction phenomena remain unaccounted for—a vital issue when high-impact country-specific business models such as opioids in the US or natural resource extraction in Russia flourish (6.4.4). The inclusion of ‘critical impact indicators’ is suggested to duly capture the consequences of such influential elite business models.

Section 6.5 then adds proposals to advance sustainable value creation measurements beyond the EQx. These are firstly, the ‘Perceptions of Elites Survey’ (PEz), with a ‘Non-Elite Questionnaire’ (1/2) and an ‘Elite Questionnaire (2/2)’ designed to (self-)assess elite quality (6.5.1), and secondly, the country-specific ‘Elite Quality Rating’ (EQr), a sophisticated ‘bottom-up’ (micro-to-meso level) measurement arrived at by aggregating the VCr’s of the elite system’s material business models (6.5.2).

Section 6.6 closes the chapter by returning to underlying development at the micro-level. The extended first sub-section (6.6.1) describes the three-stage process (Figure 6.6) to establish SVC measurements and their SVC metrics, and which stands on the three assumptions for socio-economic relations (Figure A5.4a). The first stage is the conceptual determination of the constitutive metrics of SVC measurements that parallel the EQx indicator datasets expressing value creation and extractive transfers. The second stage is the quantification of these value transfer-IN/OUT metrics. In the final third stage, the SVC measurements are calculated by applying, weighting, and using other statistical schema on the calibrated SVC metrics. Tables 6.1 and 6.2 use ten exemplar metrics for VCp/VCr to illustrate how transfer-IN/OUT activities are ascertained, with data that emphasize the materiality needed for their conceptual determination, assessment method—such as the ‘SVC Metrics Fair Assessment’ or the ‘SVC Metrics Self-assessment Survey’—and conversion process, with its ‘monetary equivalence’ and ‘calibration factor’.

The self-assessment of metrics approach yields two SVC measurements that mirror the VCp/VCr: the ‘Self-assessment Value Creation Position’ (‘self-VCp’) and the ‘Self-assessment Value Creation Rating’ (‘self-VCr’). Both depend on a questionnaire, the SVC Metrics Self-assessment Survey, designed for top management and business insiders with access to firm information to gather the data that will establish monetary equivalence between a metric and the P&L revenue/profit. A subset of this questionnaire is the ‘International Business Self-assessment Value Creation Rating’ (‘IB-self-VCr’), which is relevant in the context of international business. Together these self-assessments provide management and boards with a quick, subjective, and tentative indication of sustainable value creation. A second approach will leverage the ‘Firm Stakeholder Questionnaire’ (1/2) and the ‘Firm Principal Questionnaire’ (2/2), for a fourth firm-level survey-based SVC measurement, the ‘Perceptions of Value Creation Survey’ (‘360-VCz’), to gain a comprehensive view by including the thoughts and opinions of firm stakeholders (6.6.2). The four firm-level survey-based SVC measurements (self-VCp, self-VCr, IB-self-VCr, and 360-VCz) form a toolkit to help leaders reflect on sustainability trade-offs, and hence the impact and purpose of their organizations.

'The Business Model Sustainable Value Scorecard' (Figure 6.8), with its two 'sub-ratings', four 'rating areas' and 12 'pillars', mirrors the EQx architecture to support the conceptual determination and weighting of the SVC metrics that comprise the SVC firm measurements (6.6.3). The 'Sector Value Creation Rating' ('sector-VCr') is then introduced to benchmark firms in a particular industry and inform industrial policy (6.6.4). Finally, specific importance is placed on the impact of risk origination and transfers and a recommendation is made that all such activities should be captured by suitable SVC metrics (6.6.5). 'The Sustainable Risk Framework' for society matches risk origination and value appropriation and is presented (Figure 6.9) to serve as an essential framework for development policies.

This chapter's extensive proposals for the various SVC measurements lead us into Chapter 7 which, on the premise that the elite business model establishes the incentive system of the political economy, discusses the implications of this book's theory for research and the practical endeavors of policymakers, managers, boards, and investors before ultimately widening its purview to consider international perspectives.