CAPITAL GOVERNANCE FOR RESILIENCE IN GLOBAL ASIA: IPE WITH TRUSTWORTHY DIGITAL INFRASTRUCTURE

STATEMENT OF RESEARCH PROJECT

This project examines capital governance in Global Asia, asking how state investors, regulated banking systems and diasporic/private wealth deploy cross-border capital—and the digital infrastructures that carry it—as instruments of governance, legitimation and resilience. The core research question is: under what institutional, technological and market conditions do these actors strengthen governance quality, improve crisis responsiveness and advance sustainability objectives, and when might they instead amplify vulnerabilities? Rather than treating cross-border finance as neutral, the project conceptualises capital channels and their digital rails (fintech/regtech, machine-readable disclosure, data provenance and auditability) as political–economic instruments that transmit mandates, norms and strategic intent through market, institutional and relational interfaces. Asia's capital landscape blends state capital, regulated banking and private wealth in ways that differ from western country models, and it is being rapidly "platformised" via trade-finance platforms, tokenised assets and supervisory technology, yet we lack a comparative, data-driven account of how these channels and rails interact and how their entries, exits and system designs are interpreted by firms, markets and regulators.

The inquiry is organised around three mechanism-focused puzzles. First, beyond market signalling, by what concrete channels do sovereign wealth funds transmit national objectives—through mandate clauses and investment charters, board and voting rights, stewardship protocols and co-investment platform rulebooks—and through technology requirements such as digital transparency standards, machine-readable ESG/MRV and data-sharing/provenance controls? Do sharper mandate language and platform-level provisions, combined with auditable digital tools, correlate with increases in board independence and audit oversight, reductions in related-party transactions and more credible sustainability disclosure over 12–24 months, net of announcement effects and sector shocks? Second, in banking—an intensely regulated industry—how are public objectives actually bargained into enforceable private contracts rather than assumed to flow automatically from regulation, and how do regtech/suptech and digital finance rails make those bargains credible in practice? The question is whether supervisory carrots and sticks (taxonomy eligibility, guarantees, risk-weight relief, disclosure expectations) induce lead arrangers to hard-wire discipline via covenant packages, pricing step-ups/step-downs and continuous information rights implemented on trade-finance platforms, e-invoicing registries or programmable reporting; when do banks resist or dilute these terms, and how does sovereign cornerstone participation or public digital infrastructure shift the bargaining frontier and covenant enforcement ex post? Third, how do family offices—especially those embedded in elite/diasporic networks—operate as relational and innovation instruments in the absence of hard regulation? The project asks whether repeated co-investment with sovereign/strategic counterparts, board or advisory overlaps and privileged access to platform companies, data centres and venture pipelines align strategies with state priorities and accelerate board professionalisation and verifiable sustainability practices; it also examines when smaller offices comply via incentives and gatekeeping (tax/visa regimes, reputation screens, sandbox/pipeline access) rather than direct political ties, and whether such effects persist once local coalitions, platform rules and technology governance are accounted for.

Across the three puzzles, a further question is how these channels—and the technologies they mobilise—complement, substitute or contest one another under uncertainty (financial volatility, industrial upgrading, sustainability and technology shocks) so that mandate/design authority (SWFs), contract-based conditionality operationalised by digital rails (banks) and relational embeddedness coupled with innovation brokerage (family offices) either align to produce governance and resilience or fragment to generate opacity, regulatory arbitrage and politicised risk.

SCOPE OF WORK FOR SELECTED PHD STUDENT

The PhD student will lead both the empirical programme and the digital-infrastructure build for a multi-corridor study of capital governance in Global Asia, integrating IPE theory with fintech/ regtech tooling under the guidance of Prof Liu Hong (conceptual framing and Global Asia), Prof Liu Yang (technology and assurance), Assoc Prof Feng Qu (econometrics), and Assoc Prof (Practice) Matthew Dearth (banking/markets). The candidature moves from scoping and piloting to full identification, multi-site fieldwork, and synthesis, with a transparent, version-controlled workflow, data-protection compliance, and security/ethics review throughout.

In Year 1 the student will map literatures in state capitalism, IPE, Global Production Networks, banking discipline, family-office governance, and technology governance (regtech/suptech, machine-readable ESG/MRV, data provenance). Three corridors and two priority sectors per corridor will be delimited. IRB approval and a data-protection/security impact assessment will be obtained, alongside data-use agreements. A bilingual corpus of fund mandates, regulatory texts, platform and syndication agreements, board biographies, disclosures, and policy–media discourse will be assembled. Baseline datasets on transactions, syndicated loans, firm characteristics, boards, and ESG disclosure will be constructed. In parallel, the student will inventory corridor "digital rails" (trade-finance platforms, e-invoicing registries, tokenised asset pilots) and build parsers for machine-readable disclosure and covenant text. A reproducible pipeline in Python/R/Stata will be set up with pre-analysis plans specifying outcomes, event windows, matching rules, and heterogeneity cuts; pilot code on a Singapore-centric sample will validate measurement, estimator performance, and security/privacy design.

In Year 2 the student will implement the full identification strategy in the first corridor, extend data to ownership and creditor networks, and estimate a covenant-intensity index from loan and platform term sheets. A prototype, privacy-preserving "covenant/MRV monitor" will be deployed on trade-finance or e-invoicing data (where permitted) to operationalise contract-based conditionality. Two process-tracing case studies will recover mandate interpretation, bargaining with regulators, and coalition formation. Interview instruments will be finalised and 20–25 elite interviews conducted across sovereign investors, banks, regulators, and directors. The first manuscript—on SWF stewardship and digital transparency—will be drafted with heterogeneity by mandate language, regulatory context, and sector exposure. Documentation for the Capital Governance Observatory (codebook, data dictionary) will begin, with red-team validation of data/algorithmic assurance in collaboration with Prof Liu Yang's centre.

In Year 3 the student will extend fieldwork to remaining corridors, reconstruct ownership and creditor interlocks for two sectors per corridor, and complete manuscripts on bank-mediated green/transition lending (contract discipline on digital rails) and on family-office–led professionalisation and narrative legitimation (including platform/data-infrastructure plays). Quantitative modules will broaden to robustness, placebo, and synthetic-control diagnostics around policy and technology shocks; within-case mechanism tests will deepen qualitative chapters. The "covenant/MRV monitor" will be hardened for cross-corridor comparison, with periodic ethics and security audits.

In Year 4 the student will synthesise findings into a typology of capital statecraft configurations that integrates technological mediation, draft the theoretical integration chapter, and finalise the thesis. The defended dataset and codebook for the Observatory and the first public release of the Capital Interface Atlas will be packaged; journal submissions and policy briefs will be prepared. Two stakeholder workshops in different corridors will translate results into design principles and solicit external validation. Throughout, training will cover causal inference, panel econometrics, network analysis, text-as-data/NLP, and qualitative process-tracing, plus foundational assurance methods (program analysis, testing, privacy-preserving data workflows). Risk management includes multi-provider data redundancy, contingency designs for delayed transactions, strict anonymisation and access controls, and end-to-end reproducibility. By graduation the student will deliver publishable articles, a documented multi-corridor dataset and codebase, hardened tech prototypes, and policy-relevant outputs linking rigorous evidence to real governance challenges in Asia.