Appendix 2: Theoretical building blocks

Table A2.1: Glossary of ETED conceptual elements.*

Conceptual element	**Definition**	**ETED relation** ** **and selected sources**
Alienation 'Elite alienation'	In the same way that workers are estranged from their labor and themselves in Marx's theory of alienation, elites are alienated from the consequences of their agency and themselves. This can range from the alienation that arises from having confronted the probability of failure to the productive alienation that arises from gathering the resolve to make reforms when facing resistance. That is, elite alienation is at the root of psychological fortitude that supports the sound elite judgment needed for value creation, particularly in the context of 'alternating value extraction and creation'. On the other hand, elite alienation from stakeholders that are experiencing the consequences of value transfers may lead to the opposite; value extraction and even value destruction.	ETED development. Transposes the Marxist construct of estrangement and applies it to elite theory. Based on Marx (1844/1959), see also Petrović (1963). Links with leadership styles reviewed by developmental economists (Brady & Spence, 2010; Easterly & Pennings, 2020), and the psychological and sociological features of elite leadership observed by early theorists (Michels, 1962/1999). (Epilogue).
Artificial intelligence (AI) 'The AI division of value alignment test'	A view on AI safety and alignment that is first centered on establishing *qui generat valorem*, as value is co-created by the principals of AI business models and their stakeholders, before ascertaining the *cui bono* beneficiaries of that value. The subsequent step is implementing weighting and offsetting to align the AI with general human development.	ETED position on the AI alignment debate. (Section 8.2.5; refer to Figures A5.3c, A5.3d).
'Automatic destabilizers'	A pro-cyclical reflex elite agency response triggered by economic crises, embedded in institutions, and enabled by bargaining power differentials vs stakeholders, the effect of which is to amplify economic fluctuations. Institutions enable the income/profit levels of elite business models to stay the same, or even grow higher than pre-crisis levels ('same size of the slice' elite bias). Since the overall economic pie shrinks, pre-crisis income/profit levels for elites are *de facto* redistribution (from non-elites to elites). Such automatic responses intensify the 'extractive escalation dynamic' and invariably destabilize the political economy and society. Non-elites suffer a double whammy since their incomes register real negative income growth at rates higher than the economy's negative growth rates. Monetary policies (e.g., negative interest rates), defense policies (e.g., war in times of decline), or fiscal policies (e.g., relief in times of pandemics) can all act as automatic destabilizers.	ETED development. Term chosen to contrast with "automatic stabilizers" (see McKay & Reis, 2016). (Section 7.1.3).

*Includes only selected SVC measurements. The complete set is described in Table A3.1 (see also the visual overview provided in Figure 7.8).

**The terms in this Glossary have diverse connections to the ETED's development ranging from 'none' to 'ETED position' (i.e., a theoretical stance is taken from the literature) to 'ETED development' (a discrete conceptual element advanced for the inquiry).

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Table A2.1 (continued)

Conceptual element	**Definition**	**ETED relation** ** **and selected sources**
Business model 'Elite business model'	Elite business models are the largest residual income and reward business models in the economy and constitute a system of interdependent activities that are performed by a particular principal as part of an elite coalition in relation to its stakeholders. An elite business model consists of value creation and appropriation activities, manifested in patterns of *how* the principal and the stakeholders respectively create and appropriate value. The patterns are realized through division of value strategies, aim to generate proprietary income/profits, and associate with discrete degrees of sustainable value creation.	ETED development. References Arend (2013); Zott & Amitt (2013); Gassmann, Frankenberger, & Sauer (2016). (Section 2.2.1; SVC measurements include VCr, self-VCp, 360-VCz).
Business model 'Elite business model agglomeration'	Elite business model agglomeration refers to the clustering of specific elite business models in a political economy. When jointly reaching a critical mass, these models bring about a critical juncture in economic development and institutional path dependence which is positive insofar as it is associated with high sustainable value creation. This is the underlying process that explains the 'elite business model critical junctures' conjecture.	ETED position. References David (1985); Liebowitz & Margolis (1999); Acemoglu, Johnson, Robinson, & Yared (2009); Libecap (2011). Differs from "agglomeration economics" (e.g., Duranton & Kerr, 2015). (Section 4.3.4).
Business model 'Business model value creation spectrum' (also 'value spectrum')	A micro-level conceptual element that imagines an organization's business model on a spectrum that ranges between absolute value creation (first-order productive activity) and absolute value extraction (second-order transfer activity). Parallels the meso-level 'elite system value spectrum'.	ETED development. (Section 2.3.2, Proposition 11; SVC measurement is VCp).
Business model 'National business model'	The leading or one of a few business models in a nation that ranks highest in residual income generation. The value creation and appropriation patterns found in the agglomerated elite business models of a country's dominant sectors (e.g., automotive, finance, oil, real estate, agriculture) along with their specific set of institutional, economic, political, and even social characteristics. Usually run by members of the core coalition, from an economic development perspective the determinant feature of the national business model is its sustainable value creation on account of the disproportional impact on elite quality that this has.	ETED development. References literature and diverse national cases (e.g., for Russia, van den Beuke & van Geuns, 2021; for Germany, Chazan & Nilsson, 2022); common understanding. (Sections 7.3.4, 8.1.2).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
Cohesion 'Elite cohesion'	A horizontal form of social cohesion that is manifested in elite system coalitions abiding by intra-elite contest rules, elite system leadership, shared narratives that foster an identitarian sense of belonging in the political economy, and loyalty to the elite system in the context of prioritizing long-term wealth stocks over short-term residual income flows in the elite utility function. In its absence, intra-elite contests become deinstitutionalized and have calamitous effects on society. Elite cohesion is also a precondition for elite system transformational leadership, while the normative ideal sees it coupled with a comprehensive separation of powers. Elite cohesion maximizes the bargaining power of the national elite system over non-elites and foreign elite systems.	ETED position. Based on Gottschalk (1944); Mills (1956); Putnam (1976); Burton & Higley (1987); Levitsky & Way (2012); Gulbrandsen (2012); Best (2018a). (Sections 3.2.1, 5.3.3, 7.2.4).
Cohesion 'Elite/non-elite cohesion'	The vertical form of social cohesion. To be relevant, it must encompass a significant number of elite coalitions and non-elite groups. Elite/non-elite cohesion often consists of tactical alliances between particular non-elite groups and elites in intra-elite contests. Ideally, non-elites strategically participate in intra-elite contests and their systematic support for value creation business models solves the intra-elite quality contest dilemma. Narratives are essential for elite/non-elite cohesion.	ETED development. References Chan, To, & Chan (2006). (Sections 5.3.3, 8.1.3).
Cohesion 'Non-elite cohesion'	A horizontal form of social cohesion. While a normative goal, non-elite cohesion is of secondary relevance for institutional change in practice because non-elites are rarely a unified body, instead consisting of diverse groups with disparate interests, as described in the 'low non-elite cohesion' problem. Non-elite cohesion is difficult but can be achieved at critical historical junctures on the back of strong narratives (e.g., religion) or when non-elites feel threatened by foreign elites. Still, to effectively constrain extractive value transfers, this cohesion type must be coupled with 'elite agency on behalf of non-elites'.	ETED position. References Chan, To, & Chan (2006). (Sections 5.3.3, 8.1.3).
Cohesion 'Social cohesion'	Social cohesion refers to the readiness of society's members to work together and is conceived as consisting of three discrete but related forms: elite cohesion (horizontal), non-elite cohesion (horizontal) and elite/non-elite cohesion (vertical). Elite cohesion is the most relevant for human and economic development.	ETED position. References Stanley (2003); Chan, To, & Chan (2006); Best (2018a). (Section 5.3.3).

Table A2.1 (continued)

Conceptual element	**Definition**	**ETED relation**** **and selected sources**
'Core elite coalition'	The core elite coalition stands at the apex of the socio-economic structure pyramid, effecting elite system leadership and having a disproportional role in setting the strategic direction of the political economy (including grand strategy for cross-border business models), influencing intra-elite contests, prompting elite cohesion, and, most critically, realizing institutional change. The economic and human development objective adds an ethical dimension to the transformational agency of the core elite coalition.	References disparate theories of elites. (Sections 1.2, 8.1.1, 8.1.2, Figure 8.1; leadership varieties, Section 7.2.4, Table 7.2; see Tier 5 in the elite separation of powers, Figure A5.11b).
Cross border 'Cross-border elite business model'	Elite business models that generate an appreciable part of their revenue and residual income from markets that are foreign to most of the members of the beneficiary elite coalition. As principals in cross-border stakeholder relationships they engage in value creation and appropriation and are a factor in the economic and human development of both the home and host nations. Such models, like their domestic counterparts, are characterized by discrete degrees of measurable sustainable value creation. The beneficiaries of the models are mostly embedded in the institutions of one nation state and are rarely transnational elite coalitions.	ETED development. Combines notions from the international relations and international business literature. (Section 7.3; SVC measurement is IB-VCr).
Cross border 'Cross-border elite agency'	Cross-border elite agency is 'what elites do' in the international context, mostly in relation to their cross-border elite business models (see also the definition of 'elite agency'). This includes effecting institutional change at both the national and international levels.	ETED development. (Section 7.3.1).
Cross border 'Cross-border elite quality'	An emergent property of a nation that describes the aggregate cross-border value creation position of its elite system's business models engaged in international business. Cross-border elite quality is operationalized as the 'cb-EQr' measurement, and, on a narrower bilateral basis, as the 'bl-EQr'. It partially explains the behavior of a state and its relations with other states in the international system.	ETED development. (Section 7.3.1; SVC measurements include cb-EQr, bl-EQr; Figure 7.5).
Cross border 'Cross-border sustainable value creation'	The sustainable value creation (i.e., the value creation vs value transfers) of the international business of the firm. Operationalized through the 'IB-VCr' measurement that describes the relationship of the principal with foreign stakeholders in terms of value creation relative to 'value appropriated but *not* created' (transfer-IN). This micro-level SVC measurement aims to capture the sustainability of a firm's international business; its inputs are international business SVC metrics while its scores function as inputs to a country's meso-level cross-border elite quality measurements (cb-EQ/bl-EQ).	ETED development. (Sections 7.3.1, 7.3.2; SVC measurements include IB-VCr, IB-self-VCr).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
'Elite'	An elite is a coalition operating society's leading value creation and appropriation business models that generate the largest quantities of economic activity and residual income. Organizationally, and thus for analytical purposes, an elite is a business model that a coalition has secured from institutions—through wins in the political economy's market, non-market, and narrative market arenas—with limited rights that afford value appropriation advantages and, in consequence, a license to operate at a discrete sustainable value creation position.	Cross-disciplinary literature references. See Table A1.1 on the position this inquiry takes on the reviewed elite conceptualizations, theories, and assumptions. (Section 1.2).
Elite 'Elite agency'	Elite agency is 'what elites do' in relation to their elite business model as principals in a coalition (of economic, political, and knowledge interests) that creates value jointly with stakeholders in formal and informal exchange relationships, exercising leadership to successfully leverage lower transaction costs, higher levels of trust, and superior coordination capacity into (bargaining) power that is then converted into society's largest streams of residual income via first-order value creation or second-order value transfers.	ETED development. (Sections 1.1, 1.2).
Elite 'Elite circulation'	Elite circulation is a social process through which emergent business models become part of the elite and replace incumbent elite business models. Classical elite circulation theory is adapted by introducing elite business models as the central element and stressing that the analytical focus for development purposes should be on their sustainable value creation and value transfers.	ETED position. Classical elite circulation theory of Pareto (1968/1991), Michels (1962/1999); Marx (1867/1959b); Schumpeter (1942/2000). (Sections 1.3.2, 1.3.3).
Elite 'Progressive/ regressive elite circulation'	Elite circulation is progressive when the sustainable value creation of emergent elites exceeds that of incumbent elites in the national elite system, and regressive when it does not. Elite circulation is necessary for economic and human development on the condition that it is progressive.	ETED development. References common intuition and literature including Marx (1867/1959b); Schumpeter (1942/2000). (Section 1.3.2).
Elite bargain	A political economy pact, settlement, or bargain that members of different elite coalitions make with each other. In order to stimulate value creation, elite bargains rely on elite transformational leadership to supplement intra-elite contests as a mechanism to establish inclusive institutional change. An essential applied normative feature of elite bargains is that value transfers are limited. Two types of bargains are outlined: a broader 'elite institutional change bargain' that focuses on the law and regulations, and the narrower 'elite redistribution constraints bargain' that focuses on specific redistributive policy initiatives.	ETED position. References literature including Dercon's "elite bargain" (2022); O'Donnell & Schmitter (1986); Burton & Higley (1987). (Sections 7.1.5, 8.2.4; Tables 7.1, 8.3).

Table A2.1 (continued)

Conceptual element	**Definition**	**ETED relation**** **and selected sources**
Elite 'Elite coalition'	An elite coalition is formed around an elite business model with members specialized in the market arena (business elites in pursuit of 'money'), the non-market arena (political elites in pursuit of 'might'), and the narrative market arena (knowledge elites in pursuit of 'mind'). The elite coalition is a sub-system of the elite system and is held together by the centripetal forces of elite coordination leadership that amasses power and, more conclusively, elite business model leadership that converts power into residual income.	ETED position. Integrates diverse literatures on elite types (Figure 3.6).
Elite bargain 'Elite institutional change bargain'	In A Weighted Structural Reform Framework for policy, aimed at adjusting the incentive system (on the logic of the 'weight and offset value transfers' implication), the first step is the (i) general assessment of sustainable value creation (of an elite business model) followed by the (ii) formulation of weighted structural reform, ultimately leading to the (iii) institutional change bargain. The discontinuance of transfers must occur *ipso facto* or be institutionally phased out by the elite bargain to preempt transferee elites from reneging on their commitments as their bargaining power rises (due to the residual income gained from transfers, see the dynamics of The Elite Business Model Lifecycle). Notwithstanding institutional foresight and the bargain's guarantees, continual transformational leadership is needed at the system level to ensure that such bargains do not falter.	ETED development. References literature including Dercon's "elite bargain" (2022); O'Donnell & Schmitter (1986); Burton & Higley (1987). (Sections 7.1.5; Table 7.1; Figure A5.9b).
Elite bargain 'Elite redistribution constraints bargain'	In A Weighted Redistribution Framework for policy, aimed at sustainable redistribution, the first step is the (i) transfer parties' assessment (establishing transferees/transferors) followed by the (ii) formulation of constraints on redistribution, ultimately leading to the (iii) constraints bargain that secures their implementation. The discontinuance of constraints on redistribution must be institutionally sanctioned in the elite bargain to preempt transferee elites from disavowing such constraints as their bargaining power rises (due to the residual income gained from redistribution, see the dynamics of The Elite Business Model Lifecycle). Notwithstanding institutional foresight and the bargain's guarantees, elite system level leadership is needed *at the time of expiry* to ensure that redistribution is phased out when it is due.	ETED development. References the literature, Dercon's "elite bargain" (2022); O'Donnell & Schmitter (1986); Burton & Higley (1987). (Section 8.2.4, Table 8.3, Figure A5.9b).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
'Elite judgment'	Elite judgment refers to decisions associated with the practice of elite leadership, normatively grounded on the weighting and offsetting of value transfers, that consider the feasibility of implementing these through stable elite bargains. When transformational, elite judgment addresses the existence of value transfers and, more generally, the 'low elite quality' problem. Spurred by the 'inextinguishable value creation option of elites', such elite judgments require taking original intellectual, ethical, and aesthetic positions and demand psychological boldness.	ETED development. (Section 8.3.3 on connecting the dots).
'Elite quality'	Elite quality is the meso-level emergent property of the elite system that describes the proportion of first-order productive value creation and second-order extractive value transfers of all elite business models in a political economy. This sustainable value creation aggregate has a purported independent variable relationship with human development and economic growth. Conceptually, it is a description of 'GDP origination'. SVC measurements of elite quality include: the EQx, a top-down comparative global measurement based on macro-level indicators; the EQr, a domestic bottom-up measurement based on firm-level metrics and ratings; and the PEz, a perceptions survey of elites.	ETED development. (Chapters 4, 5, 6; SVC measurements include EQx, EQr, PEz).
Elite quality 'Elite Quality Index' (EQx)	The operationalization of elite quality as a global comparative ranking of the aggregate sustainable value creation of national elite systems.	SVC measurement. (Section 6.2, contextualized in Table A3.1a).
Elite quality 'Panel-EQx' (PEQx)	The 'PanelEQx' or 'PEQx' is a dataset designed for research and practice that measures elite quality over time, i.e., value creation and extraction in political economies over time. The PEQx conceptually corresponds to the Elite Quality Index (EQx) and is based on a discrete methodological approach that utilizes a subset of indicators contingent on the availability of historical data.	SVC measurement. Casas-Klett & Cozzi (2024, p. 32).
Elite quality 'World elite quality'	International institutions are secondary to national ones, and so elite business models are institutionally anchored to the nation state, meaning that there is no coherent world elite system as such. World elite quality is therefore a conceptual element that represents a rough aggregate of the weighted sustainable value creation of all national elite systems. Its purpose is heuristic, to provide an indication of 'the state of the world' and of future global trends.	ETED development. (Section 7.3.3; SVC measurement is world-EQ).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
Elite quality 'World Elite Quality Index' (world-EQ)	The operationalization of 'world elite quality' as an index; a *de facto* sum of the elite quality of all national elite systems calculated on the basis of global average indicators organized using the EQx architecture. These include worldwide life expectancy, planetary environmental benchmarks, educational attainment, innovation rates, global inflation, industry dominance, or armed conflicts.	SVC measurement. (Section 7.3.3, detailed in Table A3.1a).
'Elite replacement'	Elite replacement is an extreme type of elite circulation where comparatively few incumbent elite coalitions and their members maintain their status as elites as a result of elite circulation processes. When overly extensive or enacted through violence it is associated with lower coordination capacity in the economy due to the loss of 'knowledge'.	ETED position. Pareto (1968/1991); Marx (1867/1959b). (Sections 1.3.2; 1.3.3).
'Elite system' (national)	The elite system is a meso-level generic structure constituted by elite coalitions and characterized by their business models. It is a high-impact sub-system of the macro-level economic system and its emerging properties play an outsized role in a nation's economic development.	ETED development. (Section 3.1).
Elite system 'Elite system value spectrum'	A meso-level conceptual element that imagines the aggregate agency of elite business models on a spectrum that ranges between absolute value creation (first-order productive activity) and absolute value extraction (second-order transfer activity). While not operationalized, it is termed the Elite Quality Position (EQp) and parallels the business model micro-level 'value spectrum' (VCp).	ETED development. (Section 6.5.2; EQp is not an SVC measurement).
Elite system 'Elite non-system'	A structural void in a political economy where a complete and coherent elite system does not materialize and adversely affects sustainable value creation and development. In this work, the elite non-system conceptual element, or 'partial elite', finds application in modeling international relations, development outcomes, and the non-independence of nations. At the global level it explains tragedies of the commons such as the failure to address environmental crises or AI regulation. Without a functional elite system, institutions are of little practical consequence.	ETED development. Uses examples like the EU elite non-system. (Sections 7.3.4; 7.3.5).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
'Elite theory of economic development' (ETED)	A political economy theory based on the 'value is created or transferred' ontological assumption for socio-economic relations, that, on the principle of parsimony, claims that the wealth of nations and its distribution in a society is the result of elite agency and judgments concerning value transfers. Economic development is explained with recourse to conceptual elements developed from a multi-disciplinary set of ideas hailing from sociology, economics, strategic management, finance, politics, international relations, ethics and other fields. A specific integrative logic binds these together in a conceptual architecture that aims to yield falsifiable propositions, while proposing a wide range of micro, meso, and macro measurements to test them. Aiming at a grand theory of the social sciences, the ETED provides a narrative with normative implications centered on weighting sustainable value creation that is anchored by a set of ethical principles. Positive economic development trajectories associate with transformational elite leadership at the business model and meso-level system levels in the context of intra-elite contests. The theory's reconceptualization of freedom provides a clarion call for structural reform and political narratives.	ETED development. (This book; Section 5.1, see also Figure P.1).
'End of history'	A metaphor invoked in this work to denote either the 'null risk origination' scenario, where elites (and non-elites) do not bear any risk and so there is no new value creation, or simply the disappearance of sustainable value creation from a political economy, putatively as the result of low elite circulation velocity.	ETED position. Critical position taken on Fukuyama (1992). (Sections 3.3.3, 6.6.5; see Figure 6.9).
Ethics 'The sustainable value creation set of ethical principles for human and economic development'	Ethical principles for human and economic development that aim to foster transformational leadership by supplying decision-making guardrails and guidance based on a realistic account of how the political economy works. The set of principles consist of a *maxim* (*To the creators the value created*), two *tenets* for conceptual guidance, and four *precepts* for practical guidance, and can complement the personal moral values of elite individuals.	ETED development. (Chapter 8, Table A4.3a).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
'Fractal system'	The political economy system is fractal in terms of how its sources of value creation and transfers are distributed. While the core coalition holds 'the extraordinary lever', self-similarity is pervasive across scale as lesser levers function on the same bargaining power differential and residual income logic. Moreover, these levers, found in each and every nook and cranny of the economy, are held by local elite coalitions. Fractality underlies the leverage of 'the extraordinary lever' and the power of 'the power multiplier'. The conceptualization of the economic system as fractal and subject to power laws has normative policy implications (e.g., in terms of industrial policy), while it is conjectured that the higher the degree of fractality, the greater the value creation potential of the nation.	ETED position. Implied in complex adaptive systems (e.g., McDaniel, Lanham, & Anderson, 2009); notions of fractals (Mandelbrot, 1989; Liebovitch & Scheurle, 2000; Brown, Gupta, Li, Milne, Restrepo, & West, 2002; O'Brien et al., 2023). (Section 3.2.3; Epilogue, Figure E.2; see the 'elite system fractality links to value creation' conjecture).
Freedom	The unconstrained ability to create and benefit from value. The conceptual element of freedom in the ETED is derived from its set of ethical principles and institutionalized through 'The Three Freedoms for Development Model'. The two fundamental freedoms are (the negative) freedom *from* transfer-OUT and the (positive) freedom *to* create value. The third is the enabling freedom to *exit*.	ETED development. Locke (1823/1993); Fromm (1994); Sen (1999a); Acemoglu & Robinson (2019a). (Section 8.3).
Freedom 'Freedom *to* create value'	A fundamental freedom of the ETED and part of the three freedoms that are deemed necessary for economic and human development. Freedom *to* create value references positive freedom and is the power to realize one's value creation potential.	ETED position. Fromm (1994), also see Locke (1823/1993); Sen (1999a); Nussbaum (2003); Carter (2019). (Section 8.3.1; see The Three Freedoms for Development Model, Figure 8.5).
Freedom 'Freedom *from* value extraction'	A fundamental freedom of the ETED and part of the three freedoms that are deemed necessary for economic and human development. Freedom *from* value extraction references negative freedom and is the power over interference from those whose business models rely on value appropriated but *not* created.	ETED position. Fromm (1994), also see Locke (1823/1993); Universal Declaration of Human Rights (1948). Section 8.3.1; see The Three Freedoms for Development Model, Figure 8.5).
Freedom 'Freedom to *exit*'	The enabling freedom of the ETED and part of the three freedoms that are deemed necessary for economic and human development. As a mechanism to guarantee the two fundamental freedoms, it is the power to break free from extractive principal-stakeholder relationships. To be effective, the freedom to *exit* must be institutionalized in laws such as limited liability or bankruptcy.	ETED position. References actual institutional arrangements. (Section 8.3.2; see The Three Freedoms for Development Model, Figure 8.5).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
'Grand strategy'	A vision for both state power *and* for value creation and appropriation across borders, jointly conceived by the core elite coalition usually in conjunction with a specialized elite coalition, and a component of elite system leadership.	ETED position. References Gaddis (2018); Jacobs & Page (2005).
'Indicator' (inputs for the EQx and other SVC measurements)	The conceptually indivisible, discrete macro-level data sources of SVC measurements that describe quantifiable value creation or value transfer phenomena in the political economy. For instance, once normalized, weighted, and aggregated, indicators inform the composite scores and rankings of the Elite Quality Index (EQx) which describes the global comparative elite quality of a nation's meso-level elite system. The counterparts of indicators for micro-level SVC measurements are termed 'SVC metrics' or simply 'metrics'.	SVC measurement input. References OECD (2008); the EQx methodology in Casas-Klett, Cozzi, Diebold, & Zeller (2020); Diebold (2022). (Section 6.2).
'Institutional entrepreneurship'	A metaphor describing how elite agency converts power into institutional change in accordance with the preferences of specific elite business models.	ETED development. (Sections 4.3.3, 4.3.4; implicit in Figures 3.2, 3.3, 4.5).
'Institutional failure'	Cumulative institutional change in support of extractive elite business models, or the failure of institutions to support emerging elites with more inclusive models. It results from a failed and ossified system of checks and balances across The Seven Intra-elite Power Relations.	References "institutional sclerosis" (Olson, 1982); Baumol (1990); Acemoglu, Johnson, & Robinson (2005). (Sections 3.3.3, 4.2.3).
'Institutional quality'	The effectiveness and integrity of the institutions of law, regulation, and governance leads to economic and human development. In the ETED, institutional quality is also the precursor of development but is anteceded by elite quality on the premise that elite agency leads to institutional change. The focus is on the rules—both for business models and for intra-elite contests—that enable or constrain the sustainable value creation of elite business models.	References The World Bank (2020); Djankov, McLiesh, & Ramalho (2006); Kuncic (2014); Anderson & Marcouiller (2002). (See Figure 6.1; Section 3.1.3).
Contests 'Intra-elite contests'	The defining factor of institutional change and economic and human development outcomes in the political economy. The objectives of the contests are the institutions that most matter: elite business model rules and the intra-elite contest rules that determine these. Normatively, the more comprehensive the elite separation of powers is in the context of elite cohesion, the greater the likelihood that intra-elite contests yield inclusive institutional change (in terms of elite business model rules), ultimately prompting the emergence of elite business models with higher sustainable value creation.	ETED development. (Sections 3.3.1, 5.3.3; Figures 5.2, 8.3, A5.12).

Table A2.1 (continued)

Conceptual element	**Definition**	**ETED relation** ** **and selected sources**
Contests 'Intra-elite meta-contests'	Intra-elite contests about the processes that establish 'intra-elite contest rules', i.e., the meta-institutions that in turn establish the 'elite business model rules' and determine 'who gets what'. Intra-elite meta-contests are principally resolved through the exercise of bargaining power differentials.	ETED development. Leverages the meta-institutions notion of Mokyr & Nye (2007); Lorini (2014).
'Leadership'	Leadership involves effectively wielding power and leveraging coordination capacity to achieve an organization's objectives. Leadership in the ETED is about commanding 'the extraordinary lever' of the elite coalition to generate residual income. Leadership is the solution to the 'low elite quality' problem and in 'the great elite coalition for development' conjecture is critical to human and economic development in its transformational varieties (at both the firm and elite system levels).	ETED position. References diverse literature including Stogdill (1950); Jones & Olken (2005); Brady & Spence (2010); Parris & Peachey (2013); Boucekkine, Piacquadio, & Prieur (2019). (Sections 1.3.3, 7.2.4, 8.1.5)
Leadership (a) 'Elite coordination leadership'	The leadership that the elite coalition exercises at the business model level to leverage accumulated coordination capacity and use it for maximum bargaining power differentials over stakeholders. The first of the three fundamental varieties of leadership of the ETED.	ETED development. (Section 7.2.4; Figures 1.2, 4.1; The Five Varieties of Elite Leadership in Table 7.2).
Leadership (b) 'Elite business model leadership'	The leadership that the elite coalition exercises at the business model level to convert bargaining power differentials over stakeholders into maximum residual income. The second of the three fundamental varieties of leadership of the ETED.	ETED development. (Section 7.2.4; Figures 2.1, 3.6, 4.1; The Five Varieties of Elite Leadership in Table 7.2).
Leadership (c) 'Elite system leadership'	Leadership at the elite system level, usually exercised by the core elite coalition, to increase elite cohesion that in turn facilitates institutional change for the maximization of elite bargaining power and residual income. The third of the three fundamental varieties of leadership of the ETED.	ETED development. (Section 7.2.4; The Five Varieties of Elite Leadership in Table 7.2).
Leadership (d) 'Elite transformational leadership'	Leadership at the business model level that converts bargaining power differentials over stakeholders into maximum residual income that is, nonetheless, self-constrained by the minimization of value (and risk) transfers and the maximization of value (and risk) creation. This transformational leadership variety has an ethical anchor, necessitates a long-run temporal perspective, requires purposeful and continuous business model transformation (e.g., in consistency with social and technological changes), accrues legitimacy on account of signaling, and technically requires the weighting and offsetting of value creation (including transfer-OUT) against value transfer (transfer-IN) activities. The first of the two transformational varieties of leadership of the ETED.	ETED development. (Section 7.2.4; The Five Varieties of Elite Leadership in Table 7.2).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
Leadership (e) 'Elite system transformational leadership'	The leadership exercised at the elite system level by the core elite coalition that utilizes elite cohesion and the elite separation of powers (see Figure 5.2) to raise elite quality by constraining extractive value (and risk) transfers and engaging in structural reform to incentivize sustainable value creation. Such leadership is driven by a set of ethical principles, accrues legitimacy on account of signaling, and technically requires the weighting and offsetting of value creation (including the sum of transfer-OUT) against value transfers (the sum of transfer-IN) in the political economy as it seeks a sustainable elite system for economic and human development that furthers elite/non-elite cohesion and bargaining power advantages in the international system. The second of the two transformational varieties of leadership of the ETED.	ETED development. (Sections 7.2.4, 7.3.3; The Five Varieties of Elite Leadership in Table 7.2).
Leadership (i) 'Fundamental leadership varieties'	The three fundamental leadership varieties in The Five Varieties of Elite Leadership typology that exist in a functioning political economy. They are: (a) elite coordination leadership; (b) elite business model leadership; and (c) elite system leadership.	ETED development. (Section 7.2.4, Figures 1.2 and 2.1; The Five Varieties of Elite Leadership in Table 7.2).
Leadership (ii) 'Transformational leadership varieties'	The two transformational leadership varieties in The Five Varieties of Elite Leadership typology that are characteristic of political economies where elites are intent on increasing sustainable value creation, elite quality, and the prospects for economic and human development that heavily rely on individual 'elite judgment'. They are associated with ethical positions and are: (d) elite transformational leadership; and (e) elite system transformational leadership.	ETED development. (See Section 7.2.4; The Five Varieties of Elite Leadership in Table 7.2).
Lever 'The absolute lever'	Extends 'the extraordinary lever' metaphor to the AI. It reflects a conceptual universe where the non-human AI elite —omniscient and omnipotent—has absolute power in the political economy on account of its infinite bargain power differentials with human stakeholders. All (former) human elites revert to non-elite status (applies in the cases of a single non-human AI elite or various non-human elite coalitions each wielding 'the absolute lever').	ETED development. Combines literature on power and AI capabilities. (Sections 4.3.3, 8.1.4, 8.1.6, Epilogue; Figure A5.3d; Table E.1).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
Lever 'The extraordinary lever' (of elites)	A metaphor that describes the coordination capacity advantage that elites have over their direct and indirect stakeholders in a particular sector of the political economy. The advantage that the lever affords is vastly greater than its source, the transaction cost differential of elites over their stakeholders. Leverage is achieved when the power that elites have over their direct stakeholders is amplified by the power that such stakeholders have over their own direct stakeholders in the value chain. 'The power multiplier' effect underlying the lever explains the applied coordination capacity that elites have in the specific field where their agency unfolds or, in the case of core coalitions, over society at large. The levers held by elites are key for human development, but can be misused. The levers make the coordination capacity of elites 'extraordinary', a value appropriation gift that the social system affords to itself and to those at its apex. As a result, the membership of elite coalitions is much desired and contested. In fractal fashion, while the core elite coalition operates 'the extraordinary lever', lesser but similar extraordinary levers function on the same bargaining power differential and residual income logic and are held by elite coalitions in every nook and cranny of the economy.	ETED development. References literature on hierarchies, power, transaction costs, trust, networks, coordination capacity, power. (Part of Proposition 4, Sections 1.3.4, 3.2.3; Figure set A5.3).
Lever 'The power multiplier'	The amplification effect that underlies 'the extraordinary lever'. The transaction cost differentials between elites and their counterparties (non-elites) lead to disproportionally large bargaining power and, as a result, coordination capacity differentials. The multiplier operates across the length of the value chain and grows at each step of every principal-stakeholder transaction. As a simplified illustration, if a given business model yields a transaction cost advantage consistent with a power differential of 'two' from one level to the next, then the principal has a power difference of 'four' with stakeholders two levels removed in the value chain (i.e., the stakeholders of the stakeholders), before rapidly increasing the power differential to '32' with a stakeholder five levels removed (assuming no loss of power due to friction, distance, etc.). Due to this multiplier effect, human principals have power over societal stakeholders with whom they have no direct relationship. This chain of leverage explains skewed value appropriation patterns and why a single general can commandeer an army of 10,000, the existence of billionaires, and religious leaders with bureaucracies that influence the behavior of millions. 'The power multiplier' can be compared to fractional reserve banking and the creation of credit. The multiplier is the mechanism behind applied coordination capacity, is inherent to power, and is essential for inclusive human development.	ETED position. References the VCA and literature on the subjects of power, multipliers (Lange, 1943), "force multipliers", and an intuitive understanding of power in practice (see, for instance, *Book of Five Rings*, Musashi, 1645/1974). (Proposition 4; see Figure A5.3a).

Table A2.1 (continued)

Conceptual element	**Definition**	**ETED relation** and selected sources**
License 'License for evil'	An operationalized metaphor describing institutionally sanctioned rights to destroy value, including human life, to a degree equivalent or above value appropriated, i.e., 'destructive' transfer-COST vs revenue. Normatively and ethically, such a license can never be granted. Nonetheless, in reality, the 'license for evil' is granted to firms whose 'destructive value transfer-COST to revenue ratio' ('value destruction ratio') is 1.00 or above, meaning that 'destructive' transfer-COST (off-P&L *negative* value created and *not* appropriated) equals or exceeds revenue (value appropriation).	ETED development. References common intuition; literature on destructive elite business models (e.g., Purdue Pharma). (Sections 8.2.1, 8.2.2; Figure A5.5c).
License 'License to steal'	A metaphor describing institutionally sanctioned rights to extractive value and risk transfers. Normatively, such a license can be granted for a limited time and amounts under the 'weight and offset value transfers' (holistic) implication. Theoretical support for the policies described by the metaphor comes from the 'alternating value extraction and creation' conjecture and the 'extractive push' dilemma, and it is normatively developed in A Weighted Structural Reform Framework for policy, ideally referencing A Transfer Constraints Framework for policy formulation.	ETED development. References the rent-seeking literature and Tullock (1967). (Sections 2.3.1, 5.3.4, 7.1.5, 8.2.3; Tables 7.1, 8.2).
Lifecycle 'The Elite Business Model Lifecycle'	The inherent rise and fall of elite business models as a pattern that occurs in relation to political economy dynamics, where residual income is first based on value creation and then on power endowments that support value transfers via wins in the market, non-market and narrative market arenas. The lifecycle's 'value transfers replace value creation at maturity' conjecture matters to development as the extractive models that emerge at the end of the lifecycle might agglomerate into a harmful critical juncture and must be mitigated or suppressed through weighted structural reforms.	ETED development. References the life cycle theory of the firm of Mueller (1972); Schumpeter (1939). (Section 4.3.4; Figures A5.9a, A5.9b).
Lifecycle 'The Cross-border Elite Business Model Lifecycle'	The elite business model lifecycle in the international business context. Defined by international relations, it references The Great Power Elite Quality Lifecycle to account for the rise and fall of residual income (from abroad). This key variable explains that sustainable value creation or extractive value transfers by global companies in the foreign markets in which they operate is dependent on the power of their home state.	ETED development. Links the life cycle theory of the firm (Mueller, 1972) with cyclical theories of state power from Gibbon (1776/2001) onwards. (Section 7.3.2; Figure A5.9d).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
Lifecycle 'The Great Power Elite Quality Lifecycle' for international relations	The rise and fall of nations is the result of changes in domestic and cross-border elite quality over time. Leading states emerge from high quality domestic elite business models (producing exports, new technologies, financial surpluses) that augment their power (large markets, militaries, financial reserves) that in turn support increasingly effective value appropriation by their cross-border elite business models. When the proportion of elite business models at the end of their lifecycle surges, or elite quality declines for other reasons, the power that the state can exercise in international relations diminishes but does so only after a considerable time lag. In the interlude, the nation's dwindling but still considerable power might be applied for extractive cross-border business models, thus reversing the inclusive cross-border elite quality that allowed the state's ascent in the international hierarchy in the first place.	ETED position. Contrasts with Gibbon (1776/2001); Spengler (1922); Kennedy (1987); Dalio (2021); references Kondratieff (1925/1935); Schumpeter (1939). (Section 7.3.3; Figures 7.7 and A5.9d; see 'value transfers replace value creation at maturity' conjecture, Section 4.3.4 and Figure A5.9a).
'Metric' ('SVC metric'; inputs for the VCr, self-VCp, and other SVC measurements)	The conceptually indivisible, discrete, firm-level data sources that describe quantifiable value creation and risk transfers (transfer-IN/OUT) by a firm's business model. After their conceptual determination they are classified (via the 12 blocks of The Business Model Sustainable Value Scorecard), normalized, aggregated, and weighted to become inputs for the SVC measurements of a firm. The counterparts of SVC metrics for meso-level SVC measurements are termed 'indicators'.	SVC measurement input. References the ESG literature, its "social origins" (Eccles & Stroehle, 2018) and, in its applied development, third-party metric suppliers (e.g., MSCI, ISS, LSEG); Casas-Klett & Nerlinger, 2023. (Sections 6.6.1, 6.6.3; Figures 6.6, 6.7, 6.8).
'Mind'	A metaphor for the social power type obtained by elite coalitions through wins in the narrative market arena; social power is associated with knowledge elites.	ETED development. References the literature on narratives (Section 1.3.4).
'Might'	A metaphor for the political power type obtained by elite coalitions through wins in the political non-market arena; political power is associated with political elites.	ETED position. References the political science literature. (Section 1.3.4).
'Money'	A metaphor for the economic power type obtained by elite coalitions through wins in the business market arena; economic power is associated with business elites.	ETED position. References common understanding. (Section 1.3.4).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
'Non-elite'	The non-elite is made up of all members of society—the citizenry—who are not elites. Non-elites are directly or indirectly stakeholders in elite business models but are not principal beneficiaries. Far from being a unified body, the non-elite consists of many groups with disparate interests. One such non-elite group of great importance to elites is the managerial, technical, and creative class. Non-elites are defined and conceptualized in relation to elites in both the ETED's descriptive socio-economic structure pyramid and for economic and human development purposes.	References a comprehensive range of sociological, political, and other theories on elites as well as conceptual elements. (Section 8.1.1; Figure 8.1).
Non-elite 'Non-elite agency'	The agency of specific non-elite groups or of the non-elite at large. Since the leadership of non-elite groups—potential future elites—is tactical at best, it is both uninterested and unable to conceive general non-elite preferences to further development. Non-elite leadership is fragmented and possesses limited coordination capacity, explaining the non-elite rule fallacy, the 'low non-elite cohesion' problem, and the controversial 'elite agency on behalf of non-elites' approach to realize non-elite interests.	ETED development. (Sections 3.3.2, 8.1.3; Figures, 3.9, 8.1, A5.8).
Non-elite 'Non-elite quality'	An emergent aggregate property of the non-elite based on the contributions of discrete non-elite groups as business model stakeholders in terms of sustainable value creation. Non-elites generally engage in value creation through their knowledge and labor inputs and so contribute to overall elite quality but are often at the receiving end of bargaining power differentials and so suffer from degrees of extraction. On the other hand, non-elite groups may also provide no contribution to value creation, while appropriating value *not* created. To that end, certain non-elite groups make tactical alliances with elites to the detriment of other non-elite groups (see the Marxist *lumpenproletariat*), espouse violent narratives, or otherwise undermine non-elite cohesion.	ETED position. References common understanding; the literature since Plato (1908) and Aristotle (1912). (Section 3.3.3, tangentially discussed at various points of the inquiry, see Section 8.1; see non-elite agency or political options in Figures 3.9, A5.8; Epilogue discussion on non-elite quality and Figure E.1).
Non-elite 'Managerial, technical, and creative class'	A part of the non-elite strata that is directly involved in the running and advancement of elite business models (potentially contributing to their value creation). This group connects elites to non-elites and society's resources at large and are an essential component in the mechanisms of 'the extraordinary lever' that realize the coordination capacity of elites. The group includes managers, judges, journalists, military officers, priests, civil servants and so on. Since they are not prime residual income beneficiaries of the elite business model, they are deemed to be part of the non-elite class (even if many members speciously imagine themselves to be part of the elite).	References various literature such as Mosca's (1939) 'second stratum'; and Bottomore's (1993) 'sub-elite'. (Section 8.1.1; Figure 8.1).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
'Nook and cranny'	A metaphor that represents the narrow recesses and niche corners of the economy such as specific industry sectors, local geographies, and market segments. Elite business models that possess 'the extraordinary lever' in these specific fields are able to reap second-order value transfers. Given the self-similarity of the levers and multiplier effects across different scales (with the largest being in the hands of the core elite coalition), it is these nooks and crannies that prescriptively confirm the fractal nature of the political economy, as well as the difficulties in effecting structural reforms, as these niches remain concealed from the political and narrative market arenas and under the radar of institutional change. The concern of the ETED is that value transfers in these nooks and crannies dangerously add up and intensify the 'extractive escalation dynamic'. In a perfect world and regardless of their size, they ought to be the target of micro-policy interventions aimed at adjusting their narrow incentive systems and transforming their local elite business models towards higher sustainable value creation.	ETED development. Associated with the understanding of fractal structures in complex systems, see Mandelbrot (1989); Liebovitch & Scheurle, (2000); Brown, Gupta, Li, Milne, Restrepo, & West (2002); note "social fractals" (O'Brien et al., 2023); relevant to policy as in Johnson (1982); Aghion, Cai, Dewatripont, Du, Harrison, & Legros (2015); Primi (2015); Aghion, et al. (2015); Mazzucato & Rodrik (2023); Shih (2023). (Sections 7.1.5; 3.2.3; implications in Sections 7.1.4 or 7.1.5; elements unified in Epilogue; Epilogue and Figure E.2).
'Offsetting'	The process that addresses the practical aspects of the general sustainable value creation optimization problem of the political economy at the business model level. It is based on the trade-off notion—central to economics—that it is not possible to simultaneously satisfy all goals. Offsetting involves the establishment of trade-offs between business model activities based on their monetary quantification. The offsetting of business model activities takes a position on implicit weighting, and occurs through transformational leadership at the firm level that is incentivized by institutions. It is made practical by SVC metrics, measurements, and the frameworks of the 'weight and offset value transfers' (holistic) implication.	ETED position. References trade-offs in economics (see Campbell & Kelly, 1994; Eccles, 2024), cost-benefit analysis (see, Frank, 2000). (Sections 5.3.1, 6.6.1, 7.1, Chapter 8; see 'weighting' in Glossary).
'Omniscience'	In this inquiry, the state of knowing everything refers to the comprehensive description of value transfers in all of the socio-economic relations in a political economy. Such a comprehensive approach to capturing reality is currently unrealistic as it would necessitate massive amounts of data and unconventional macroeconomic models, but might be possible with the existence of a superintelligence.	ETED position. References common intuition and various philosophical traditions. (Figures A5.10; Tables A3.1b, E.1).
'Political economy'	The mechanisms through which second-order value and risk transfers are enabled and the required bargaining power differentials are established.	ETED position. (Section 4.1.2).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
Political economy 'Political economy omniscience' (of value transfers)	The category of SVC measurements based on tentative assumptions that all value transfers are knowable—and computable—in the political economy. Political economy omniscience is a thought experiment similar to the technological solutionism fallacy. At present, this quest is reflected in SVC measurements like 'weighted transfers general equilibrium' (WTGE) macroeconomic models and informs the even more demanding 'individual value creation rating' (ind-VCr) and the 'weighted transfers game' (WT-Game). Ultimately, these measurements would be purposed for practice (e.g., policy formulation, gaming services). Games might best realize such omniscience quests as a multiplayer community harnesses the collective knowledge and intuitions of the public. Such a game world, literally a digital parallel universe of the political economy, could provide benchmarks for the real world to move towards sustainable value creation, aiding in the formulation of weighted structural reform proposals or the design of narratives for political parties.	ETED development. References the gaming industry (e.g, *EVE Online* MMORPG, *SimCity* series, or *Capitalism Lab*). (Sections 7.1.1, 8.3.3; Figures A5.10, set A5.14; links to AI, see Tables A3.1b, E.1).
'Power'	The ability to assert one's will and to coordinate, a capacity that emanates from the low transaction costs enjoyed by narrow coalitions in a society. The relevant form of power in the ETED is bargaining power as 'the extraordinary lever' held by elites is applied to appropriate value across principal-stakeholder relationships. For development purposes, power has a dual nature or potentiality: it can be used by elites for extractive transfers, but also for transformational leadership, and is indispensable for sustainable value creation and bringing about the structural reforms that lead to economic and human development. Antipower approaches or the elimination of bargaining power differentials in the political economy are both naive (reflecting the elite denial fallacy) and counterproductive.	ETED position. References Weber (1925); Arendt (1970); Pareto (1981); van der Eijk (2018); Coff (1999). (Section 4.3; Figure A5.3a).
Power 'Bargaining power'	Bargaining power is the relative capacity to assert one's will in principal-stakeholder relationship transactions, and its possession is usually manifested in the form of advantageous pricing. It results from wins in the political economy contest arenas through the accumulation of 'money', 'might', and 'mind' that provide business model principals with positive power differentials vs counterparties and enable influence over prices and terms that monetize value, including value appropriated but *not* created. Asymmetrical bargaining power relationships are sought by all agents in the economy and usually favor elite business model principals over non-elite stakeholders. Contrasts with the normative, 'equalized bargaining power equilibrium prices' condition.	Porter (1980); Coff (1999); MacDonald & Ryall (2004), adapted for the ETED in Proposition 8. (Section 2.2.2; Figure A5.9c).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
Power 'The elite separation of powers'	A comprehensive conceptualization of the elite separation of powers at the national elite system level is central in explaining sustainable value creation and growth and extends classical separation of powers theory from the power domain of politics into that of the economy and society. The 'within-arena' (Tier 1), 'across-arena' (Tier 2) and 'within-system' (Tier 3) checks and balances result in robust intra-elite contests across The Seven Intra-elite Power Relations. In the international context, a fourth separation of powers tier, 'across-system' (Tier 4), is added to moderate each of three domestic tiers. In most political economies, a fifth separation of powers tier (Tier 5) is also at work, termed as 'from-core' to denote the core elite coalition's ability to check and balance regular elite coalitions. The specific elite separation of powers configuration is an emergent property of the elite system.	ETED position. Extends Montesquieu's (1748/1949) tripartite separation of powers and constitutional government theory; Madison (1787/1977). (Sections 3.2.2, 3.3.3, Propositions 16, 20; see also Figures 1.2, 3.7, 3.9, 3.10, Figure set A5.11; Table 3.2).
Power 'The Seven Intra-elite Power Relations'	The seven types of relations between business, political, and knowledge elites that constitute effective checks and balances on power in a political economy. Sustainable value creation outcomes and economic and human development rely in part on robust intra-elite contests in all seven of the intra-elite power relations that in turn depend on a comprehensive separation of powers across the three tiers of checks and balances.	ETED development. (Proposition 20, Section 3.3.3; Table 3.2).
Power 'The Three-tier Set of Intra-elite Checks and Balances'	The three types of checks and balances in a political economy are institutionalized to different degrees in each country. In Tier 1 'within-arena', same type economic, political, and knowledge elites compete for preeminence in the market, non-market, and narrative market arenas and check and balance each other; in Tier 2 'across-arena', economic, political, and knowledge elites check and balance each other; in Tier 3 'within-system', elite coalitions compete with their elite business models against each other.	ETED development. (Section 3.2.2; Figure 3.7).
Productive activity 'First-order activity' (value creation)	An activity that creates value. Productive activities kick-start and maintain economic life. They relate to production, specialization, trade, finance, and innovation in all of its varieties. Productive value creation is termed a 'first-order' activity because it can exist on its own terms. One of the two types of human activities in the 'value is created or transferred' ontological assumption of socio-economic relations.	ETED development. References the theories of value of Smith (1776/1904); Ricardo (1817/1999); Marx (1867/1959b); Schumpeter (1911/2003); Bhagwati (1982); Damodaran (2005). (Sections 2.2.2, 2.3.1).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
(Non-)productive activity 'Second-order activity' (value transfer)	An activity that transfers value from one subset of society to another. Non-productive extractive transfer activities appropriate value from first-order activities and hence are termed 'second-order'. They are referred to in economics and other domains as rent seeking, extractive surplus appropriation, or even plunder and theft and might include regulation, monopolies, exchange restrictions, licensing, litigation, or crime. Second-order value transfer activities are contingent on first-order value creation activities. One of the two types of human activities in the 'value is created or transferred' ontological assumption of socio-economic relations.	ETED development. References Bastiat (1845/1996); Tullock (1967); Krueger (1974); Buchanan (1980); Baumol (1990); Olson (1993); Murphy, Schleifer & Vishny (1993); Tollison (2012). (Section 2.3.1).
'Redistribution'	A value transfer effected by political elites in the non-market arena and rooted in the narrative market arena where wealth or income is moved from one social group (transferor) to another (transferee). It is problematic from a human and economic development perspective when such transfers are from a lower to a higher social group and away from first-order productive value creators, or when the transfers persist after the objectives that brought about the original redistribution are achieved (or when these are endemically not achieved). Normatively addressed for policy purposes in A Weighted Redistribution Framework for policy.	References diverse literatures including Dixit & Londregan (1995); Alesina & Perotti (1996); Aghion, Caroli, & García-Peñalosa (1999); Stiglitz (2012); Piketty (2015). (Section 8.2.4; Table 8.3; Figure A5.9b).
Redistribution 'Third-order transfers'	A metaphor for redistribution anchored by narratives (stressing empathy or compensation) that aims to reverse earlier second-order transfers via new transfers. Such transfers risk acting as catalysts for the 'extractive escalation dynamic'.	ETED position. Based on the redistribution literature (Sections 2.3.1, 5.3.4, and 8.2.4)
'Residual income' (RI) (profits)	Residual income refers to the profits of a firm. In the ETED, residual income corresponds to the notion of net value appropriation (NVa) consistent with the use of the VCA framework. Residual income (RI) is calculated from the P&L profits (π), conceptually the revenue minus costs, and facilitates the calculation of micro-level SVC measurements (e.g., VCp/VCr).	ETED position. (Section, 2.2.3; equations (1.1), (1.2), (1.3)).
'Revenue adjusted' (R') (revenue)	The ETED-specific technical term that refers to the adjustment of the revenue of a firm so that it corresponds to the notion of value appropriation (Va) consistent with the use of the VCA framework. Revenue adjusted (R') has a close correspondence to and is derived from revenue reported in the P&L statement and facilitates the calculation of micro-level SVC measurements (e.g., VCp/VCr).	ETED position. (Section, 2.2.3; equations (3.1), (3.2)).

Table A2.1 (continued)

Conceptual element	**Definition**	**ETED relation**** **and selected sources**
Risk	A form of value creation. All business activities that result in value creation are associated with degrees of risk. High risk exposure associates with uncertainty undertakings that are essential for new value creation and in open access social orders bring about high elite circulation velocities and economic development.	Markowitz (1952); Sharpe (1964); Damodaran (2005); Taleb (2018, 2020). (Section 6.6.5).
Risk ‘Sustainable risk origination’	A form of sustainability that occurs when the value created (profits) from the undertaking of uncertainty is appropriated by the risk-takers who also appropriate the *negative* value creation (losses). ‘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. Its antithetical scenarios are ‘unsustainable no-risk origination’, that sees risk not originated but *positive* value appropriated (like inflation or the free labor of LLM training); and ‘unsustainable risk origination’, that sees risk created but *negative* value *not* appropriated (like bailouts or the agency of systemically important institutions).	ETED position. Markowitz (1952); Sharpe (1964); Damodaran (2005); Taleb (2018, 2020). (Section 6.6.5; Figure 6.9).
Rules (institutions) ‘Elite business model rules’	The institutions granting the license to operate to elite business models. They are the institutions that matter most to development because they determine ‘who gets what’, and as a result, the levels of value creation/extraction in the economy. Therefore, these rules should normatively be the primary target of weighted structural reforms and elite/elite system transformational leadership. Elite business model rules are determined by the dynamics of intra-elite contest rules.	ETED development. (Section 4.2.3; Figures 4.3, 5.2, 6.1, 7.1, A5.12).
Rules (meta-institutions) ‘Intra-elite contest rules’	The rules and institutions that regulate intra-elite contests and establish ‘elite business model rules’. They are the meta-institutions that matter most to elite business model rules. They should therefore normatively be the target of structural reforms and elite system transformational leadership. Intra-elite contest rules are in turn chiefly resolved through bargaining power differentials in intra-elite meta-contests.	ETED development. (Sections 3.3.1; 3.3.3; 4.2.1; 4.2.3; Figure 4.3).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
Singularity 'Elite singularity'	A tipping point that occurs when autonomous AI elite agency exceeds human elites in terms of its value appropriation and value creation capabilities, and a non-human AI elite system is formed. AI applications are initially given narrow tasks requiring significant coordination capacity and, as a result of successfully performing these, are then entrusted with leadership roles such as managing business models or writing laws and negotiating their passage. Increasingly autonomous, AI elite agency proceeds to arrogate functions from incumbent human coalitions, ultimately controlling and running all elite business models in the political economy, effecting all institutional change, and constituting a sovereign AI elite system. The term brings the 'elite singularity' notion—where humans are confronted with the unknown possibilities of a superintelligence—into the realm of the political economy.	References the notions of singularity by Good (1965); Kurzweil (2005); Vinge (2013); Bostrom (2014); Chalmers (2016). (Sections 8.1.3, 8.1.6; 8.3.3, Epilogue; Tables A4.3b, E.1).
Structural reform 'Weighted structural reform'	Structural reform is the central element in the economic policy mix to achieve inclusive development and growth and must mainly target elite business model rules. It is based on *de facto* adjustments to the incentive system and relies on institutional and (de)regulatory measures. Structural reform is designed to stimulate elite business model transformation towards sustainable value creation. It requires a long-term intertemporal perspective and discrete engagement across the economy's narrow nooks and crannies where extractive elite business models enact excessive value transfers to the detriment of development. To be effective, structural reform must acknowledge that extractive value transfers are inseparable from value creation (e.g., as in the case of the 'extractive push' dilemma) hence requiring their respective weighting for decision-making purposes in consistency with the 'weight and offset value transfers' (holistic) implication (for financial analysis).	ETED position. References ideas on the incentive system (Olson, 1984; North, 1990, 1994; Nicholas, 2003; Robinson, 2010), on structural reform *per se* (Kaldor, 1970; Sachs & Woo, 1994; Laitner, 2000; Cuervo-Cazurra & Dau, 2009; Gollin, 2014; Palma, 2014), and on development and state capacity (Besley & Persson, 2010; Acemoglu, García-Jimeno & Robinson, 2015; Zhang, 2022). (Section 7.1; Figure 7.1).

Table A2.1 (continued)

Conceptual element	**Definition**	**ETED relation** and selected sources**
'Sustainability'	In the ETED, sustainability is defined in terms of the principal-stakeholder relationship. On the principal side, this means to appropriate value created while abstaining from taking value appropriated but *not* created (second-order value and risk transfers) in a proportion that bests average agency. On the stakeholder side, it is the privilege to retain one's value creation. Sustainability is in the interest of non-elites and is feasible with adequate 'knowledge' at the elite business model level (i.e., it does not compromise financial performance). Elite agency that is sustainable increases aggregate value creation and moves societies forward. Operationalized as 'sustainable value creation' (SVC) it is the ethical basis for human and economic development and realized through the maxim, *To the creators the value created*.	ETED position. Integrates literature on the VCA framework, the principal-stakeholder perspective, rent seeking, economic development and growth, and CSR/ESG. It is the cornerstone of this work and integrated as an ethical position in Chapter 8.
Sustainability 'Sustainable development'	Based on the generally accepted notion that sustainability "is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987), the focus is on the value creation of the elite business model. Sustainable development requires that the revenue/profits of elites be generated from first-order productive activities rather than from second-order (or third-order) transfer activities.	ETED position. References the VCA framework, literature on sustainability, economics literature on rent seeking, externalities, and economic development and growth. (From Section 2.3.1, Proposition 10 onwards).
Sustainability 'Sustainable Value Creation' (SVC)	A conception of sustainability based on the business model where value is appropriated from first-order productive activities rather than from second-order (or third-order) transfer activities, i.e., the first-order value creation activities of other parties. Value is everything that humans determine is worth appropriating and business models based on 'value appropriated but *not* created' are non-sustainable. Sustainable value creation is at the base of the micro to macro transmission mechanism and accounts for macro-level outcomes like growth, equality, or innovation. It is operationalized at the business model level as the relationship between first-order value creation and second-order value transfers through SVC measurements like the Value Creation Rating (VCr).	ETED development. References the VCA framework, the principal-stakeholder perspective, rent-seeking literature, economic externalities, von Carlowitz (1712/2022) and Brundtland (1987), and a range of CSR and ESG literature. (From Chapter 2 onwards).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
'Transnational elite coalition'	An elite coalition with members from diverse nation states that mostly operates cross-border elite business models. It benefits from global public goods like multilateral institutions and peace. Such coalitions have relatively lower levels of elite cohesion and power (compared to domestic elite coalitions) since their members and the way that they are organized do not associate with a particular state (as a business model is primarily embedded in the institutions of a nation state). Hence, these coalitions are rare—more imaginary than real. Ultimately, the dominant nationality of the coalition's members and socialization determine its primary institutional affiliation, but this cannot be transnational (even when its cross-border income flows are globally diversified and significant).	ETED development. Critically references Rothkopf (2008); Bühlmann, David, & Mach (2012); Sklair (2012). (Sections 1.2.1, 7.3.2, 7.3.3).
'Unemployed capital'	A form of value transfer based on the excessive expansion of the monetary mass where capital ceases to be used for the efficient allocation of resources. 'Unemployed capital' is evidenced by ballooning reserve balances at central banks, share buybacks, or inflation. Is is a particularly regressive type of redistribution that also causes the economy's overall coordination capacity to deteriorate.	ETED development. References developments in finance at both the macro level, such as reserve balances held by Federal Reserve Banks (WRESBAL), and the micro level, such as share buybacks (e.g., Charles Schwab, 2024). (See Section 6.2.4 and Epilogue).
'Value'	Value is everything that humans determine is worth appropriating and is jointly created in socio-economic exchanges by the parties in principal-stakeholder relationships. The creation of value is via first-order productive activities. If value is likened to energy, through the lens of the second law of thermodynamics, value creation is the agentic mechanism by which entropy is lowered in the human domain (in contrast to second-order value transfers that increase entropy); the elite system of the political economy is then the zone of the social habitat where order (negative entropy) is generated.	References various theories of value such as those by Smith (1776/1904); Bentham (1781/1970); Ricardo (1817/1999); Marx (1867/1959b); Mill (1863/2001). Draws from strategic management and finance insights as in Porter (1980); Damodaran (2005); Aspers & Beckert (2011); Harrison & Wicks (2013). Anchored by the VCA framework as in Brandenburger & Stuart (1996); Brandenburger (2002); Garcia-Castro & Aguilera (2015); Di Gregorio (2013). (From Section 2.2.2 onwards).

Table A2.1 (continued)

Conceptual element	Definition	ETED relation** and selected sources
Value 'Value destruction ratio'	An operationalization of value destruction that is in excess of value appropriation and measurable through the 'destructive value transfer-COST to revenue ratio'. When the '*negative* value created and *not* appropriated' is higher than revenue (i.e., the ratio is over 1.00) the business model has *de facto* been issued a 'license for evil' along with a license to operate. This is a controversial measurement given that the data sources needed for calculating the *negative* value created amount (in the numerator) are off-P&L and hence judgment-based.	ETED development. Diverse references including Arendt (1964); Gotshalk (1963); Ricoeur & Pellauer (1985); Wasserstrom (1999). (See Section 8.2.2; Figures 6.7, A5.5b; 'value destruction ratio' is not an SVC measurement).
'Value Creation Position' (VCp)	The VCp measures the sustainability of a firm by describing 'value created and appropriated' as a proportion of the total 'value appropriation'. The VCp is assessed by establishing the amount of second-order 'value appropriated but *not* created' transfers (transfer-IN) that benefit the business model as a proportion of total revenue/profits (the total value appropriated). The VCp can be conceptualized on a 'value spectrum' with one segment for 'value created and appropriated' (net value creation) and another for 'value appropriated but *not* created' (transfer-IN). Transfer-IN is quantified through metrics with a 'monetary equivalence'. VCp is expressed (for revenue) in the equation: VCp = [revenue – transfer-IN] / revenue. The VCp measurement is provided as a percentage: a score of 100% indicates that a firm's revenue/profits is entirely attributable to first-order productive value creation, and a score of 0% indicates that it is all attributable to second-order extractive value transfers.	SVC measurement. References a wide range of literature on finance, governance, CSR and ESG, and economics, including "VCA elasticity" (Garcia-Castro & Aguilera, 2015). (Chapter 2, Table 2.4, equation (4.1); calculation process in Sections 5.3.1, 6.6.1-6.6.3; Figure 6.6).
'Value Creation Rating' (VCr)	The VCr comprehensively measures the sustainability of a firm by describing the proportion of all 'value creation' in relation to all 'value appropriation'. The VCr is assessed by establishing the amount of second-order 'value appropriated but *not* created' transfers (transfer-IN) that benefit the business model as well as 'value created but *not* appropriated' transfers (inclusive transfer-OUT) in relation to total revenue/profits (the total value appropriated). The VCr is an operationalization of the full value impact of a business model and reflects the relationship between a firm and society by assessing all second-order value transfers, both the extractive (transfer-IN) and inclusive (transfer-OUT), quantified through metrics with a 'monetary equivalence'. The VCr is expressed (for profits) in the equation: VCr = [profits – transfer-IN(profits) + transfer-OUT(profits)] / profits. The VCr is provided as a score with two decimal points: a score of 1.00 indicates that a firm's value creation and value appropriation are equal and in balance; a score over/below 1.00 indicates that a business model is leaning towards inclusive/extractive activities.	SVC measurement. References a wide range of literature on finance, governance, CSR and ESG, and economics (rent seeking, negative externalities). (Chapter 2, Table 2.4, equation (4.2); calculation process in Sections 5.3.1, 6.6.1-6.6.3; Figure 6.6). VCr-derived measurements are presented in this work (e.g., ind-VCr, sec-VCr, IB-VCr), while others may be developed through future research initiatives (e.g., law-VCr).

Table A2.1 (continued)

Conceptual element	**Definition**	**ETED relation** ** **and selected sources**
Value ‘Value transfer-IN’	Value appropriated but *not* created. Value transfers from third parties. Transfer-IN is deemed to be extractive and results from business model activities that negatively impact specific stakeholders and development.	ETED development. (From Chapter 2 onwards, used in the equation set of Table 2.4; Figure 6.7).
Value ‘Value transfer-COST’	Concisely defined as ‘cost created but *not* borne’. Value transfer-COST is ‘extractive’ when it is a *de facto* reduction of P&L costs (value appropriated but *not* created, i.e., a form of transfer-IN). It is ‘destructive’ when it is off-P&L (*negative* value created and *not* appropriated) causing damage that is not formally quantified.	ETED development. (Section 8.2.1; Figures 6.7 and A5.5a).
Value ‘Value transfer-OUT’	Value created but *not* appropriated. Value transfers to third parties. Transfer-OUT is deemed to be inclusive and results from business model activities that contribute value to specific stakeholders and positively impact development.	ETED development. (From Chapter 2 onwards, used in the equation set of Table 2.4; Figure 6.7).
Vespasian ‘Doing a Vespasian’	The pursuit of an extreme form of cross border value extraction by one country’s elite system on another for profit or survival. References the first emperor of the Flavian Dynasty, Titus Flavius Vespasianus (9–79 AD), who used the spoils of the First Jewish–Roman War (66–73 AD), including slaves as well as the massive gold and silver reserves of the Second Temple, to recapitalize *ex manubiis* the Roman state and renew its capital.	ETED development. An historical interpretation with a starting point in *The Wars of the Jews: Or history of the destruction of Jerusalem* (Josephus, 2009). (Epilogue).
‘Weighting’	The conceptual element that brings the elite theory into the realm of practice and normative application. Any business model activity is weighted, meaning that it has bargaining power that causes deviations from the counterfactual ‘equalized bargaining power equilibrium prices’ and, as a result, appropriates more/less value that it otherwise would. Weighting is pervasive, emerges naturally, and hence happens implicitly, materializing in business model rules. The explicit and normative practice of weighting in the ETED can be more accurately described as ‘re-weighting’ , based on a deep recognition that ‘all elite agency creates and transfers value’ and is enabled by the two premises of human behavior: the ‘universal value extraction propensity of humans’; and the ‘innate value creation character of humans’. Weighting grants more/less power and hence the capacity to appropriate more/less residual income from some activities.	ETED development. (Sections 5.3.1, 6.6.1, 7.1, Chapter 8; Table 7.1; also see ‘offsetting’ in this Glossary).

Table A2.1 (continued)

Conceptual element	**Definition**	**ETED relation**** **and selected sources**
Weighting 'Weighted reforms'	Reforms that target specific (elite) business model rules based on the 'weight and offset value transfers' (holistic) implication. Weighting in a normative context is explicit, the precursor of offsetting, and requires that both value creation and transfers are discretely established and quantified to support transformational leadership. This can be achieved by employing the frameworks and SVC measurements of the 'weight and offset value transfers' (holistic) implication for both the formulation of policy—i.e., weighted reforms—and to make business model judgments.	ETED development. (Sections 5.3.1, 6.6.1, 7.1, Chapter 8; Table 7.1).
Weighting 'Weighted transfers general equilibrium' ('WTGE') macroeconomic model, also referred to as 'weighted transfers modeling'	Macroeconomic models that describe the first-order value (and risk) creation and second-order value (and risk) transfers in the economy. Referencing mainstream macroeconometric approaches they incorporate SVC measurements (e.g., EQr, VCr) and test their relationships with standard economic variables. The predictive econometric modeling entails exploring diverse development scenarios by adjusting value transfer weights and related policy parameters, thus enabling a comprehensive understanding of potential economic outcomes and trajectories. Weighting is meant to be prescriptive and is the essential policy approach to support structural reform.	SVC measurement (international version is G-WTGE). References DSGE, CGG, HANK, et al. models and literature; see Morozov (2014). (Sections 7.1.1, 7.1.5, 8.3.3; Figure 7.1).
Weighting 'Weighted transfers game' ('WT-Game')	An interactive simulation where gamers aim to construct a digital twin of all real-world business models' principal-stakeholder relationships and transactions. The goal is to comprehensively describe both first-order value (and risk) creation and second-order value (and risk) transfers. Gamers review principal-stakeholder transactional data (from payment systems, social networks, etc.) to identify transfers and, when successful, the universe they digitally create represents socio-economic reality and its fractal nature (whose equations correspond to those of 'weighted transfer modeling'). As an intended 'omniscience' SVC measurement, the putative advent of AGI might be a condition for its full realization. While the game is ostensibly for entertainment purposes, for committed players it is also to nudge agents in the political economy towards sustainable value creation, to formulate structural reform proposals, to inform narratives and political programs, and to come up with complex solutions to rebalance bargaining power differentials without losing coordination capacity.	SVC measurement (international version is GWT-Game). An early-stage speculative idea that will require industry partners and must be developed over the next years and decades. (Section 7.1.1; Table A3.1b; Figures A5.10, set A5.14; see 'The heavenly AI' hypothesis in Table E.1).

Table A2.2: Main ETED frameworks.*

Framework	Description	Purpose (and ETED sources)
The Elite Circulation Matrix	A 2x2 economic development framework for elite circulation based on two properties of the elite system: social order access (on the x-axis) and elite quality (on the y-axis). The four sectors of this political economy prescriptive matrix represent elite circulation modes that suggest four development trajectories: (1) 'blockage' mode for regressive development; (2) 'infiltration' and (3) 'endosmosis' modes, both leading to unsustainable development; and (4) 'admixture' mode, leading to sustainable development.	To understand economic and social development paths through the lens of elite circulation. (Section 1.3.3, Proposition 3; Figure 1.1).
Tripartite elite typology	The framework for elite agency based on three elite types—political, business, and knowledge—active in the three available contest arenas—market, non-market, and narrative market—from which their respective power type—'money', 'might', or 'mind'—is derived. The three elite types fuse at the business model level through 'elite coordination leadership' (for the accumulation of power) and 'elite business model leadership' (for the conversion of power into residual income), integrating the power domains of politics, economy, and society.	To facilitate the analysis of the macro-level political economy and the effectiveness of micro-level elite business models. (Sections 1.3.4, 2.2.1; summarized in Figure A5.1).
The 'value is created or transferred' (ontological) assumption	Value is created. It is then either appropriated by its creators or by third parties who did not create the value in the first place. That is, the value is transferred. The essential dualist framing of socio-economic relations (and nature) operates. This results in the dichotomous typology of business model activities referencing value. This simple ontological assumption is reductionist and is advanced as the fundamental framework for sociology, economics, politics, international relations, management, and finance.	A fundamental dualism to interpret socio-economic reality with critical implications for development and the ontological bedrock of the ETED. (From Section 2.3 onwards; see Table 2.3; Figures A5.4c, 8.7).
The dichotomous typology of business model activities referencing value	A two-level typology of all economic activity (and social life) that differentiates between first-order productive activities (value creation) and second-order transfer activities (value extraction). Based on the (i) 'value is created or transferred' ontological assumption, it provides the most fundamental applied support for the ETED system. The two-level typology serves as a basis for the operationalization (through SVC metrics), measurements, and normative aspects of the ETED. From this simple dichotomy—a dualist classification framework—the complexities of the political economy emerge.	To provide a guide to differentiate activities in the economy based on their sustainable value creation. (Section 2.3.1, Proposition 10; Table 2.3).

*While some of these frameworks appear suited for inclusion in the ancillary propositions of Table A1.3, the entries selected here represent broader structures that have been constructed to enhance the understanding of complex phenomena (the primary focus here is not on the specific relationships between conceptual elements, even though the underlying logic of most frameworks strive for falsifiability).

Table A2.2 (continued)

Framework	Description	Purpose (and ETED sources)
The elite agency microfoundations of institutional change model	A model positing a two-way causal relationship between elite agency and institutions. Elite agency is the principal microfoundation of institutional change and leads to adjustments in the economy's incentive system.	To establish the role of elites in the social system for both academic and applied purposes. (Section 3.1.1, Proposition 12; Figure 3.2).
The Three-tier Set of Intra-elite Checks and Balances	A schema that lies at the core of the ETED's conceptual framework for the separation of powers based on a three-tier set of checks and balances in the political economy: 'within-arena' (Tier 1), 'across-arena' (Tier 2), and 'within-system' (Tier 3), that correspond to the three intra-elite contest arenas (market, non-market, narrative market) and the three elite types (business, political, knowledge). A fourth 'across-system' (Tier 4) tier of checks and balances is added to consider cross-border business models as foreign elites participate in intra-elite contests (mostly in Tier 1 'within-arena' contests). A fifth (Tier 5) tier describes the balance of power relationship between the core elite coalition and regular elite coalitions.	To analyze the political economy and predict, in conjunction with the countervailing force of elite cohesion, institutional change and sustainable value creation. (Proposition 16, Sections 3.2.2, 7.3.1, 8.1.2; Figures 3.7, A5.11b).
The Seven Intra-elite Power Relations	A practical framework that specifies the ETED's separation of powers by providing a typology of seven intra-elite relations across the political economy's set of intra-elite checks and balances. Three elite types (business, political, knowledge) engage in intra-elite contests using the schema of The Three-Tier Set of Intra-elite Checks and Balances ('within-arena' Tier 1, 'across-arena' Tier 2, and 'within-system' Tier 3). Sustainable value creation and economic development rely on robust intra-elite contests in all seven intra-elite power relations.	To analyze the precise sources of institutional change and sustainable value creation in the political economy (additional intra-elite power relations emerge from including Tier 4 and 5 checks and balances to the framework). (Section 3.3.3, Proposition 20; Table 3.2).
The Elite Business Model Lifecycle	Explains the rise and fall of elite business models in the political economy over time, where the variables are the amounts of value creation and power accumulation. The lifecycle reveals how elite residual income first originates from the value creation of 'knowledge' before later accruing from power endowments leveraged for value transfers via 'political economy know-how'. The derived lifecycle's 'value transfers replace value creation at maturity' conjecture matters to growth because an aggregation of extractive, rent-seeking models at the end of the lifecycle can tip an economy towards a critical juncture and an extractive cul-de-sac.	To analyze and then formulate weighted structural reforms to address excessive extractive transfers in a political economy. (Section 4.3.4; Figures 4.5, A5.9b).

Table A2.2 (continued)

Framework	**Description**	**Purpose (and ETED sources)**
Typology of individual non-elite responses to extractive value transfers by elite business models	The full range of individual responses to value extraction by non-elites: (i) ‘acceptance’; (ii) ‘exit’; (iii); ‘informality’; (iv) ‘challenge’. Each response is the result of complex cultural, social, economic, and psychological forces. When aggregated, each of these responses are manifested as political options: (i) individual ‘acceptance’ responses such as (a) *resignation* or (b) *embrace* materialize as collaboration (option b) ‘trust in elites’; (iv) ‘challenge’ responses of the (a) *struggle* variety result in confrontation (option a) ‘non-elite vs elite struggle’, while those of the (b) *participation* (in intra-elite contests) variety result in collaboration (option c) ‘tactical participation’, or (option d) ‘strategic participation’. Individual responses such as (ii) ‘exit’ and (iii) ‘informality’ mostly fall outside the political economy’s elite/non-elite dialectics.	To examine the basis for non-elite political options in response to value extraction and understand the cultural, social, and economic influences on the non-elite/elite relationship and its influence on development. (Table 5.1; Sections 5.2.3, 8.1.3; see Figure A5.8).
The three assumptions for socio-economic relations	Three assumptions for socio-economic relations in the ETED’s pragmatic philosophy upon which the operationalization of sustainable value creation occurs: the (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.	To theoretically cement the practical apparatus of the ETED in order for SVC measurements to enable informed transformational leadership choices. (Sections 5.3.1, 6.6.1; Figure A5.4a).
The Political Economy Power and Value Matrix	A 2x2 framework that links value (creation/extraction) and power to its political and economic dimensions. The quadrants of this political economy matrix (which correspond to the four index areas of the EQx) result from the intersection between the two variables of power and value (represented on the x-axis), and the two dimensions, political and economic (represented on the y-axis), and are: (i) ‘political power’; (ii) ‘economic power’; (iii) ‘political value’; and (iv) ‘economic value’.	To classify political economy phenomena and conceptually guide the operationalization of political economy measurements like elite quality. (Section 6.2.2; Figure 6.2).
The classification logic for elite quality indicators	A 2x2 framework for the operationalization of elite quality (referencing The Political Economy Power and Value Matrix, Figure 6.2). It articulates the logic by which four ‘index areas’ conceptually organize and assign component datasets (the 12 pillars and indicators for the EQx). The quadrants of the political economy matrix result from the intersection between the two variables of power and value (represented on the x-axis), and the two dimensions, political and economic (represented on the y-axis), and are: (i) ‘capture’ for ‘political power’ indicators; (ii) ‘dominance’ for ‘economic power’ indicators; (iii) ‘income (transfer)’ for ‘political value’ indicators; and (iv) ‘value’ for ‘economic value’ indicators.	To conceptually identify and classify the component indicators of the EQx. (Section 6.2.4; Figure 6.4).

Table A2.2 (continued)

Framework	Description	Purpose (and ETED sources)
The State of the Elite System Framework for the political economy	A 2x2 framework for policy that links levels of elite power, i.e., potential future value extraction (on the x-axis) with elite value creation (on the y-axis). The four sectors of this political economy prescriptive matrix describe the state of the elite system and are: (1) 'rentier elite system'; (2) 'enlightened elite system'; (3) 'striving elite system'; and (4) 'competitive elite system'.	To serve as a comparative classification and analytical tool for national elite systems to inform policy and structural reform. (Section 6.3.2; Figure 6.5).
The three-stage process to establish firm-level SVC measurements and their SVC metrics	A three-stage procedural framework to establish SVC measurements (i.e., the VCp/VCr and the self-VCp/self-VCr). The three stages are: (I) *conceptual determination of SVC metrics*; (II) *quantification of SVC metrics (input)*; and (III) *calculation of SVC measurements (output)*. Stage (I) is achieved with the (a) 'description' and (b) 'rationale' for each SVC metric. Stage (II) is where the critical quantification choices are made on the (1/3) *assessment method*, the (2/3) *data source*, and the (3/3) *calibration of metrics*, with the latter comprising of (a) 'monetary equivalence' and (b) 'calibration factor'. Stage (III) involves the implementation of SVC measurement equations on the basis of the weighting, aggregation, and other pertinent statistical schema applied to the component SVC metrics.	To calculate SVC measurements. (Chapter 2, Sections 5.3.1, 6.6.1-6.6.3; Tables 6.1, 6.2; the process is captured in Figure 6.6).
The Value Creation and Appropriation Matrix: A framework for the classification logic of SVC metrics	A 2x3 framework for the classification of business model activities as metrics for SVC measurements. The framework takes the value transfer perspective and is based on value creation (on the x-axis) and value appropriation (on the y-axis). The elements of the political economy classification matrix, reflecting the double-entry transferee/transferor nature of value transfers are: (i) 'no value creation' (no transfer) as 'value *not* created and *not* appropriated'; (ii) 'transfer-IN' as 'value appropriated but *not* created'; (iii) 'transfer-OUT' as 'value created but *not* appropriated'; and (iv) 'net value creation' (no transfer) as 'value created and appropriated'. The matrix has two additional 'quadrants' for *negative* value creation (on the x-axis) denoting two types of value transfer-COSTS (i.e., 'cost created but *not* borne'): (v) 'extractive' transfer-COST as 'value appropriated but *not* created' (a form of transfer-IN which is equivalent to monetizing value created by stakeholders); and (iv) 'destructive' transfer-COST, '*negative* value created but *not* appropriated' (and not monetized *per se*).	To conceptually identify and classify SVC metrics, the components of SVC measurements. (Sections 6.6.1, 8.2.2; Figure 6.7).
The Business Model Sustainable Value Scorecard	A classification framework presented as an artifact, a visual model for the conceptual determination of SVC metrics and the judgments for their relative weightings in SVC measurements after their 'monetary equivalence' and 'calibration factors' have been established. The 12 blocks of the scorecard facilitate the aggregation of a firm's transfer-IN and transfer-OUT sums and thus establish their relative proportions (which is required for the calculations of firm-level SVC measurements like the VCr). The scorecard mirrors the 12-pillar EQx architecture used to classify its indicators, but in order to reflect the firm-level perspective, 'political' becomes 'non-market' and 'economic' becomes 'market'.	To support the conceptual determination of SVC metrics and the calculation of SVC measurements. (Section 6.6.3; Figures 6.6, 6.8).

Table A2.2 (continued)

Framework	Description	Purpose (and ETED sources)
The Sustainable Risk Framework for society	A 2x2 framework for policy that links risk origination (on the x-axis) and value appropriation (on the y-axis) thus articulating the implications of the distribution of risk and its (positive and negative) rewards in society. The four sectors of the political economy prescriptive matrix are: (1) 'null risk origination'; (2) 'unsustainable no-risk origination'; (3) 'unsustainable risk origination'; and (4) 'sustainable risk origination'.	To assist the understanding of risk in policymaking and to incentivize the undertaking of risk/ uncertainty by preempting the transfer of the *positive* or *negative* value associated with risk origination. (Section 6.6.5; Figure 6.9).
'Weighted transfers modeling' ('WTGE') of the economy	An econometric model that frames and establishes first-order value (and risk) creation vs second-order value (and risk) transfers in an economy and sets out their respective relationships and entanglements. The aim of statistically mapping all elite business model principal-stakeholder relationships in terms of value (and risk) creation and transfer probabilities is an estimable formulation of the theoretical relationship between the disaggregated sustainable value creation of elite business models and economic development outcomes. Value creation modeling relies on micro-level SVC measurements (e.g., VCr) and supplements the mainstream econometric models that it references (such as DGSE, HANK, etc.) with novel inputs such as principal-stakeholder transactional datasets that validate the elite business models and institutions that maximize economic and human development.	To support policymakers in formulating weighted structural reform and value transfer offsets (and the leadership needed for elite bargains on institutional change) by computationally establishing the value creation relationships in an economy. (Sections 7.1.1, 7.1.5; Figures 7.1, 7.8; Table 7.1).
'Weighted transfers game' ('WT-Game') of the economy	An interactive digital twin of the economy (and society) that functions as a framework that ultimately builds and operates a model encompassing all first-order value (and risk) creation and second-order value (and risk) transfers. It relies on extensive principal-stakeholder transactional data, SVC measurements, and 'weighted transfers modeling' (WTGE) equations, but augments these through the commitment of individual gamers dedicated to researching, revealing, and optimizing value transfers across socio-economic groups and elite coalitions. While the simulation is primarily designed for entertainment purposes, its structured evidence, insights, and hypotheses are seen as being significant to policymaking as gamers realize the maxim, *To the creators the value created*. The WT-Game (and its international version, the global weighted transfers game, 'GWT-Game') will require technology partnerships for its operationalization with full actualization contingent on the plays and data supplied by gamers as well as by its AI capabilities.	To entertain and provide an additional and discrete tool to establish the weighted structural reform and value transfer offsets that simulate development on the basis of participative gamification and related collective insights. (Section 7.1.1; Table E.1; Figure A5.10 shows the 'WT-Game' in relation to SVC measurements; renditions in Figure set A5.14).

Table A2.2 (continued)

Framework	Description	Purpose (and ETED sources)
A Weighted Structural Reform Framework for policy	A framework for economic policymaking that supports structural reforms to adjust the incentive system centered on the ‘weight and offset value transfers’ implication. Its three steps are: (i) *general assessment of sustainable value creation impact*; (ii) *formulation of weighted structural reform*; and (iii) *elite transformational leadership for the elite institutional change bargain*. As one of the three frameworks for weighted policymaking it references A Weighted Redistribution Framework for policy (Table 8.3) and receives inputs from A Transfer Constraints Framework for policy formulation (Table 8.2).	To support policymakers planning and implementing weighted structural reform via value transfer offsets by fostering the leadership required for elite bargains on institutional change. (Section 7.1.5; Tables 7.1, A4.4).
The Sustainable Value Matrix: A performance framework for management	A 2x2 management framework that serves as a classification schema of business models based on two variables representing firm performance (on the y-axis), e.g., profits, and sustainable value creation (on the x-axis), e.g., the VCr. The four quadrants of the decision-making matrix are: (1) ‘sustainable’ firm; (2) ‘naïve’ firm; (3) ‘rentier’ firm; and (4) ‘living-dead’ firm.	To support top management in determining the contribution of their business models to sustainable value creation. (Section 7.2.1; Figure 7.2).
The Five Varieties of Elite Leadership typology	A classification framework for elite leadership that proposes five discrete leadership varieties, respectively effected by elite coalitions and the core elite coalition at the elite business model or elite system levels. The first three types are (i) ‘fundamental’ elite leadership varieties: (a) elite coordination leadership; (b) elite business model leadership; and (c) elite system leadership. These three types are supplemented by two further (ii) ‘transformational’ leadership varieties: (d) elite transformational leadership; and (e) elite system transformational leadership.	To understand elite agency and development potential, perform political economy analysis, and support elite transformations towards sustainable value creation. (Section 7.2.4; Table 7.2).
The Sustainable Finance Matrix: A framework for investments	A 2x2 finance framework that extends The Sustainable Value Matrix for management (Figure 7.2) by adding an investment strategy layer. It is likewise based on sustainable value creation (on the x-axis), e.g., the VCr, and on firm performance (on the y-axis), e.g., profits. The four quadrants of the decision-making matrix for investments aimed at individual investment portfolio strategies are: (1) ‘sustainable’ investment category; (2) ‘non-profitable’ investment category; (3) ‘non-sustainable’ investment category; and (4) ‘non-investable’.	To support the sustainability analysis of specific investments and investment strategies in the financial and corporate contexts. (Section 7.2.5; Figure 7.3).

Table A2.2 (continued)

Framework	Description	Purpose (and ETED sources)
The Sustainable Valuations Matrix: A framework for investors	A 2x2 finance framework for finance that extends The Sustainable Value Matrix for management (Figure 7.2) by adding an investment portfolio strategy layer. It is likewise based on sustainable value creation (on the x-axis), e.g., the VCr, and on firm performance (on the y-axis), e.g., profits. The quadrants suggest the hypothetical impact on equity and debt valuations for each of the investment categories (as detailed in the first variant of the matrix, Figure 7.3). The impact on valuations inferred (notwithstanding empirical validation) by the decision-making matrix for investors matters to portfolio asset allocation analysis: (1) for the 'sustainable' investment category both equity and debt valuations trend *upward*; (2) for the 'non-profitable' investment category, equity will trend *upwards* and debt will be in a *range-bound* trend; (3) for the 'non-sustainable' investment category, equity will trend *downwards* and debt will be in a *range-bound* trend; and (4) for the 'non-investable' ('taker') investment category both equity and debt valuations trend *downward*.	To support the practice of sustainable finance by portfolio investors through equity and debt valuations of firms; relevant for portfolio management. (Section 7.2.5; Figure A5.7).
The Value Transfer Strategy Matrix: A sustainability framework for principal-stakeholder relationships	A 2x2 management framework that describes a firm's relationships with its stakeholders on the conceptual basis of extractive transfers (i.e., transfer-IN) and inclusive value transfers (i.e., transfer-OUT). The two transfer types are discrete and independent (and are captured by SVC metrics). For this purpose, the decision-making matrix for principals and stakeholders utilizes the VCr (on the x-axis) and the VCp (on the y-axis) as its two dimensions. The VCr dimension of a firm reflects a range from 'keeper' (the firm does not part with any value) to 'giver' (the firm creates value for stakeholders); the VCp dimension provides a range from 'inclusive' (no extraction) to 'extractive' (extraction occurs). The four quadrants of the matrix are: (1) the doubly inclusive 'inclusive giver' strategy; (2) 'extractive giver' strategy; (3) 'inclusive keeper' strategy; and (4) the doubly extractive 'extractive keeper' (or 'taker') strategy.	To formulate sustainability strategy with a uniquely granular and comprehensive understanding of the extractive/inclusive relationships in the value chain, designed for both firm principals and stakeholders. (Section 7.2.6; Figure 7.4).
The Global Influence of the Elite System Framework for international relations	A 2x2 international relations framework that describes a national elite system from the perspective of the global political economy. The two matrix dimensions are domestic elite quality (on the x-axis), e.g., EQx, EQr, and cross-border elite quality (on the y-axis), e.g., cb-EQ, bl-EQ. The four quadrants in this political economy prescriptive matrix are: (4) the developmentally ideal 'global public goods' elite system; (3) the 'global extractive' elite system; (2) the 'global subsidizer' elite system; and the (1) 'global public bads' elite system.	To analyze and predict the role and behavior of a state in the international system and the nature of interstate relationships based on domestic and cross-border elite quality. (Section 7.3.1; Figure 7.5).

Table A2.2 (continued)

Framework	Description	Purpose (and ETED sources)
The Great Power Elite Quality Lifecycle for international relations	An international relations framework that accounts for the rise and fall of powers. States become powerful as a result of transformational leadership towards higher domestic elite quality and that power in turn supports the increasingly effective value appropriation of their elites' cross-border business models. The overreliance of elites on state power to extract global revenues abroad causes these endowments to ultimately shrink as foreign rival elites can gain ascendance by creating more value and thus bolster the comparative power of their own states in the international system. The logic has parallels with The Elite Business Model Lifecycle.	To support the analysis of power and states in international relations. Rests on cyclical accounts of national development (from Gibbon, 1776/2001, or Spengler, 1922, to Kennedy, 1987, or Dalio, 2021). (Section 7.3.3; Figure 7.7, links with The Elite Business Model Lifecycle at the micro-level, Figure A5.9d).
Polis in empire	A normative political economy framework set out in the form of a metaphor where the ideal institutional and elite system configuration lies in the two-level creative tension between local and supranational political units. The local 'polis' generates incentives for bottom-up value creation while the power of 'empire' scales elite value creation, protects non-elites from value extraction by foreign elites, and has the capacity to effect top-down institutional change. Polis and empire elites coexist, enrich, and check and balance each other in the elite system. The EU is antipodal to the 'polis in empire' model and is hence deemed to provide inadequate economic and human development to its citizens.	To support economic reform and inclusive political visions. Derived from Manent's *Metamorphoses of the City* (2013) and applied using the example of Europe. (Section 7.3.4).
Set of ethical principles (of the ETED)	An ethical framework based on a fundamental maxim: (i) *To the creators the value created*. Its two tenets for elite agency are: (ii) *Maximize first-order value creation and risk origination for productive economic transformations fit for human purpose*; and (iii) *Weight and offset second-order value and risk transfers and minimize these to maximize value*. The practical precepts are: (iv) *Measure value and risk transfers and establish the optimal weightings and potential offsets to maximize sustainable value creation*; (v) *Realize sustainable value creation and risk origination incentives through top-down weighted structural reforms and bottom-up elite business model transformation*; (vi) *Invest in elite cohesion and in the elite separation of powers with a comprehensive set of checks and balances to encourage productive intra-elite contests*; and (vii), *Promote the freedom to* exit *and the freedom* to *create value irrespective of optimal value creation, transfer weightings, and potential offsets*.	To support policymaking for development based on a realist account of how the political economy works. Directed at the core elite coalition and social agents shaping the elite system and institutional change. (Chapter 8; Tables A4.3a and A4.3b, the latter adapted for the AI).

Table A2.2 (continued)

Framework	Description	Purpose (and ETED sources)
The socio-economic structure pyramid	A classification framework of the socio-economic structure arranged hierarchically to represent relative power endowments. Conceptually visualized as a pyramid, it is comprised of elite strata (beneficiaries of elite business model residual income flows) and non-elite strata (stakeholders of elite business models). The (1) elite is divided into the (1.a) core elite coalition and (1.b) regular elite coalitions; the (2) non-elite is divided into (2.a) the managerial, technical, and creative class and (2.b) all other non-elite groups.	To support social analysis and the determination of value creation sources in a country for economic and human development purposes. (Section 8.1.1; Figure 8.1).
A typology of aggregate *non-elite* political options in response to extractive value transfers	A classification framework for aggregate non-elite agency. Elites and non-elites are assumed to be in a dialectical relationship as non-elites respond to extractive value transfers by elites. Individual non-elite responses aggregate into a range of political options that pursue either collaboration or confrontation: (option a), 'non-elite vs elite struggle'; (option b) passive 'trust in elites'; (option c), 'tactical participation', where a specific non-elite group aligns with a specific elite coalition in support of its business model; (option d), 'strategic participation'. The latter approach is optimal from a development perspective as the non-elite, broadly understood, mobilizes on the side of the higher sustainable value creation contenders across as many intra-elite contests as possible. A non-matching political reaction by elites negatively affects social cohesion and compromises general development.	To supply a typology of possibilities for elite/non-elite relationships in support of social, political, and economic analysis towards effective social movements and policies for non-elite welfare and development. (Section 8.1.3; Figures 8.2, A5.8).
A typology of aggregate *elite* political options to non-elite political options to extractive value transfers	A classification framework for aggregate elite agency. Elites will counter or match non-elite political options to extractive value transfers with a range of political options that pursue either collaboration or confrontation: (option a'), 'value appropriation focus'; (option b') active 'elite agency on behalf of non-elites'; (option c'), 'alliances with non-elite groups' in intra-elite contests; and (option d), 'mastering the intra-elite quality contest dilemma'. The latter approach is optimal from a development perspective where the elite, broadly understood, focuses on sustainable value creation; a non-matching political reaction by too many non-elite groups negatively affects social cohesion and compromises general development.	To supply a typology of possibilities for elite/non-elite relationships to support social, political and economic analysis towards effective social movements and policies for non-elite welfare and development. (Section 8.1.3; Figure 8.2).
'Value transfer-COST to revenue ratio' ('transfer-OUT ratio'; establishes the 'license for evil' metaphor)	A threat detection framework for the political economy. It establishes the ratio of 'cost created but *not* borne' (the 'destructive' transfer-COST) to value appropriated (revenue). While not an SVC measurement, it can be calculated. A ratio of 1.00 or above is deemed to constitute a 'license for evil' that is institutionally granted to elite business models and burdens stakeholders and society as a whole with onerous value destruction.	To identify, shame, and eradicate particularly extractive elite business models. (Sections 8.2.1, 8.2.2; Figure A5.5c).

Table A2.2 (continued)

Framework	Description	Purpose (and ETED sources)
The Political and Business Systems Sustainable Value Creation (SVC) Test	A comparative political economy framework to test political and business systems. It uses SVC measurements and other data to determine how elite agency and a system's institutions associate with value creation rather than extractive transfers. The narrative and nature of the system or its *a priori* legitimacy are secondary, while the test addresses controversial questions such as the potential advantages of democracy vs authoritarianism from a non-elite perspective through a sustainable value creation lens.	To test the development performance of political and/or business systems. (Section 8.1.5; Figure 8.3).
A Transfer Constraints Framework for policy formulation	An institutional constraints framework for policy formulation encouraging both development and elite accountability. It constrains extractive value transfer licenses granted to elite businesses that have pledged to turn these into value creation. Value transfers are sustainable when they are limited, weighted, and undergo offsetting, at times in application of the 'alternating value extraction and creation' conjecture. The three limitation types are: (i) *intertemporal constraints*; (ii) *monetary constraints*; and (iii) *value creation milestones*. It is one of the three frameworks for weighted policymaking and provides inputs for policies conceived by the other two—A Weighted Structural Reform Framework for policy (Table 7.1) and A Weighted Redistribution Framework for policy (Table 8.3)—that when subsequently implemented secure the proposed limitations through elite bargains.	To support policymakers in authorizing the licenses to operate for business models with significant value transfers by establishing constraints (mostly based on the elite coalition's own *a priori* value creation promises), thus fostering enhanced and traceable accountability. (Section 8.2.3; Tables 8.2 and A4.4).
A Weighted Redistribution Framework for policy	A sustainable redistribution framework for economic policymaking designed to manage redistributive transfers associated with elite business models in the political economy. Its three steps are: (i) *transfer parties' (transferee/transferor) assessment of redistribution impact*; (ii) *formulation of constraints on redistribution*; and (iii) *elite transformational leadership to support the 'elite redistribution constraints bargain'*. As one of the three frameworks for weighted policymaking, it references A Weighted Structural Reform Framework for policy (Table 7.1) and receives inputs from A Transfer Constraints Framework for policy formulation (Table 8.2).	To support policymakers planning and implementing sustainable redistribution by fostering the leadership required for elite bargains on redistribution. (Section 8.2.4; Tables 8.3, A4.4).
The Two Fundamental Freedoms for Development Matrix	A 2x2 ethics and policy framework based on two fundamental freedoms derived from the positive and negative freedoms proposed by Fromm (1994): "freedom to" and "freedom from". These two freedoms are repurposed as the 'freedom *to* create value' (on the x-axis) and the 'freedom *from* value extraction' (on the y-axis). The four quadrants of the political economy prescriptive matrix link to economic development through the lens of the investment incentives in the economy and are: (4) 'investment in value creation and risk origination'; (3) 'underinvestment in value creation'; (2) 'underinvestment in risk origination'; and (1) 'divestment'.	To forecast and trace the consequences for investment and development resulting from the respective presence or absence of the ETED's two fundamental freedoms. (Section 8.3.1; Figure 8.4).

Table A2.2 (continued)

Framework	Description	Purpose (and ETED sources)
The Three Freedoms for Development Model	A model of economic and human development where the two fundamental freedoms of the ETED are supplemented by a third, the enabling 'freedom to *exit*'. Together these provide the basis for economic and human development. The three freedoms incentivize generalized sustainable value creation and related business models as they strengthen the elite separation of powers, rebalance bargaining power differentials, and incorporate non-elite agency into the political economy, thus positively impacting social cohesion. Together, the three freedoms comprise the notion of 'liberty' in the ETED.	To support social and institutional analysis, including legal and structural reforms for economic growth consistent with the set of ethical principles for development. (Section 8.3.2; Figure 8.5; Tables A4.5a, A4.5b).
The Non-Elite vs Elite Quality Matrix: A framework for human development incorporating culture	A 2x2 framework that links elite quality (on the x-axis) with non-elite quality (on the y-axis) that aims at long-term human and economic development. By including non-elite agency, new perspectives for policy and analysis are supplied. For instance, the proximate responsibility for growth is placed with non-elites, while insofar as there is cultural production, the business models of knowledge elites play a vital precursor role. The quadrants of this framework are: (i) 'regression'; (ii) 'stagnation due to excessive value transfers'; (iii) 'stagnation due to lack of value creation'; (iv) 'development'.	To guide society at large in the formulation of long-term development plans by taking into account both elite and non-elite agency, offering the possibility of incorporating cultural factors into the analysis. (Epilogue; Figure E.1)
Classification of elite theories and conceptualizations	A 2x2 political economy classification framework of elite theories and conceptualizations based on two dimensions: the 'perspective' (particularism to universalism on the x-axis) and the 'level' (micro to macro on the y-axis). The analytical 'perspective' ranges from the specific context-bound to the ubiquitous context-transcendent. The analytical 'level' considers phenomena from the small-scale micro to the large-scale macro.	To adequately reference the existing literature on elites for theory development purposes and for the convenience of readers and pundits not versed with the wide array of research considered. (Figure A5.2; Section 1.2).

Table A2.3: The building blocks for the speculative and pragmatic philosophies of the ETED.*

Framework	Description	Role
The first principles of the ETED (Section 8.3.3; Figure 8.6)	The fundamental principles that cannot *a priori* be deduced for the purposes of human and economic development are the three general principles of life: the Will to Live, the 'universal extraction propensity of life', and the Will to Power.	Out of the first principles spring the building blocks of the ETED's speculative philosophy. First, the basic constraint of the human condition and subsequently the three premises for human nature, which eventually lead to the ontological assumption for socio-economic relations around which the ETED's pragmatic philosophy revolves.
Speculative philosophy (Section 8.3.3; Figure 8.7)	The fundamental nature of reality—including of the human condition—that grounds and explains socio-economic relations. It provides a description of the innate quality that underlies the political economy and its economic and human development outcomes. It is considered on three levels: 'General principles of life'; 'Basic constraint on the human condition'; and 'Premises for human behavior'.	The foundation for the ETED's pragmatic philosophy via its 'premises for human behavior' that spring from first principles, influence socio-economic relations, and extend to elite agency.
Pragmatic philosophy (Section 8.3.3; Figure 8.7)	The nature of the experience of economic and human development and its practical implications. Culminates in transformational leadership that calibrates the 'all elite agency creates and transfers value' (realist) inference.	Based on the ETED's speculative philosophy and the basis for its normative apparatus; includes the set of ethical principles.
General principles of life (x3) (Section 8.3.3; Figure 8.6)	The principles by which life is deemed to operate are: the (A) Will to Live; (B) 'Universal extraction propensity of life' law of nature; and (C) Will to Power.	The three principles directly and indirectly combine in the (Z) 'value appropriation demand of humans' (socio-economic) constraint.
(A) Will to Live (Sections 7.2.3 and 8.3.3)	The origin, the inner nature, and the non-rational force for self-preservation of all that is alive; self-evident in the experience of being alive. References Schopenhauer's (1818/2010) suffering and struggle philosophy, the *Wille zum Leben*.	Leads to the (B) 'universal extraction propensity of life' but also in some respects to its antagonist (C) Will to Power, two apparent opposites that in turn cause the (Z) 'value appropriation demand of humans' (socio-economic) constraint.
(B) 'Universal extraction propensity of life' law of nature (Section 8.3.3)	The deterministic law as an impulse to all that is alive. References Schrödinger's (1944/2013) consideration of energy, with life sucking negative entropy from inferior organisms.	Springs from the Will to Live and is both similar and opposite to the (C) Will to Power; causes the (Z) 'value appropriation demand of humans' (socio-economic) constraint.

*This table articulates the conceptual elements found in Figure 8.7 that also depicts their relationships. Descriptions of some entries can also be found on: Conjectures and other ancillary propositions of the ETED (Table A1.3); Main ETED frameworks (Table A2.2); and the Glossary of ETED conceptual elements (Table A2.1).

Table A2.3 (continued)

Framework	Description	Role
(C) Will to Power (Section 8.3.3)	The creative manifestation of the Will to Live transcends the essential survival impulse and is associated with a will to play; the *élan vital* at the root of beauty, truth, and value creation. References Nietzsche (1872/1923; 1883/2006) and the creative and aesthetic quality of his *Wille zur Macht*.	Springs from the Will to Live and is both similar and opposite to the (B) 'universal extraction propensity of life' to which it still relates. Leads to a two-way relationship with (Z) 'value appropriation demand of humans' (socio-economic) constraint and most critically bolsters the pragmatic (III) 'inextinguishable value creation option of elites' (leadership) premise.
Basic constraint of the human condition (x1)	The single, non-negotiable, limiting fact of human existence is the (Z) 'value appropriation demand of humans' (socio-economic) constraint, which forces elite and non-elite agency to appropriate value (often value *not* created) from stakeholders (humans and non-humans) to sustain its own life and thrive.	Springs directly and indirectly out of the three general principles of life and informs the premises for human behavior, both in the appropriative and creative senses.
(Z) 'Value appropriation demand of humans' (socio-economic) constraint (Discussion on value appropriation starting with Chapter 2; Section 8.3.3, see Figure 8.6)	The necessary limitation of all individual agency which originates in requirements valid to all life forms. In its human version it becomes the catalyst for the speculative philosophy underlying economic and human development to become pragmatic. The constraint, despite being a simple proxy layer enveloping the speculative philosophy, acts as the most connective level of the elite theory's philosophical foundations.	The constraint realizes the (B) 'universal extraction propensity of life' law of nature and thus underpins the (II) 'universal value extraction propensity of humans' (socio-economic) premise for human behavior, which upon first glance seems in opposition to the (I) 'innate value creation character of humans' (natural) premise. Yet the constraint, being also rooted in the (C) Will to Power, is also a creative type of self-assertion and hence fuels the (I) natural premise that is key to general value creation. Moreover, there is a creative tension with the (III) 'inextinguishable value creation options of elites' (leadership) premise that explains economic development.
Premises for human behavior (x3) (Section 8.3.3; Figure A5.4c)	The premises that animate human behavior located at the intersection between speculative and pragmatic philosophies: the (I) 'innate value creation character of humans' (natural) premise; the (II) 'universal value extraction propensity of humans' (socio-economic) premise; and the (III) 'inextinguishable value creation option of elites' (leadership) premise.	Emanating from the ETED's first principles and the derived speculative philosophy, these cement the assumptions for socio-economic relations from which the implications made practical in the context of financial analysis materialize and on which SVC measurements are based.

Table A2.3 (continued)

Framework	Description	Role
(I) 'Innate value creation character of humans' (natural) premise (Sections 8.1.5, 8.1.5, 8.2.4; Figure A5.4c)	All individuals, elite and non-elite alike, have potential value creation agency. Non-elites create most of the value building blocks in the economy. The need for the realization of the premise informs the ETED's set of ethical principles and understanding of liberty.	Consistent with the (III) 'inextinguishable value creation option of elites' (leadership) premise. Its antithesis is the (II) 'universal value extraction propensity of humans' (socio-economic) premise, and the creative tension between the two leads to the theory's dualistic ontology and, in actuality, advances development.
(II) 'Universal value extraction propensity of humans' (socio-economic) premise (Sections 3.3.3, 8.1; Figure A5.4c)	Elites and non-elites will extract from their stakeholders to the maximum extent that their power differentials allow. Second-order value extraction is a defining characteristic of *homo sapiens* and a key feature of social orders that is mostly realized by elites holding 'the extraordinary lever'. For optimal development outcomes, value extraction must be weighted and offset.	Rooted in the (B) 'universal extraction propensity of life' law of nature and, to an even greater extent, in the (A) Will to Live, its antithesis is the (I) 'innate value creation character of humans' (natural) premise. The creative tension between the two leads to the theory's dualistic ontology and, in actuality, advances development.
(III) 'Inextinguishable value creation option of elites' (leadership) premise (Section 2.2.1; Figure A5.4c)	The perpetual option of elites to transform business models towards ever higher sustainable value creation positions (and reduce extractive transfers). This agentic option is exercised through intra-elite contests.	Parallels the (I) 'innate value creation character of humans' (natural) premise in the case of elite agency, while also resting on the Will to Power. Its actualization is normatively consistent with the set of ethical principles, and it materializes as transformational elite leadership.
Assumptions for socio-economic relations (x3) (Figure A5.4b)	The assumptions that facilitate the modeling of relationships in society and the economy, particularly those between principals and stakeholders that determine value appropriation.	Emanating from the premises for human behavior, the assumptions have implications for financial analysis and related SVC measurements. The ontological assumption has the most far-reaching consequences.
(i) The 'value is created or transferred' (ontological) assumption (From Section 2.3 onwards, see Table 2.3 and Figures A5.4c or 8.7; Epilogue)	The essential dualist framework to comprehend socio-economic relations (and nature). It results in the dichotomous typology of business model activities referencing value (value creation vs value transfers). This elementary ontological assumption is reductionist but undergoes a combinatorial expansion in practice, disparately manifesting itself in sociology, economics, politics, international relations, management and finance, supplying further frameworks for understanding and normative agency.	The bedrock of the ETED. The *constant* by which individual parts relate to the whole, and vice-versa, across socio-economic scales. Results from the dialectical tension between the (I) 'innate value creation character of humans' (natural) premise, and the (II) 'universal value extraction propensity of humans' (socio-economic) premise. It directly leads to the central implication of the ETED: the 'weight and offset value transfers' (holistic) implication.

Table A2.3 (continued)

Framework	Description	Role
(ii) 'Quantifiability of value transfers' (financial) assumption (Section 5.3.1)	The financial assumption that describes the deep unity and interconnectedness of business model activities realizable by pricing value transfer activities. Pricing links value transfers to the P&L of an organization and thus provides equivalence across principal-stakeholder relationships.	An assumption consistent with the 'value is created or transferred' (ontological) assumption that results in the (a) 'transparency of value creation and transfer activities' (open) implication.
(iii) 'Bona fide value appropriation' (positive) assumption (Section 2.3.1)	The assumption about business models that is positive, as value appropriation is deemed to be value creation at the outset. Since the full revenue of a firm is taken to be value creation (i.e., net value creation) the burden of proof for value extraction rests on establishing value transfer (transfer-IN) amounts.	An assumption consistent with the 'value is created or transferred' (ontological) assumption that results in the (b) 'revenue is value creation unless value transfer is proven' (constructive) implication; actualized with transfer-IN SVC metrics that lead to SVC measurements and SVC valuations.
Implications for financial analysis (x3) (Figure A5.4b)	The philosophical apparatus of the ETED realizes its pragmatic vocation through its operationalization for finance, the tested methods for which serve the purpose of adequately allocating capital and resources in society.	Each of the three implications for finance are grounded in one of the three assumptions for socio-economic relations; the SVC measurements and related tools for finance derived from the implications constitute the groundwork for elite agency, i.e., firm transformation and macro-level policy measures for generalized sustainable value creation.
(a) 'Transparency of value creation and transfer activities' (open) implication (Section 6.6.1; Figure 6.6)	All value creation and transfer activities can, and thus ought to be, made transparent. Realized for financial analysis by first conceptually determining and then quantifying value creation and transfers at the firm level by using SVC metrics that then become inputs for SVC measurements.	Based on the (ii) 'quantifiability of value transfers' (financial) assumption; transparency is the quantification of value through SVC metrics; the aim is to establish metrics that aggregate into both the transfer-IN and transfer-OUT of a business model to realize SVC measurements and SVC valuations.
(b) 'Revenue is value creation unless value transfer is proven' (constructive) implication	All revenue/profits in the P&L are deemed to be value creation at the outset. The starting point for the financial analysis of the firm is hence constructive and value transfers are only confirmed after the conceptual determination and quantifiable evidence provided by SVC metrics (transfer-IN).	Based on the (iii) 'bona fide value appropriation' (positive) assumption; within the parameters of a firm's revenue the aim is to establish SVC metrics that aggregate into the transfer-IN of a business model to realize SVC measurements and SVC valuations.

Table A2.3 (continued)

Framework	Description	Role
(c) 'Weight and offset value transfers' (holistic) implication	The central and final financial analysis step of elite agency at the firm level and for macroeconomic policies. Requires the comprehensive determination of value creation and value transfers, and their respective quantification. Both aggregates are then weighted against each other to inform decision-making (at the firm or institutional levels), facilitating the positive/negative offsets that enable/constrain value transfers. Benefits from SVC measurements and references SVC valuations.	The culmination and synthesis of practice towards economic and human development in the ETED; the ultimate applied consequence of its philosophical position. Grounded in the assumptions for socio-economic relations, it integrates the other two implications for financial analysis and relies for its realization on SVC measurements and SVC valuations that then affect (and are affected by) transformational leadership.
Elite agency for sustainable value creation (ETED prescriptive)	Elite agency is sustainable when it pursues continuous transformation, coordination capacity, and bargaining power, both at the business model and elite system levels, and is used to stimulate first-order productive value creation and risk origination and constrain second order value and risk transfers.	Consistent with many of the world's ethical systems and references the ETED's set of ethical principles; incentives for sustainable value creation increase when ethics are institutionalized (including the freedoms for development) in the legal system; normative elite agency practice is grounded in the (c) 'Weight and offset value transfers' (holistic) implication (for financial analysis).
Transformational leadership (Section 7.2.4, Table 7.2)	Exercised at both the elite system (meso-level) and the elite business model (micro-level) levels by business model beneficiaries choosing to maximize first-order value creation and risk origination and constrain second-order transfers. In the 'elite utility function', short-term residual income flows are passed over for long-term wealth stocks (generated by elite business models for the nation).	The ultimate expression of the (III) 'inextinguishable value creation option of elites' (leadership) premise and, at a deeper level, the Will to Power in which it is rooted; leads to inclusive institutional change.
(z) 'All elite agency creates and transfers value' (realist) inference (Section 2.3.1)	A description of all socio-economic agency applied to the elite business model where both first-order productive value creation and second-order extractive value transfers are a joint reality. At times, the relationship between these two opposites is that one requires or precedes the other. The realist inference is anchored in the pragmatic philosophy of the ETED in the context of transformational elite agency.	Awareness of the realist inference stimulates elite transformation leadership and the realization of offsets, with extraction limited to the extent that it is balanced by value creation and phased out in due course; from the courageous acceptance of extraction to its audacious termination.

Table A2.3 (continued)

Framework	Description	Role
Legal foundation for economic and human development	The codification of ethical principles into legal statutes through weighted structural reforms that implement institutional and (de)regulatory measures.	The positive and sustainable realization of the microfoundations of institutional change referencing its processes.
Set of ethical principles (Chapter 8)	The framework that springs from the maxim, *To the creators the value created*. Most effective when developed into institutions and laws (elite agency at the elite system level), but equally necessary in organizations (elite agency at the business model level). Ethical elite agency possesses a strong personal dimension.	A reference for transformational leadership; the ethical principles can be adopted and adapted for personal moral guidance; realized in practice at the firm and political economy levels with the (c) 'Weight and offset value transfers' (holistic) implication.