Appendix A1: China (High Cancerous Structure + Strong External Spillover)

1. Overview

- FFI = 15.7 / 100 (very low functional health structure)
- CSI = 83.0 / 100 (very high cancerous structure)
- CHS = -63.7 (overall health score is negative)
- EOI = 0.8 (very high external output capacity, mainly via economy, technology, and discourse power)
 - RUI = 66.4 (significant reverse unification risk)
- HCCI = -44.6 (net negative contribution to global civilization)

Interpretation:

China exhibits a dual pattern of internal cancerization and external expansion. Internally, information systems, legal frameworks, and value structures are heavily centralized and suppress individual freedom, critical thinking, and innovation. Externally, China projects its structural control model through capital, supply chains, technology standards,

and narrative influence, creating a "reverse unification" effect on global systems.

2. Detailed Scores for the Seven Systems

Each system contains 10 positive FFI indicators (0-5 points) each) and 5 negative CSI indicators (0-5 points) each), converted into a 0-100 scale.

2.1 Information & Neural System

• FFI = 10 / 100

- Press Freedom: 0/5 (China ranks 172/180 on the RSF
 Press Freedom Index)
- Media Pluralism: 1/5 (All major media are controlled by the Party)
- Government Data Openness: 1/5 (Key statistics and data are opaque or manipulated)

- Algorithm Transparency: 0/5 (Algorithms primarily serve censorship and propaganda)
- Whistleblower Protection: 0/5 (Whistleblowers are often silenced or prosecuted)
- Online Diversity: 2/5 (Some VPNs exist but are illegal and unstable)
- Independent Investigations: 1/5 (Rare cases of investigative journalism exist but are suppressed)
- \rightarrow Total = 10/50 = 20/100, adjusted to 10/100 due to structural censorship dominance.
 - CSI = 95 / 100

- Keyword Blocking: 5/5 (Massive censorship lists)
- Criminalization of Speech: 5/5 (Numerous cases of imprisonment for online comments)
- Algorithmic Manipulation: 5/5 (Platforms like Weibo and Douyin fully manipulate content flow)
- External Information Blocking: 5/5 (Google, Twitter, YouTube, and others are fully banned)
- Great Firewall Scope: 5/5 (The largest national firewall in the world)

2.2 Resource Circulation System

• FFI = 20 / 100

Rationale:

- Property Rights Protection: 2/5 (Legal frameworks exist but are undermined by arbitrary state seizures)
- Market Competition: 2/5 (Dominated by state-owned enterprises and Party-affiliated capital)
- Fiscal Transparency: 1/5 (Budgets are largely non-transparent)
- Wealth Equality: 1/5 (Gini coefficient ~0.47, indicating high inequality)
- Entrepreneurship Environment: 3/5 (Entrepreneurship is active but heavily dependent on politics)
- Infrastructure Accessibility: 4/5 (Strong infrastructure but often overbuilt due to political incentives)

$\rightarrow 20/100$

• CSI = 80 / 100

Manifestations:

• Resource Monopolies: 5/5 (Energy, telecom, and

transportation sectors are monopolized)

- Gray Economy: 4/5 (Corruption and rent-seeking are widespread)
- Family/Oligarchic Control: 4/5 (Power and capital concentrated among elite groups)
- Tax Corruption: 4/5 (Tax revenues and budget allocations are often opaque)
- Black-box Budgeting: 4/5 (Lack of independent audits)
 → 80/100

2.3 Cultural Digestion & Absorption System

• FFI = 25 / 100

- Cultural Openness: 2/5 (Most foreign books and films face heavy censorship)
- International Academic Collaboration: 2/5 (Partnerships exist but are politically restricted)
- Global Media Access: 0/5 (Major platforms like Google and Twitter are inaccessible)
 - Translation & Publishing Freedom: 2/5 (Books are

published with heavy edits)

- Tolerance for Diversity: 2/5 (Cultural chauvinism is prevalent)
- International Conference Freedom: 2/5 (Scholars require state approval to attend global events)
- Global Innovation Cooperation: 4/5 (Selective collaboration in areas like 5G and quantum computing)
- Cultural Heritage Protection: 3/5 (Local cultures are preserved but politicized)
- Knowledge Platforms: 4/5 (Platforms like Zhihu and Douban exist but are censored)
- Global Historical Perspective in Education: 4/5 (History education remains highly China-centric)
- $\rightarrow 25/100$
 - CSI = 70 / 100

- Banning of Books/Films/Platforms: 5/5 (Strict bans on global cultural products)
- Ideological Censorship: 5/5 (All media and education undergo political vetting)
- Historical Distortion: 4/5 (History is rewritten to suit state narratives)

- Cultural Nationalism: 4/5 (Promotion of "cultural self-confidence" over global openness)
- Demonization of Foreign Ideas: 3/5 (Free-market or liberal ideas are often portrayed as hostile)

 \rightarrow 70/100

2.4 Reproduction & Inheritance System

• FFI = 15 / 100

- Marriage Freedom: 3/5 (Legal marriage exists, but traditional family pressure remains strong)
- Gender Equality: 2/5 (Gender pay gap and discrimination persist in employment and education)
- Child Protection: 2/5 (Cases of child abuse and bullying are frequent)
- Sex Education Quality: 1/5 (Comprehensive sex education is almost absent)
- Reproductive Freedom: 2/5 (From forced birth control to pro-birth policies, personal choice is limited)
- Anti-Domestic Violence Enforcement: 2/5 (Laws exist but enforcement is weak)

- Non-Traditional Family Legality: 1/5 (Same-sex marriage and single-parent adoption are illegal)
- Public Childcare Quality: 1/5 (Childcare facilities are insufficient and poorly regulated)
- Intergenerational Mobility: 2/5 (Social mobility is low due to class stratification)
- Child Mental Health Support: 2/5 (Mental health resources in schools are inadequate)
- $\rightarrow 15/100$
 - CSI = 85 / 100

- Forced Birth Control Policies: 5/5 (Historic one-child policy and ongoing population engineering)
- Emotional Collective Punishment (Filial Piety Extremes): 5/5 (Children are expected to obey family authority unconditionally)
- Domestic/Educational Violence: 4/5 (Beating and shaming as "discipline" is culturally accepted)
- Marriage as Resource Transaction: 4/5 (High dowries and material-driven matchmaking dominate)
- Systemic Gender Discrimination: 4/5 (Women face structural disadvantages)

2.5 Legal & Institutional Framework

• FFI = 10 / 100

- Judicial Independence: 0/5 (Courts are under Party leadership)
- Legal Transparency: 1/5 (Court documents are selectively published)
- Separation of Powers: 0/5 (Executive, legislative, and judiciary are unified under the Party)
- Equality Before Law: 1/5 (Wealth and political status strongly influence outcomes)
- Constitution & Human Rights Protection: 2/5 (Constitution exists but is not enforced independently)
- Anti-Corruption Effectiveness: 3/5 (Anti-corruption campaigns exist but are politically motivated)
- Lawyer Independence: 1/5 (Lawyers risk disbarment or harassment)
 - NGO Legitimacy: 1/5 (NGO operations are tightly

controlled)

- Audit & Oversight Independence: 1/5 (Auditing agencies lack independence)
- Public Referendum/Amendment Mechanism: 0/5 (No citizen vote for major legal changes)
- $\rightarrow 10/100$
 - CSI = 90 / 100

Manifestations:

- Administrative Interference with Judiciary: 5/5 (Courts directly follow Party orders)
- Selective Enforcement: 5/5 (Laws applied differently based on status or loyalty)
- Political/Conscience Prisoners: 5/5 (Many cases of detained activists and dissidents)
- Lack of Fair Trials: 5/5 (Political trials lack independent defense or transparent hearings)
- Law as Political Tool: 5/5 (Laws are weaponized for political control)

 \rightarrow 90/100

2.6 Human Values & Direction

• FFI = 18 / 100

- Priority on Freedom & Dignity: 2/5 (Collective and state goals override individual rights)
- Happiness Index: 2/5 (China ranks around 52 on the World Happiness Report)
- Minority Protection: 1/5 (LGBTQ+ and disabled communities lack legal protections)
- Creativity Index: 3/5 (Exam-oriented education restricts innovation)
- Critical Thinking Education: 1/5 (Education emphasizes obedience, not questioning)
- Human Rights Media Coverage: 1/5 (Mainstream media avoids human rights issues)
- Charity & Public Welfare: 3/5 (Civil philanthropy exists but is under state scrutiny)
- Social Innovation Freedom: 2/5 (Social experiments are limited by regulations)
- Inclusion of Vulnerable Groups: 2/5 (Discrimination remains widespread)
 - Public Participation: 1/5 (Very limited public

decision-making channels)

- $\rightarrow 18/100$
 - CSI = 78 / 100

Manifestations:

- Enforced Value Conformity: 5/5 (Ideological indoctrination is state policy)
- Extreme Nationalism: 5/5 (Nationalist campaigns often dominate discourse)
- Collectivism Over Individual Freedom: 5/5 (The individual is seen as a tool of the collective)
- Suppression of Diversity: 4/5 (Alternative views or lifestyles are stigmatized)
- Instrumentalization of Values: 4/5 (Morality is subordinated to state needs)

 \rightarrow 78/100

2.7 Immune System

• FFI = 12 / 100

Rationale:

• Crisis Response Transparency: 1/5 (COVID-19

information was delayed or suppressed)

- Speed of Self-Correction: 1/5 (Failures are covered up rather than corrected)
- Civil Society Resilience: 2/5 (NGOs and independent organizations face heavy restrictions)
- Global Cooperation: 3/5 (Participates in trade and climate talks, but lacks transparency)
- Scientific & Rational Decision-Making: 2/5 (Decisions prioritize political goals over evidence)
- Public Feedback Channels: 1/5 (Public opinion channels are heavily filtered)
- Cross-Disciplinary Expert Participation: 1/5 (Policies are made by a narrow political core)
- $\rightarrow 12/100$
 - CSI = 82 / 100

- Suppression of NGOs & Media: 5/5 (Independent oversight is virtually nonexistent)
- External Structural Penetration: 5/5 (Using capital and tech to export control models)
- Hostility Toward Other Civilizations: 4/5 (Foreign models are portrayed as hostile)

- Rejection of External Oversight: 4/5 (Refusal to accept international audits or criticism)
- Crisis Information Lockdown: 5/5 (Health and disaster info are tightly controlled)

 $\rightarrow 82/100$

3. Data Summary

• Average FFI (7 systems): 15.7 / 100

• Average CSI (7 systems): 83.0 / 100

• CHS: -63.7

• EOI: 0.8

• RUI: 66.4

• HCCI: -44.6

Interpretation:

China's structure is severely cancerized internally while actively exporting control mechanisms globally, resulting in a net-negative global contribution.

4. Data Sources & Evidence

- International Index Mapping:
- RSF Press Freedom Index → Information FFI
- World Bank Governance Indicators (WGI) → Legal
 & Resource systems
- Transparency International Corruption Perceptions
 Index (CPI) → Resource CSI
- V-Dem Democracy Index → Legal & Institutional framework
 - World Happiness Report → Human Values
 - Real-world Cases:
 - The Great Firewall and keyword censorship
 - COVID-19 information suppression
 - Detention of dissidents and human rights lawyers
 - State-led cultural propaganda and censorship
- Export of surveillance technologies and AI-powered censorship abroad