Appendices

Appendix 1: Theory development support tables

Table A1.1: Reviewed literature on elites and the positions taken by the ETED.

Literature	Key ideas	Selected sources	ETED position: [a] Adopted; [b] Adjusted; [c] Rejected
(i) Grand socio-political conceptualization of elites			
The *anacyclosis* theory of cyclical elite rule. (Section 1.2.1)	– Cyclical theory of political development. – Benign and perverted forms of government alternate. – Some forms of government are by elites and others by non-elites. – There is both elite vs non-elite struggle and intra-elite conflict. – Government forms vary and are the result of political transitions associated with conflict. Mixed government forms are possible and they can alleviate conflicts.	Polybius (1889), as well as similar conceptualizations by Aristotle (1912), Cicero (1829/2017), Machiavelli (1513/1998), and Proudhon (1851/1971). See also: Podes (1991); Neill (2011); Bradshaw (2011); Koivukoski (2011); Turchin (2023).	[a] Elites matter in the political economy. [b] There are no established cyclical patterns for government forms; the analyst's focus must be on elite circulation and associated value creation patterns. [c] Benign and perverted rule is related not to a form of government but associated to the degree of value creation of elite business models. [c] Non-elite rule fallacy ('people power'). The instant a non-elite wins in the political economy contest arenas it is running an elite business model and is hence an elite coalition for all practical, social, and behavioral purposes and effects (see Proposition 1).
Marx's class theory. (Section 1.2.1)	– The business models of production have distributional effects and result in the social dichotomy resulting from being at one or the other end of "exploitation". – Elite vs non-elite class struggle determines history. – Normative vision of 'classless society'.	Marx (1867/1959b); Marx & Engels (1848/1969). See also: Andrew (1975); Barrow (2007).	[a] Elite business models have distributional effects. [b] Elite vs non-elite struggles are real, but intra-elite contests are continual, more prevalent and relevant for elites and non-elites alike (see the political options for elites and non-elites in Figure 8.2). [c] Elite business models' distributional effects are not necessarily exploitative. Elites can contribute more value to society than the value they appropriate as residual income (see Section 2.2). [c] A 'classless society' is a naïve ideal, unprecedented, and impossible as long as narrow groups have transaction cost advantages.

https://doi.org/10.1515/9783110734638-014

Table A1.1 (continued)

Literature	Key ideas	Selected sources	ETED position: [a] Adopted; [b] Adjusted; [c] Rejected
(ii) Contemporary conceptualizations of elites			
Power elite theory. (Section 1.2.2)	– A critical perspective on elitism in society where the elite dominates institutions and determines policy. – The elite is a cohesive governing class, with insider cliques from different parts of society (business, administration, military, etc.); the elite is not a pluralistic set of actors representing society's diversity. – National elite system as a meso construct.	Mills (1956); Bell (1958); Domhoff (1967, 1970). See also: Mayville (2015); Kerbo & Della Fave (1979).	[a] Elites (i.e., elite business model preferences) impact institutions (see Proposition 14 or Figure 3.2). [a] The national elite system is a meso construct (see Proposition 17, Figure 3.8). [b] Governing elites might incorporate in institutional change processes a diverse range of non-elite interests. [b] Different elite types constitute the national elite system; the ETED suggests a tripartite elite typology of business, political, and knowledge elites (see Figure 1.2). [c] The elite system is not a monolithic governing class in modern polities; the core elite and other coalitions (see Figure 8.1) circulate; there are different degrees of elite cohesion (see Section 5.3.3); intra-elite contests are a constant and intensify as a nation's elite business models evolve.
Specific conceptualizations of a power elite. (Section 1.2.2)	– Development of context-specific constructs of particularism to describe core and other elite coalitions like the iron triangles (e.g., in the US, the key nodes in elite networks are interest groups, legislators, and the civil service). – Emphasis on elites as insiders. – Elite networks can be conceived as a meso construct.	For instance, Adams (1981); Gais, Peterson, & Walker (1984); Kerbo & McKinstry (1995); and indirectly, Stigler (1971).	[a] Specific political economy contexts associate with specific core and other elite coalition configurations in terms of the elite type and background of their members (see Figure 3.6). [b] Political economies have core elite coalitions (see Figure 8.1); the strength of the cohesive 'iron' holding the coalition together, however, varies since cohesive forces are context-dependent and subject to internal stresses and external intra-elite contest pressures.

Table A1.1 (continued)

Literature	Key ideas	Selected sources	ETED position: [a] Adopted; [b] Adjusted; [c] Rejected
Transnational elite constructs. (Section 1.2.2)	– Broadens the agency of elites beyond the nation state to the international stage. – Context-specific constructs of particularism such as 'cosmopolitan capital' or the transnational capitalist class (TCC) suggest elite networks where the key nodes include major corporations, 'globalizing' professionals, bureaucrats, and politicians. – Neo-Gramscian perspectives on hegemony extend elite power beyond the national context and posit the existence of a world order.	Sklair (2012); Jönsson & Tallberg (2010); Hoffmann-Lange (2012); Best, Lengyel, & Verzichelli (2012); Bühlmann, David, & Mach (2012)	[a] Transnational elite coalitions exist. [b] The cross-border elite business models of transnational elite coalitions are comparatively deinstitutionalized at the international level as coalition members are bound by the nation state; the relevant institutional context for elites is the nation state (see Sections 7.3.2 and 7.3.3). [c] Contrary to transnational elite conceptualizations, elites compete in the international arena on the basis of nation state affiliation while the network stability of transnational elite coalitions is fragile and subordinated to national interests (the interests of rival national elites that are not part of the coalition), as examples in the context of the current Sino-US rivalry illustrate. [c] Members of cross-border elite business model coalitions receive, in a manner that parallels the rivalrous nation state dynamics in international relations, a significant part of their bargaining power vis-à-vis other elite coalition members from their nation states.
Elites as the custodians of narratives. (Section 1.2.2)	– Narratives coordinate elite agency. – Theoretical links between elites and narratives include the Advocacy Coalition Framework (ACF), a causal theory of policymaking, or the theory of cultural hegemony. – Elites can be extensive coalitions thanks to the power of narratives. – The power of narratives means that elites exist on both the Left and Right of the political spectrum.	Gramsci's *Prison Notebooks* (Hoare & Nowell-Smith, 1999); Jenkins-Smith & Sabatier (1993); Beckert (2016); Zingales (2017).	[a] Narratives are a cause of institutional change. [a] Narratives are critical for the cohesion of any elite coalition. [b] Narratives are a constitutive element of elite business models; the narrative market is one of three arenas for the accumulation of elite power (see Figure 1.2). [b] Because of narratives, elites, the beneficiaries of elite business models, can be numerous (albeit narrower than their counterparties).

Table A1.1 (continued)

Literature	Key ideas	Selected sources	ETED position: [a] Adopted; [b] Adjusted; [c] Rejected
The technocratic ideal view. (Section 1.2.2)	– A rational technocracy of fair scientific problem solvers maximizes social utility. – Politics and administration must be separated. – Idealistic, harks back to Platonic philosopher king.	Roots in Plato (*The Republic*, Book VI, 1969); Saint-Simon (1952); Veblen (1899/1924, 1904/1975); Akin (1977); Putnam (1977); Elliott (1978); Crane (2008).	[a] Core elite coalitions (see Figure 8.1) can adopt narratives whose legitimacy emanates from superior technical knowledge or rationalism. [a] A technocratic elite emphasizes value creation delivered through structural reform and institutional change that provides incentives for elite business model transformation. [a] The separation of powers between politics and administration is desirable (as an instance of 'within-arena' (Tier 1), intra-elite power relationship 2, see Table 3.2). [b] Applied sustainable value creation partially shares the technocratic ideal.
Elite research in political science. (Section 1.2.2)	– Elite system emphasis on political elites, thick descriptions about their characteristics and agency. – Includes power elite theory and lobbying theories.	Best & Higley (2018); Vogel, Gebauer & Salheiser (2018); Paniagua & Vogler (2022).	[a] Elites are the reason for institutional change. [b] Political elites are essential to the elite system and to any elite coalition, but their importance vis-à-vis business and knowledge elites (see checks and balances in Figure 3.7) is contingent on the specific national context.
Lobbying theories. (Section 1.2.2)	– Institutional change is the result of lobbying. – Interest groups are at the center of the political process. – Political elites are beholden to business elites. – Lobbying is an essential fact of the political economy since it provides licenses to operate. – Lobbying theories are US-centric. – Lobbying is an avenue for institutional capture and plays a prominent role in rent seeking.	Hall & Deardorff (2006); Baldwin & Robert-Nicoud (2007); Lowery (2007). Critical related views in Beard (1913); Mills (1956); Bartels (2008); Nader (2014); Holcombe (2018). Links with Ostrom (1975); Buchanan (1980); Tollison (2012); Tullock (1967); Stigler (1971); Laffont & Tirole (1991).	[a] Institutional change is the result of elite agency. [a] Elite coalitions are at the center of the political process. [b] Elite business models are constituted by business, political and knowledge elites. [b] Lobbying is accessible to all participants in intra-elite contests and is but one avenue by which elites accumulate power and effect institutional change. [b] General theorizing beyond US/ Western context. [c] Avoid overemphasis on lobbying and focus on the elite separation of powers, intra-elite contest rules and the sustainable value creation of elite business models.

Table A1.1 (continued)

Literature	Key ideas	Selected sources	ETED position: [a] Adopted; [b] Adjusted; [c] Rejected
Dominant coalitions in organizations. (Section 1.2.2)	– Hierarchies topped by elites are a rational and effective approach for managing organizations. – Common interests determine coalitions, yet these can shift and make coalitions unstable. – Bargaining is a political process playing out within and across coalitions. – Conceptualization of elites at the micro-level of the firm. – The characteristics of a firms' dominant coalition impacts on its performance.	Michels (1962/1999); Cyert & March (1963); Thompson (1967); Stevenson, Pearce & Porter (1985); Hambrick & Mason (1984); Pearce (1995).	[a] Elites dominate in organizations and at all levels of socio-economic organization. [a] Elite coalitions are shifting, unstable, transient, and engaged in permanent bargaining processes (intra-elite contests). [b] Elite coalitions are the result of common interests around an elite business model, whether in an organization or in an economy. [b] Economic, social, and organizational performance is the result of the sustainable value creation of elite agency.
(iii) Conceptualizations of elites relevant to economics			
Classical elite theory. (Section 1.2.3)	– Elites are a minority. – Elites are a certainty. – Elitism; elites are the best. – Elitism; non-elites are capable of governing themselves. – Political economy analytical perspective. – Value-free analysis of elites. – Group/class with hegemony over its own group/class or over all other groups/classes.	Mosca (1939); Michels (1962/1999); Pareto (1968/1991). Influences from Machiavelli, Hobbes, Weber, Schumpeter and Ortega y Gasset (as per Pakulski, 2018). See also: Mayhew & Schollaert (1980); Zetterberg (1991); Lerner, Nagai & Rothman (1996); Busino (2000); Higley & Pakulski (2012); Pakulski (2012); and relatedly, Brezis & Temin (2007).	[a] Elites are a minority. [a] Elites are a certainty. [b] Elites are 'best' in terms of power accumulation and value appropriation; elites are also 'best' in fostering economic and human development *if* (and only if) they operate sustainable value creation business models. [b] Non-elites never govern; non-elites that acquire power—and the capability of running an elite business model—have circulated into the elite. [a] The analysis of elites is value-free, as it is detached from ideologies or political narratives. [a] Political economy analytical perspective. [b] Elites have hegemony over their own group and across society, insofar as their elite business models are preserved.

Table A1.1 (continued)

Literature	**Key ideas**	**Selected sources**	**ETED position: [a] Adopted; [b] Adjusted; [c] Rejected**
Theory of groups and collective action logic. (Section 1.2.3)	– Explains the existence of elites based on lower coordination costs for small(er) groups. – Elite agency determines institutions and the wealth of nations. – Small groups exploit large ones. – As interest groups accumulate, institutional decay ensues.	Olson (1965/1971), (1982); McCallum & Blais (1987). See also Heckelman, 2007. Consistent with Higley (2010); Gallo, Riyanto, & Roy (2019).	[a] Small groups have lower transaction costs and thus more accumulated power (see 'the extraordinary lever', Figure A5.3) resulting in a greater ability for applied collective action. Hence elites invariably arise in all societies. [a] Dominant coalitions (with specific elite business model preferences) impact institutional change (see Figure 3.2). [b] Institutional sclerosis occurs when elites run extractive transfer business models in the absence of structural reform (see Figure 7.1) and elite transformational leadership (see Table 7.2).
Institutions as constraints on elites. (Section 1.2.3)	– Institutions can be inclusive or extractive. – Incipient incorporation of elite agency and elite power notions into economic models. – Elites can and must be constrained by institutions.	North (1990); Acemoglu (2006); Acemoglu & Robinson (2013b, 2019a); new institutional theory.	[a] Institutions can be inclusive (value created and appropriated) or extractive (value appropriated but *not* created). [b] Institutions constrain elite agency, but elite agency first imposes its preferences on institutions (see Figure 3.2). [b] Institutional constraints are the result of intra-elite contests and the elite system's separation of powers (see Table 3.2), i.e., elites *de facto* constrain each other. [c] Research focus on inclusive elite business models and incorporation of elite agency in economic modeling (see Figure 7.8). [c] Non-elite vs elite struggle can be sterile and counter-productive; the focus is on non-elite strategic political participation in intra-elite contests (see Figure 8.2), the dynamics that shape inclusive institutions, and on the varieties of elite transformational leadership (see Table 7.2).

Table A1.1 (continued)

Literature	Key ideas	Selected sources	ETED position: [a] Adopted; [b] Adjusted; [c] Rejected
Social order as an outcome of elite agency. (Section 1.2.3)	– Elites establish social orders to rein in violence in exchange for rents derived from “limited access” (North, Wallis, & Weingast, 2006). – Countries where elites establish social orders based on “open access” are more likely to see modern social development than those with “limited access” social orders (North, Wallis, & Weingast, 2006). – The “stationary bandit” protects against the comparatively more extractive “roving bandit”, thus sowing the seeds of social order (Olson, 1993, 2000).	Hobbes’ social contract theory (1651/2002); North, Wallis, & Weingast (2006); Olson (1993, 2000).	[a] Elites establish social orders with degrees of open/limited access. [a] Value creation (e.g., through the control of violence) and transfers (e.g., taxation) combine in elite business models; extractive transfers can be a condition for value creation (see Section 2.3.1, ‘alternating value extraction and creation’ conjecture). [a] The transformation towards higher degrees of open access in the social order is the result of endogenous processes within the elite system (see Section 4.3.5). [b] Social access openness explains economic development trajectories when combined with elite quality (see Figure 1.1, The Elite Circulation Matrix). [b] There is no elite/non-elite Hobbesian social contract; elites create social order on their own accord.

Table A1.2: Propositions on the logic of elite agency for the ETED.

Ref. Section	Proposition	Supporting theoretical perspectives	Selected sources
1.3	**Basic propositions on the logic of elite agency**		
1.3.1	Proposition 1: The elite dominance iron law is structural to society.	Classical elite theory.	Pareto (1968/1991); Mosca (1939); Michels (1962/1999); Zetterberg (1991).
		Theory of groups and the logic of collective action.	Olson (1965/1971, 1982).
		Various others.	e.g., Bottomore (1993); North, Wallis & Weingast (2006).
1.3.2	Proposition 2: Elite circulation is multi-dimensional and characterizes society.	Classical elite theory.	Pareto (1968/1991); Mosca (1939); Michels (1962/1999).
1.3.3	Proposition 3: The mode of elite circulation affects economic development.	Elite circulation theory.	Pareto (1968/1991); Michels (1962/1999).
		Social order access.	North, Wallis, & Weingast (2006).
		Schumpeterian economics and Kondratieff's theory of economic waves.	Schumpeter (1939); Kondratieff (1925/1935).
		The Elite Circulation Matrix.	ETED development (see Figure 1.1).
1.3.4	Proposition 4: Elites in the abstract are coordination capacity enabled by low transaction costs.	Theory of groups and the logic of collective action.	Olson (1965/1971, 1982).
		Transaction cost theory.	Commons (1924, 1950); Coase (1960); Williamson (1981, 1993); North (1984); Medema, (1994).
		Social network theory.	Granovetter (1973, 2005).
		Trust as social capital thesis.	Fukuyama (1995); Tsai & Ghoshal (1998); Morck & Yeung (2004).
		The 'extraordinary lever' (actualized through 'the power multiplier').	Theories for this sub-section refer to those on power used in this work, those of economics (Lange (1943), or conceptual elements like "the force multiplier" from military affairs (Sloan, 2012); ETED conceptualization (see Figure A5.3).

Table A1.2 (continued)

Ref. Section	Proposition	Supporting theoretical perspectives	Selected sources
2.1	**Propositions on the behavioral logic of elite agency**		
2.1.1	Proposition 5: Elite behavior maximizes utility and is potentially sustainable.	Rational choice theory (RCT) and its utilitarian bases; RCT applications to elites.	Bentham (1781/1970) and Mill (1863/2001); Becker (1993); Allison & Zelikow (1999); Wang (2021).
		Stationary bandits monopolize power and extract rents but also provide public goods, helping to secure elite identity over the long term.	Olson (1993, 2000).
		Sustainability notion based on von Carlowitz's *Sylvicultura Oeconomica* (1712/2022) and Brundtland's *Our Common Future* (1987).	Described in Scoones (2007); Brundtland (1987).
2.1.2	Proposition 6: Elite identity is driven by residual income.	Identity as 'economic model of behavior' distinct from RCT; non-RCT motivation theory and behavioral economics are rejected.	Maslow (1943); Akerlof & Kranton (2000). Machiavelli (1513/1998).
		Elite identity explained by income maximization preferences with illustrative cases provided.	ETED position.
2.2	**Propositions on the logic of elite business models**		
2.2.1	Proposition 7: The elite business model is central to elite agency.	The business model (what companies do to get paid).	Drucker (1994); Zott & Amitt (2013); Arend (2013); Ovans (2015).
		The principal-stakeholder perspective of the business model, which describes the system of interdependent activities that are performed by the firm and its stakeholders.	Coff (1999); Brandenburger (2002); Zott & Amitt (2013); Garcia-Castro & Aguilera (2015).
		Successful elite agency at the business model level sees an accumulation of power that is leveraged for income maximization.	ETED conceptualization.

Table A1.2 (continued)

Ref. Section	Proposition	Supporting theoretical perspectives	Selected sources
2.2.2	Proposition 8: The elite business model is characterized by principal-stakeholder bargaining power differentials required for value appropriation.	Classical, Marxist, neo-classical value theories, non-orthodox approaches to value.	Smith (1776/1904); Bentham (1781/1970); Ricardo (1817/1999); Mill (1863/2001); Marx (1867/1959b); Jevons (1871); George (1898); Lackman (1976); Georgescu-Roegen (1971, 1986).
		Value is understood in terms of social relationships, as being everything that humans determine is worth appropriating.	Combination of multiple references in this sub-section; Menger (1871/2007); Harrison & Wicks (2013). ETED position.
		Value as a collective process.	Porter (1980); Brandenburger (2002); Garcia-Castro & Aguilera (2015); Mazzucato (2018).
		VCA framework; division of value strategies; the principal-stakeholder perspective (business models consist of a principal and stakeholders who jointly create value that they then each attempt to appropriate).	Brandenburger & Stuart (1996); Coff (1999); Amit & Zott (2001); Brandenburger (2002); MacDonald & Ryall (2004); Lepak, Smith, & Taylor (2007); Di Gregorio (2013); Garcia-Castro & Aguilera (2015).
		Bargaining power (impact on value appropriation).	Coff (1999); MacDonald & Ryall (2004); Moatti, Ren, Anand, & Dussauge (2015).
		'Nature stakeholder' assumption.	Literature on sustainability such as Starik (1995) and Laine (2011).
		Hayek's "meaning of competition" (including "personal relationships" and "differentiating").	Hayek (1948/1958); Bowles, Kirman, & Sethi (2017). Parallels also with Buchanan (1980) 'non-market' and 'market' allocation.
		'Equalized bargaining power equilibrium prices' condition; 'Elite vs non-elite knowledge gap' hypothesis; 'Elite power vs value creation gap' hypothesis; 'the Amazon dilemma'.	ETED development.
2.2.3	Proposition 9: Value creation-appropriation (VCA) is the analytical framework best suited to understand elite business models' division of value strategies.	VCA framework, division of value strategies; decrease of opportunity costs and increase in prices (willingness to pay).	Garcia-Castro & Aguilera (2015); Zott & Amitt (2013).
		Equations on residual income (1/9), value creation (2/9) and value appropriation and transfers (3/9).	ETED operationalization. (Sections 2.2.3, 7.3.2).

Table A1.2 (continued)

Ref. Section	Proposition	Supporting theoretical perspectives	Selected sources
2.3	**Propositions on value creation and value transfers as extraction**		
2.3.1	Proposition 10: Sustainable value creation results from the proportion of first-order productive activities (value creation) relative to second-order transfer activities (value extraction).	Rent seeking theory, productive entrepreneurship, and related ideas to establish the classification schema that distinguishes between 'first-order productive activities' and 'second-order transfer activities' based on the 'value is created or transferred' ontological assumption.	Buchanan (1980); Tollison (2012); Tullock (1967); Baumol (1990), and others discussed in Section 5.2.1. ETED conceptualization (Table 2.3, Figure A5.4a).
		Risk taking is a form of value; risk transfers are a form of value extraction.	Markowitz (1952); Sharpe (1964); Taleb (2018). ETED position and development.
		Positive/negative externalities.	Pigou (1920/1932); Coase (1960); Buchanan & Stubblebine (1962); Baumol (1972); Bueno de Mesquita (2016).
		Sustainable value creation notion references von Carlowitz, *Sylvicultura Oeconomica* (1712/2022) and Brundtland's *Our Common Future* (1987).	Described in Scoones (2007); Brundtland (1987).
		'Alternating value extraction and creation' conjecture; 'extractive push' dilemma.	ETED position and development, illustrated by examples like 'The Miracle on the Han River' (Gemici, 2013).
2.3.2	Proposition 11: All elite business models have a measurable value creation position on a 'value spectrum'.	VCA framework, division of value strategies.	Brandenburger & Stuart (1996); and others.
		The 'business model value creation spectrum' ('value spectrum') and its operationalization as equations (4/9) to deliver micro-level sustainable value creation measurements.	ETED operationalization (see Figure 2.10).

Table A1.2 (continued)

Ref. Section	Proposition	Supporting theoretical perspectives	Selected sources
3.1	**Propositions on the theoretical perspectives that inform elite agency**		
3.1.1	Proposition 12: Elite agency is the principal microfoundation of institutional change.	Microfoundations of new institutional economics, its practice and behavioral variant.	DiMaggio & Powell (1991); Powell & Colyvas (2008); Giddens (1984); Smets, Jarzabkowski, Burke, & Spee (2015).
		Multiple levels of social analysis.	Williamson (2000); Seo & Creed (2002).
		Incentive system as the relevant institution for economic outcomes.	Olson (1984); North (1990, 1994); Holmstrom & Milgrom (1994); Nicholas (2003); Robinson (2010). ETED (see Figure 3.2)
		Elite agency in institutional economics.	North (1990); Bourguignon & Verdier (2010); Acemoglu & Robinson (2008); Brezis & Temin (2007); Robinson (2010); Amsden, DiCaprio, & Robinson (2014); ETED conceptualization.
3.1.2	Proposition 13: Elite agency determines distributional outcomes—the winners and losers in the political economy.	Political economy.	From its origins, e.g., Ricardo (1817/1899), Bastiat (1845/1996), to the present, e.g., Alesina & Rodrik (1994); Kelly (2005); Alesina & Perotti (1994).
		Theories of lobbying and institutional capture.	Hall & Deardorff (2006); Baldwin & Robert-Nicoud (2007); Lowery (2007); Downs (1957); Stigler (1971); Laffont & Tirole (1991).
		New institutional economics.	Commons (1950), as cited in Elliott (1978); Joskow (1995).
3.1.3	Proposition 14: Elite agency effects institutional change through the political economy's narrative market.	Narratives conceptual element.	Denning (2006); Hagel (2011); Hagel, Brown & Davison (2010).
		Narratives in sociology, organizational theory.	Lyotard (1979); Abell (2004); Boje (2008); Casas-Klett & Li (2022).
		Narrative economics.	Shiller (2017).
		Theory of cultural hegemony and derived neo-Gramscian perspectives.	Bates (1975); Cox (1983); Lerner, Nagai, & Rothman (1996); Bieler & Morton (2004).
		Cases: Christianity, Communism, Internet Tax Freedom Act of 1998, stablecoins, BLM, Tesla, the Olympics.	Pareto (1968/1991); Stupak (2016); various media and public domain sources.

Table A1.2 (continued)

Ref. Section	Proposition	Supporting theoretical perspectives	Selected sources
3.2	**Propositions on the system of national elites**		
3.2.1	Proposition 15: Elite coalitions are the constitutive elements of national elite systems	General systems theory.	Aristotles' 'whole' (1912, 5.8); Von Bertalanffy (1969/2003; 1972); Parsons (1951/1991), Simon (1962); Hayek (1964/1967).
		The elite is a system (e.g., "power elite", "governing class", "Medici vicious cycles"); a sub-system of the political economy system.	Pareto (1968/1991); Mills (1956); Domhoff (1967, 1970); Zingales (2017). ETED conceptualization.
		Elite coalitions (e.g., interest groups, advocacy coalitions, lobbies) are held together by their shared elite business model and are sub-systems of the national elite system.	Diverse literature including Laffont & Tirole (1991); Jenkins-Smith & Sabatier (1993); Hall & Deardorff (2006). ETED conceptualization links political economy and business model literature.
3.2.2	Proposition 16: The elite system operates on a multi-tier set of checks and balances.	Separation of powers theory and constitutional government theory.	Montesquieu (1748/1949); Madison (1787/1977); Levi (1976).
		The Three-tier Set of Intra-elite Checks and Balances	ETED extension and development.
3.2.3	Proposition 17: The national elite system is situated at the meso-level	Meso-level perspective.	Dopfer, Foster & Potts (2004); Dopfer (2012). ETED conceptualization.
		General systems theory; complex systems with emergent properties.	Von Bertalanffy (1969/2003); Parsons (1951/1991); Hayek (1964/1967); Simon (1962); Gleick (1987); Anderson (1972); O'Connor (1994); Chalmers (2006). ETED conceptualization.
3.3	**Propositions for the logic of intra-elite contests in the elite system**		
3.3.1	Proposition 18: Elites shape institutions primarily through intra-elite contests.	Classical elite theory and elite circulation theory.	Pareto (1968/1991); Mosca (1939); Michels (1962/1999). ETED development.
		Theories from anthropology for intra-elite competition.	Forsdyke (2005).
		Cases: Written law in archaic Greece; IMF rescue packages; Indonesia; American Revolutionary War; Libya/Coca-Cola.	Hölkeskamp (1992); Johnson (2009); Dick & Mulholland (2010); Hosenball (2011).

Table A1.2 (continued)

Ref. Section	Proposition	Supporting theoretical perspectives	Selected sources
3.3.2	Proposition 19: Non-elite agency can constrain value extraction through participation in intra-elite contests.	Marxist theory on revolution and violence; Leninism.	A recurring theme in Marx and Engels (e.g., 1848/1969) and Lenin (1918); inspired by Hegel's logic and dialectics (1812/2010).
		Cases: Maccabees revolt; French Revolution; October Revolution.	Hobsbawm (1990); Acemoglu, Cantoni, Johnson & Robinson (2009); Allen (2004).
		Elite/non-elite cooperative game for institutional change.	ETED extension.
3.3.3	Proposition 20: Non-elite interests are primarily served by a comprehensive elite separation of powers.	Separation of powers theory and constitutional government theory.	Montesquieu (1748/1949); Madison (1787/1977); Levi (1976); Paniagua & Vogler (2022).
		The Seven Intra-elite Power Relations.	ETED extension and development (see Table 3.2).
		Cases: Sugar plantations in post-colonial Latin America; Rosa Parks; Uber.	Uber Files; Sokoloff & Engerman (2000)

Table A1.3: Conjectures and other ancillary propositions of the ETED.*

Conjectures and ancillary propositions	Description	ETED relation** and selected sources
'Minimum elite circulation velocity' conjecture (Section 1.3.3)	The elite circulation velocity required for a positive level of economic growth. The conjecture assumes that (short of revolutionary replacements or wars) the higher the elite circulation velocity, the higher the realized economic and human development. In advanced economies this velocity must be comparatively higher than in emerging economies (links to the 'advanced economies have a higher sensitivity to elite quality' conjecture, Section 7.1.3).	Pareto's (1968/1991) admixture notion in his elite circulation theory.
'The great elite coalition for development' conjecture (Section 1.3.3)	References Carlyle's (1840/2008) Great Man Theory of history and leadership; elites that increase the value creation positions of their elite business models or effect inclusive structural reforms have a positive and disproportionally large impact on the economic and social development trajectories of nations. Such elite individuals are 'great' and even 'heroic' given the resistance that they are likely to face from reactionary coalitions that lose out as a result of their agency. The transformational leadership of individuals is essential for development and is based on the 'inextinguishable value creation option of elites' premise.	ETED position. Links to transformational leadership, Table 7.2; is the solution to the 'low elite quality' problem, Section 8.1.5. Carlyle (1840/2008); Schumpeter (1942/2000); supporting and opposing views include Jones & Olken (2005); Andrews (2013); Gilson & Milhaupt (2011); Easterly (2011); and Brady & Spence (2010).

*Includes conjectures, as well as dilemmas, assumptions, premises, implications, functions, conditions, problems, metaphors, and hypotheses.

**The conjectures and ancillary propositions 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).

Table A1.3 (continued)

Conjectures and ancillary propositions	**Description**	**ETED relation** and selected sources**
'Elite utility function' (Section 2.1.1)	The general utility function of elites which, consistent with rational choice theory (RCT), has residual income maximization as its highest preference in turn bound by temporal considerations. The function optimizes the trade-offs between two variables: short-term residual income flows and long-term wealth stocks. The long horizon requires elite business models based on first-order productive activities and constraints on extractive transfers from non-elite stakeholders, as non-elite value must be generated for harvest in the future. This informs sustainable value creation, the ETED's concept of sustainability. The relative weight of the function's two temporal variables, in part associated with whether an elite is roving or stationary, is contingent on constraints like intra-elite contests, elite leadership, and individual ethical positions.	ETED position, Proposition 5. Based on Olson's (1993, 2000) stationary and roving bandit notion and RCT assumptions (e.g., Becker, 1993; Allison & Zelikow, 1999; Wang, 2021. The normative sustainability reference is von Carlowitz (1712/2022) and Brundtland's *Our Common Future* (1987).
'Inextinguishable value creation option of elites' (leadership) premise for human behavior (Section 2.2.1)	Elites possess a perpetual option to transform business models towards ever more sustainable value creation positions (and reduce value transfer-IN). Such agency, conceived as an option exercised through intra-elite contests, rests on the ETED's first principles (especially on the Will to Power), links to its set of ethical principles (and possibly to natural law), and materializes as transformational leadership.	ETED position, Proposition 7. Connects elite business models and elite transformational leadership with economic development; the third (III) of the ETED's three premises for human behavior (Figure A5.4c).
'Equalized bargaining power equilibrium prices' condition (Section 2.2.2)	A hypothetical condition where prices (or costs) in the principal-stakeholder relationship are determined by the counterparties having similar amounts of bargaining power, thereby impeding extractive value transfers. The price levels under equalized bargaining power conditions serve as a benchmark for theory purposes. Value transfers are assumed to be the source of prices that differ from counterfactual 'equalized bargaining power equilibrium prices'. When regarded as a normative criterion, it must be balanced against the value creating coordination capacity that power differentials afford.	ETED development, Proposition 8, see a policy perspective of The Elite Business Model in Figure A5.9c. Based on the bargaining power notions of Porter (1980); Coff (1999); MacDonald & Ryall (2004).

Table A1.3 (continued)

Conjectures and ancillary propositions	Description	ETED relation** and selected sources
'Nature stakeholder' assumption (Section 2.2.2)	Nature is a stakeholder in any business model in the context of principal-stakeholder relationships. The nature stakeholder is to be given an entity-like identity (and be deemed a custodian for legal purposes). Nature, when operationalized as a legal persona, needs to appropriate value commensurate to the value of the services that it creates and provides for principals.	Combination of VCA framework with literature on sustainability such as Starik (1995); Laine (2011). Also see value added reporting: Rutherford (1977); Haller & van Staden (2014).
'The Amazon dilemma' (Section 2.2.2)	Elite business models that create substantial amounts of knowledge (and thus inclusive value transfer-OUT through spillovers, etc.) can simultaneously engage in extractive value transfer-IN away from stakeholders. This dilemma is posited to originate from two hypothetical sources: the 'elite vs non-elite knowledge gap' and the 'elite power vs value creation gap'. The dilemma forces elites to take a position on whether to self-constrain value transfer-IN. In contrast to the Olsonian stationary bandit whose power emanates less from 'knowledge' and who runs an entire polity, there is initially less pressure in the elite system to self-constrain extraction because the area of operation is only in a part of the political economy and the value appropriated is, notwithstanding the pervasive impact of data, only a part of the value that stakeholders create. This reinforces the necessary role of transformational leadership and the ETED's set of ethical principles.	ETED development, Proposition 8. An expression of the 'alternating value extraction and creation' conjecture (Section 2.3.1) and leads to the (c) 'weight and offset value transfers' (holistic) implication for financial analysis (Figure 8.7) that is realized through SVC measurements.
'Elite vs non-elite knowledge gap' hypothesis (Section 2.2.2)	The 'knowledge' creation capabilities of elite business models exceed those of non-elites. This gap, part of 'the Amazon dilemma' and gaining newfound significance in the era of AI, is at times the result of deliberate barriers to accessing knowledge placed by elites on non-elites (e.g., limits on alphabetization) or caused by the very nature of technology (e.g., the cumulative effects of intelligence). The gap may contribute to lasting elite/non-elite bargaining power differentials and stable, structural, and hard-to-reverse value extraction by elites from non-elites.	ETED development, Proposition 8. References literature to explain the causes for the gap, including barriers to literacy (Goody & Watt, 1963) or the monopolistic tendencies of data (Cheng, 2020).

Table A1.3 (continued)

Conjectures and ancillary propositions	Description	ETED relation** and selected sources
'Elite power vs value creation gap' hypothesis (Section 2.2.2)	The bargaining power of elites grows faster than the value creation of elite business models. This gap, part of 'the Amazon dilemma', can be the result of elite coalitions that are innovation laggards but retain their power because of 'political economy know-how' in the political non-market and narrative market arenas. Innovative elites might also, through their possession of 'the extraordinary lever', manage to multiply their power beyond their value creation achievements. The gap may contribute to lasting elite/non-elite bargaining power differentials and structural, hard-to-reverse value extraction by elites from non-elites.	ETED development, Proposition 8. Informs The Elite Business Model Lifecycle and links to the 'value transfers replace value creation at maturity' conjecture (see Figure A5.9a). Sources of power conceptual element derived from Hayek's (1948/1958) "The Meaning of Competition".
'Value is created or transferred' (ontological) assumption (for socio-economic relations) (Section 2.3.1)	The ontological assumption of the ETED posits that all social-economic reality is either first-order productive activity (i.e., value creation and risk origination) or second-order transfer activity (i.e., value extraction and risk transfer). This dualist ontology follows the principle of parsimony and allows for the classification of all business model activities into a dichotomous, two-class typology.	ETED position, introduced in Proposition 10. The first (i) of the ETED's three assumptions for socio-economic relations (see Figure A5.4a; Table 2.3); a red thread across the theoretical system. Benefits from multiple sources such as the rent-seeking literature.
'Bona fide value appropriation' (positive) assumption (for socio-economic relations) (Section 2.3.1)	The positive assumption about business models where value appropriated is deemed to be value created. This then substantiates the (b) 'revenue is value creation unless value transfer is proven' implication for the operationalization of SVC measurements. Since the full revenue of a firm is taken to be value creation (net value creation) the burden of proof for value extraction rests on establishing transfer-IN amounts.	ETED position. The third (iii) of the ETED's three assumptions for socio-economic relations (see Figure A5.4a).
'Revenue is value creation unless value transfer is proven' (constructive) implication (for financial analysis) (Section 2.3.1)	A simple rule to establish 'first-order productive activities' and separate them from 'second-order transfer activities' when measuring sustainable value creation in the application of the (iii) 'bona fide value appropriation' assumption. The rule provides a starting point for calculations conceptually ringfencing revenue (or profits) in financial statements that are then premised in calculations (e.g., for VCp/VCr) to be net value creation until transfer-IN is ascertained.	ETED position, Proposition 10. Examples of first-order value creation and second-order transfer activities presented in Table 2.3. Articulated in Section 2.2.3, and through equations 4.1 and 4.2. The second (b) of the ETED's three implications for financial analysis (see Figure A5.4b).

Table A1.3 (continued)

Conjectures and ancillary propositions	**Description**	**ETED relation**** **and selected sources**
'Alternating value extraction and creation' conjecture (Section 2.3.1)	The condition under which first-order productive value creation requires and/or is the result of previous second-order extractive transfer-IN. This conjecture nuances the general ETED position against extractive value transfers by conceiving them, under certain circumstances, as 'investments' and a necessary feature of social order. Extractive transfers by elite business models alternate and *de facto* combine with value creation. Elite agency based on this understanding faces resistance (from the extracted parties) and requires transformational leadership.	ETED position, Proposition 10. Hobbes' social contract theory (1651/2002), Olson's stationary bandit (1993, 2000) as a provider of public goods and North, Wallis, & Weingast (2006) on closed access societies.
'Extractive push' dilemma (Section 2.3.1)	The application of the 'alternating value extraction and creation' conjecture to transition from one economic development stage to the next. To kick-start a developmental transition requires substantial initial extractive value transfer to encourage more novel sustainable elite business models. The 'push' associates with extractive transfers from non-elites to elites, with the latter thus accumulating the 'knowledge' (and capital, etc.) to advance long-term development goals (that will eventually benefit non-elites). An 'extractive push' can kick-start a country in its early stages of development (e.g., the case of the South Korea or Israel) or at more advanced stages (e.g., granting monopoly rents to Big Tech in the US or China). The optimal size of the transfers necessary to successfully achieve an economic transition is an empirical question that creates a dilemma for policymakers (addressable by utilizing the constraints in frameworks for weighted policymaking, see Tables 8.2 and 8.3). Still, excessive and unlimited transfers will forestall development.	ETED position, Proposition 10. The dilemma has conceptual links across the theory, from weighted policy formulation (Table 8.2) or the 'elite institutional change bargain', to the set of ethical principles. Hobbes social contract theory (1651/2002), Olson's stationary bandit (1993, 2000) as provider of public goods and North, Wallis, and Weingast (2006) closed access societies.
'Same size of the slice' elite bias (Section 3.3.1)	The tendency for elite business models during crises to retain pre-crisis income/profit levels thanks to institutional embeddedness as the economic pie shrinks. In consequence, the stakeholders of the model experience a reduction in their share of the pie.	ETED development. Value chain as pie metaphor in Brandenburger (2002), or *The Economist* (2014).

Table A1.3 (continued)

Conjectures and ancillary propositions	**Description**	**ETED relation** and selected sources**
'Value creation by elite separation of powers' conjecture (Section 3.3.3)	The normative understanding of classical separation of powers theory applies to intra-elite contests in all three political economy contest arenas: non-market, market, and narrative market. The more numerous and institutionalized the checks and balances of the national elite system, the more frequent and competitive the intra-elite contests, and thus the larger the likelihood that high value creation models emerge. This conjecture is part of the 'intra-elite quality contest' dilemma and is moderated by the 'elite cohesion underpins social order' conjecture to which it stands in *coincidentia oppositorum*.	ETED position, Proposition 20 (see Figure 5.2). Extends Montesquieu's (1748/1949) tripartite separation of the political power domain, and constitutional government theory starting with Madison (1787/1977).
'Universal value extraction propensity of humans' (socio-economic) premise (for human behavior) (Section 3.3.3)	Elites and non-elites are all utility maximizing agents, *a priori* moral equivalents in value appropriation terms, and will extract from their stakeholders to the extent that their power differentials allow, however minuscule these are. Second-order value extraction is not only an inclination of *homo sapiens* and a feature of social orders but is distinctive in all relationships in nature, and of life itself. While the (B) 'universal extraction propensity of life' law of nature has negative entropy nourish the superior organism (as in Schrödinger's *What is Life?*, and even if one asserts the prevalence of symbiotic or complementary relationships in evolution), the 'extraordinary lever' embedded in social relationships enables *homo sapiens* to extract more from each other than any other organism.	ETED position. The second (II) of the ETED's three premises for human behavior (see Figure A5.4c). Schrödinger (1944/2013) and diverse systems of thought; common intuition.
'Follow the money' heuristic of institutional change (Section 4.2.2)	A political economy heuristic suited for establishing the primary cause of an institutional change, with the *cui bono* beneficiaries of that change being the winning elites in intra-elite contests. Normatively, the *cui bono* agents that succeed in effecting institutional change are those *qui generat valorem*, as in the maxim, *To the creators the value created* (see the discussion of ethical principles in Chapter 8).	ETED position. RCT; Olson (1984); public domain; common understanding.

Table A1.3 (continued)

Conjectures and ancillary propositions	**Description**	**ETED relation** ** **and selected sources**
'Elite business model critical junctures' conjecture (Sections 4.3.4, 5.1.1)	Critical junctures in development occur when specific elite business models take preeminence and as a result determine a nation's long-term developmental performance. The critical juncture can be a sudden event if it is caused by an exogenous shock or occur more gradually as contributing factors build up to a tipping point. In either event, it results from a critical mass of elite coalitions that endogenously agglomerate around certain business models (often the models of the core coalition).	ETED position. David's path dependence (1985); Liebowitz and Margolis' path dependence (1999); Acemoglu, Johnson, Robinson, & Yared's critical junctures hypothesis (2009); Libecap's institutional path dependence (2011).
'Value transfers replace value creation at maturity' conjecture (Sections 4.3.4, 7.3.3)	The inherent sequence in The Elite Business Model Lifecycle conceptual element and the consequence of the 'elite power vs value creation gap' hypothesis. The sequence starts as elites rise on the back of their value creation but possess little power and ends as elite incumbents with huge amounts of power appropriate value and create very little. Power, institutional embeddedness, and political economy dynamics explain the declining levels of sustainable value creation at maturity. When excessive numbers of mature elite models agglomerate in the final stages of their lifecycles a nation's elite quality declines (potentially powerful states compensate for this by increasing cross-border business model extraction) and requires decisive weighted structural reform.	ETED development. Rendered in Figure A5.9a and, for an international perspective, Figure A5.9d. Rooted in the literature of power, bargaining power, and institutional change, the life cycle theory of the firm (Mueller, 1972), and the elite perspective.
'Impossible exit' conjecture (Section 5.2.2)	The trap-like nature of certain principal-stakeholder relationships where the counterparties of an elite business model, instead of engaging in the pursuit of utility maximization, accept value extraction (at times even in the form of mere subsistence-level prices as per Marx). 'Sticky' elite business models become a trap for stakeholders due, for instance, to a lack of alternatives. This critical rigidity in the economy breaks down with the enabling presence of the freedom *to* exit (Section 8.3.2), allowing non-elite value creators alternative responses to extractive value transfer-OUT.	ETED position. Typology of individual non-elite responses to extractive value transfers in Table 5.1. Multiple types of evidence with extremes ranging from slavery (Walk Free, 2023) to "techno feudalism" (Varoufakis, 2021).

Table A1.3 (continued)

Conjectures and ancillary propositions	**Description**	**ETED relation**** **and selected sources**
'Quantifiability of value transfers' (finance) assumption (for socio-economic relations) (Section 5.3.1)	An assumption on the deep interconnectedness of all business model activities realized by quantifying value transfer activities. Pricing is the means to link value transfers to the P&L statement of organizations and provide equivalence for value transfers across diverse principal-stakeholder relationships. The implication of quantifying all value transfers is that any business model activity can be traded and offset against any another. Sustainability objectives can be priced, budgeted, and managed and sustainable value creation becomes a transparent, solvable optimization problem for elites, policymakers, managers and the public.	ETED position The second (ii) of the ETED's three assumptions for socio-economic relations (see Figure A5.4a). System theory, see Von Bertalanffy, 1969/2003; Hayek, 1964/1967; Gleick, 1987.
'Weight and offset value transfers' (holistic) implication (for financial analysis) (Section 5.3.1)	The central normative implication of the ETED and the core financial approach for the operationalization of sustainable value creation. Business model decisions by the firm that are relevant for governance, strategy, management, investment or valuations are to be made by weighting the sustainable value creation of its constituent activities (via SVC metrics). This extends to the macro level where policymakers weight and offset the sustainable value creation of elite business models (via SVC measurements) and will also reference A Transfer Constraints Framework for policy formulation (Table 8.2). Links to elite transformational leadership, elite bargains, and the set of ethical principles.	ETED position. The application of financial tools for the normative realization of the theory. The third (c) of the ETED's three implications for financial analysis (see Figure A5.4b).
'Elite cohesion underpins social order' conjecture (Section 5.3.3)	Elite cohesion is the most relevant form of cohesion in society and more relevant than non-elite or elite/non-elite forms for the emergence of social order upon which economic and human development is based. Other forms of social cohesion, such as elite/non-elite cohesion, are also usually a signal of elite cohesion. The flip side of elite cohesion is that it adds to the resilience of extractive elite business models and thus must exist in tandem with a robust elite separation of powers. This conjecture is part of the 'intra-elite quality contest' dilemma and is moderated by the 'value creation by elite separation of powers' conjecture to which it stands in *coincidentia oppositorum*.	ETED position. Social cohesion definition of Chan, To, & Chan (2006). Examples, including Botswana (Sebudubudu & Molutsi, 2011) and Southeast Asia (Brown, 1993).

Table A1.3 (continued)

Conjectures and ancillary propositions	**Description**	**ETED relation**** **and selected sources**
'Intra-elite quality contest' dilemma (Section 5.3.3)	Elite quality results from two *a priori* irreconcilable elements that when balanced integrate and provide a standard for practice: a comprehensive elite separation of powers (see the 'value creation by elite separation of powers' conjecture) and elite cohesion (see the 'elite cohesion underpins social order' conjecture). When the elite system masters this dilemma, institutional change and business model rules that support sustainable value creation are possible, eventually leading to economic and human development.	ETED development. Rendered in Figure 5.2. References body of literature on social cohesion and the separation of powers.
'Extractive escalation dynamic' conjecture (vs. 'inclusive escalation dynamic') (Section 5.3.4)	A developmental trap posited as a conjecture where one extractive value and risk transfer business model incentivizes the next until a sub-optimal equilibrium is reached short of the 'extractive end point' of society where everybody seeks to extract from each other and there is no value creation or productive risk-taking. The opposite of this steady state of value transfers is the 'inclusive escalation dynamic', which leads to an acceleration in economic and human development.	ETED position. Rent seeking theory as in Buchanan (1980); Tollison (2012); Tullock (1967); Markowitz's (1952) notions of risk; Damodaran's (2005) exploitation of uncertainty; Taleb (2018; 2020).
'Extractive end point' metaphor (Section 5.3.4)	An *ad absurdum* situation in society, a cul-de-sac where everyone seeks value transfers from others, and first-order productive activities cease to exist. This represents the terminus of the conjectured 'extractive escalation dynamic' trap. In practice, a society where each and every member engages in unproductive theft and plunder is unsustainable. Even when approximated, the actual end point is therefore hypothetical as all economic life collapses before it is reached. Thus, when the extractive end point is close, the demise of society is precariously averted through responses to extraction such as 'informality'.	ETED position. Complements the 'extractive escalation dynamic' conjecture. Similarities with the Lu Xun (1918/1985) "cannibalism" metaphor; common intuition.
'Power as potential future value extraction' assumption (Section 6.2.1)	Power is a pre-condition for value appropriated but *not* created. While power is not necessarily deployed by individual elite coalitions for extractive transfer purposes it is predictor of potential future value extraction in a measure to be empirically determined.	ETED position. Operationalized with SVC measurements (e.g., EQx). Based on bargaining power theory and the VCA framework.

Table A1.3 (continued)

Conjectures and ancillary propositions	Description	ETED relation** and selected sources
'Transparency of value creation and transfer activities' (open) implication (for financial analysis) (Section 6.6.1)	As a consequence of the (ii) 'quantifiability of value transfers' (finance) assumption for socio-economic relations, all value creation and transfers are made transparent. This aim is realized in financial terms by conceptually determining and then quantifying SVC metrics (both transfer-IN and transfer-OUT, see Figure 6.6) as inputs for SVC measurements.	ETED position. The first (a) of the ETED's three implications for sustainable value creation (see Figure A5.4b). Consistent with the normative understanding of transparency (e.g., Kaufmann & Weber, 2010).
'Advanced economies have a higher sensitivity to elite quality' conjecture (Section 7.1.3)	The more advanced and the closer to the technology frontier an economy is, the higher the elite quality that is required for sustainable growth and the narrower the elite quality corridor for tolerating extractive activities. Implications include a higher required 'minimum elite circulation velocity' (see Section 1.3.3).	ETED position. Derived from innovation- and productivity-based growth notions, see Solow (1957); Krugman (1994).
'War as cross-border value appropriation' conjecture (Section 7.3.2)	The state of war in international relations is traceable to the elite business models of a nation that benefits (non-elites can also profit) from the value appropriated but *not* created by foreign elites and non-elites. That is, conflict is the result of war profits being higher than peace dividends for bellicose elites.	ETED position. Formalization of common, near universal non-elite understanding. Historical examples provided, with salience given to Suetonius's (1914) *The Life of Julius Caesar* (54.2).
'Peace through cross-border elite business models' conjecture (Section 7.3.2)	The state of peace in international relations is achieved by interdependencies brought about by cross-border elite business models and by elite coalitions with members from diverse countries.	ETED position. References diverse works, including Angell (1910).
'Elite system fractality links to value creation' conjecture (Epilogue)	A conjectured economic law that claims that the deeper the system's fractality, the higher its growth potential. The recursive fractal elements of the socio-economic hierarchy are its nooks and crannies, i.e., the sectors of the political economy that are driven by independent agency (as opposed to linear bureaucracies) capable of exercising judgments on their business models (which then aggregate together and become elite). The more complex and munificent the fractality of the system, the greater the overall value creation potential is in a polity.	ETED development. See Epilogue, visualized as a metaphor in Figure E.2; see also Section 3.2.3. Speculates on the primary notion of fractality (as often implied in complex adaptive systems; see Mandelbrot, 1989; Liebovitch & Scheurle, 2000; Brown, Gupta, Li, Milne, Restrepo, & West, 2002; McDaniel, Lanham, & Anderson, 2009).
'Low non-elite cohesion' problem (Section 8.1.3)	Low non-elite cohesion is the result of the high transaction costs and low levels of trust that are endemic to non-elites and that can seldom be addressed without direct elite support. This problem hampers non-elites in realizing their four *a priori* political options in response to extraction.	ETED position. Rendered in Figures 8.2 and A5.8, see also Section 5.3.3. References social cohesion research (e.g., Chan, To, & Chan, 2006).

Table A1.3 (continued)

Conjectures and ancillary propositions	**Description**	**ETED relation**** **and selected sources**
'Elite agency on behalf of non-elites' elite option (Section 8.1.3)	'Low non-elite cohesion' precludes institutional change consistent with non-elite interests, so elites that are motivated by economic development and intrinsic values need to be open to supporting the strategic participation of non-elites in intra-elite contests based on a robust separation of powers that minimizes bargaining power differentials and establishes open access social orders. This approach reeks of elitism and paternalism.	ETED position. Rendered in Figures 8.2 and A5.8.
'Low elite quality' problem (Section 8.1.5)	The low elite quality problem, an example of which is the 'bad emperor problem', occurs when development is contingent on the transformational leadership of poor-quality individual elites and members of the core elite coalition. There is no technical solution to this economic development challenge other than the commitment of elites engaged in intra-elite contests to sustainable value creation models. Links with the (III) 'inextinguishable value creation option of elites' (leadership) premise for human behavior and might necessitate untangling psychological dimensions that are beyond the scope this work.	ETED position. Focus on elites; problem addressable within 'the great elite coalition for development' conjecture (Section 1.3.3). References the 'bad emperor problem' (Suetonius, 1914; Fukuyama, 2012).
'Innate value creation character of humans' (natural) premise (for human behavior) (Sections 8.1.5; 8.2.4)	Holds that all individuals have potential value creation agency, value creation being the essential characteristic of the human experience. The natural premise's antithesis is the (II) 'universal value extraction propensity of humans' (socio-economic) premise and the interaction between the two is at the core of this theory's ontology, while their creative tension moves human development forward.	ETED position. The (I) first of the ETED's three premises for human behavior (see Figure 8.7). Realized by the freedom *to* create value (Figure 8.5). References diverse values traditions and common understanding.