



Financial Policy, Innovation Capacity, and Organisational Sustainability in the Digital Economy: A Moderated Serial-Mediation Framework with Strategic Resilience as a Boundary

SANJAY V S^a, Dr. R.V. SUGANYA^b

^a Research scholar, Department of commerce, Vels University, Chennai, Tamil Nadu. Email: sanjayvscpt@gmail.com

^b Assistant Professor, Department of commerce, Vels University, Chennai, Tamil Nadu. Email: suganya.sms@velsuniv.ac.in

Abstract

The accelerating digitisation of economic activity has redrawn the channels through which financial policy reaches firm-level outcomes, yet the mechanism linking macro-level financial-policy design to micro-level organisational sustainability remains theoretically underspecified and empirically fragmented. This study proposes and validates a moderated serial-mediation framework — the Financial Policy–Capability–Innovation–Sustainability (FPCIS) model — that traces a sequential pathway from financial policy through financial capability and innovation capacity to organisational sustainability, with strategic resilience specified as a second-stage boundary condition moderating the innovation-capacity-to-sustainability link. Grounded in institutional theory (DiMaggio & Powell, 1983), the capability approach (Sen, 1999), absorptive capacity theory (Cohen & Levinthal, 1990), the dynamic capabilities framework (Teece, 2007), and the strategic resilience construct (Hamel & Välikangas, 2003), the framework integrates five distinct theoretical traditions into a single, testable causal architecture. The study develops a structured research design employing a cross-sectional survey of [VALUE] firms operating in India’s digital economy, with data analysis planned through partial least squares structural equation modelling (PLS-SEM) and conditional process analysis (Hayes PROCESS Model 83). Six hypotheses are advanced: a direct effect (H1), two simple mediations (H2–H3), a serial mediation (H4), a moderation (H5), and a conditional indirect effect capturing the full moderated serial-mediation pathway (H6). The paper contributes to the strategic management, innovation, and sustainability literatures by (a) specifying strategic resilience as a theoretically grounded boundary condition — not merely a main effect — in the innovation-to-sustainability pathway, (b) introducing a policy-to-sustainability causal chain that bridges institutional and

capability-based explanations, and (c) providing a replicable instrument and analytical protocol for future empirical testing. Implications are drawn for the Reserve Bank of India, the Ministry of Finance, NITI Aayog, and firm-level strategic and financial-management functions.

Keywords: financial policy; financial capability; innovation capacity; organisational sustainability; strategic resilience; digital economy; moderated serial mediation; PLS-SEM; India

1. Introduction

The digital economy — defined as economic activity derived from digitally enabled transactions, business models, and organisational practices (Bukht & Heeks, 2017) — has fundamentally altered the environment in which firms pursue sustainability. National financial-policy instruments such as priority-sector lending mandates, digital-payment infrastructure (Unified Payments Interface), credit guarantee schemes, and fintech regulatory sandboxes no longer affect firms only through traditional banking intermediation; they now reach organisations through platform ecosystems, application programming interfaces, and real-time data flows that compress the lag between policy stimulus and firm response. India's digital economy illustrates this shift vividly: the Digital India programme, combined with the Jan Dhan–Aadhaar–Mobile (JAM) trinity and an expanding fintech regulatory framework, has created a financial-policy environment that is simultaneously more

inclusive and more complex than its pre-digital predecessor (Niti Aayog, 2019).

Yet the academic literature has not kept pace with this transformation. Three gaps are particularly consequential. First, the relationship between financial policy and organisational sustainability is typically examined as a direct association (Beck et al., 2005; Demirgüç-Kunt et al., 2018), obscuring the intermediate capabilities through which policy translates into sustainable firm outcomes. Second, innovation capacity — widely recognised as a driver of competitive advantage (Lawson & Samson, 2001; Teece, 2007) — is rarely positioned as a mediator in a policy-originating causal chain; instead, it tends to appear as an independent predictor or as a moderator. Third, strategic resilience, a construct that captures a firm's capacity for continuous strategic renewal in the face of disruption (Hamel & Välikangas, 2003), has been studied predominantly as a main effect rather than as a boundary condition that amplifies or constrains how effectively

innovation capacity converts into sustainability outcomes.

This study addresses these gaps by proposing the Financial Policy–Capability–Innovation–Sustainability (FPCIS) framework, a moderated serial-mediation model that specifies: (a) a sequential indirect pathway from financial policy through financial capability and innovation capacity to organisational sustainability, and (b) strategic resilience as a moderator of the second-stage link between innovation capacity and organisational sustainability. The framework integrates institutional theory (DiMaggio & Powell, 1983), the capability approach (Sen, 1999), absorptive capacity theory (Cohen & Levinthal, 1990), the dynamic capabilities framework (Teece, 2007), and the strategic resilience literature (Hamel & Välikangas, 2003; Lengnick-Hall et al., 2011) into a single, internally consistent theoretical architecture.

The study makes three primary contributions. Theoretically, it advances the strategic resilience construct from a descriptive attribute to a formally specified boundary condition in a causal chain, responding to recent calls for moderation-based resilience research (Duchek, 2020; Williams et al., 2017). Methodologically, it applies a moderated serial-mediation design (Hayes, 2022, PROCESS Model

83) to a policy-to-sustainability pathway that has not previously been modelled this way, providing a replicable analytical protocol. Empirically, it contributes a validated research design and measurement instrument situated in India's digital economy — a context that combines rapid financial-policy innovation with an urgent sustainability imperative.

The remainder of this paper is structured as follows. Sections 2 through 9 establish the research problem, gaps, aim, objectives, questions, scope, significance, and novelty statement. Section 10 reviews the literature on the five focal constructs. Section 11 establishes the theoretical foundations. Section 12 presents the conceptual framework and develops the six hypotheses. Section 13 details the research methodology. Section 14 discusses the expected contributions. Sections 15 and 16 address implications and limitations, respectively. Section 17 concludes.

2. Literature Review

2.1 Financial Policy in the Digital Economy

Financial policy encompasses the regulatory, monetary, and fiscal instruments through which governments structure the financial environment

available to economic agents (Stiglitz, 2000; La Porta et al., 1998). In the Indian context, these instruments include the Reserve Bank of India's priority-sector lending norms, the Pradhan Mantri Mudra Yojana (PMMY) micro-enterprise credit scheme, the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), the regulatory sandbox for fintech innovations, and the digital-payment infrastructure centred on the Unified Payments Interface (UPI). The digital economy has amplified the reach and velocity of these instruments: UPI alone processed over 13 billion transactions per month by late 2024, creating a real-time financial infrastructure that compresses the traditional lag between policy intent and firm-level financial access (National Payments Corporation of India, 2024).

The literature on financial policy and firm outcomes has evolved through three broad phases. The first, anchored in financial-repression theory (McKinnon, 1973; Shaw, 1973), examined how interest-rate and credit controls distorted resource allocation. The second, associated with the financial-liberalisation consensus, focused on the growth effects of deregulation and institutional reform (King & Levine, 1993; Rajan & Zingales, 1998). The third and current phase examines how digital financial infrastructure and inclusive

finance policies reshape the relationship between policy and firm performance (Demirgüç-Kunt et al., 2018; Sahay et al., 2020). This study situates itself in the third phase, arguing that the digitisation of financial-policy delivery has created new mediating pathways — specifically, through financial capability and innovation capacity — that the earlier literature did not theorise.

A persistent limitation in this literature is the tendency to treat financial policy as a monolithic construct whose effect on firm outcomes is direct and unmediated. Studies that do examine intermediate mechanisms typically focus on credit availability (Beck et al., 2005) or financial inclusion (Klapper et al., 2016) rather than on the higher-order capabilities — financial management capability, innovation capacity — that determine whether firms can convert enhanced financial access into sustainable outcomes. The present study addresses this gap by positioning financial capability and innovation capacity as sequential mediators in a policy-to-sustainability pathway.

2.2 Financial Capability

Financial capability refers to an organisation's capacity to effectively access, manage, and deploy financial resources in alignment with strategic

objectives (Lusardi & Mitchell, 2014; Johnson & Sherraden, 2007). At the organisational level, financial capability encompasses financial literacy among decision-makers, the sophistication of internal financial-management systems, the ability to access and evaluate diverse funding instruments, and the capacity to integrate financial planning with strategic planning (Atkinson et al., 2006; Sherraden, 2013). The construct extends beyond mere financial access — having a bank account or a credit line — to encompass the managerial competence required to convert financial resources into strategic action.

Sen's (1985, 1999) capability approach provides the foundational logic for distinguishing financial access from financial capability. In Sen's framework, capabilities are the substantive freedoms that enable agents to achieve functionings they have reason to value; access to resources is a necessary but insufficient condition. Applied to the organisational context, financial policy may expand the set of financial instruments available to a firm — government credit guarantees, subsidised lending rates, digital-payment infrastructure — but the firm's financial capability determines whether those instruments translate into productive outcomes (Nussbaum, 2011; Robeyns, 2005).

The measurement of organisational financial capability remains less standardised than its individual-level counterpart. At the individual level, validated scales exist (Atkinson et al., 2006; OECD/INFE, 2011); at the organisational level, measurement tends to be operationalised through proxies such as financial-management-practice indices, cost-of-capital calculations, or managerial self-assessments (Demirgüç-Kunt et al., 2018). This study develops an organisational-level financial capability scale that captures four subdimensions: financial-resource access, financial-management sophistication, financial-technology adoption, and financial-strategic integration.

2.3 Innovation Capacity

Innovation capacity is defined as the organisational ability to continuously transform knowledge and ideas into new products, processes, services, and systems for the benefit of the firm and its stakeholders (Lawson & Samson, 2001). The construct draws on two foundational theoretical streams: absorptive capacity theory (Cohen & Levinthal, 1990), which explains how firms identify, assimilate, and exploit external knowledge, and the dynamic capabilities framework (Teece et al., 1997; Teece, 2007), which explains how firms reconfigure internal and

external competences to address rapidly changing environments.

Zahra and George (2002) reconceptualised absorptive capacity as a dynamic capability comprising potential absorptive capacity (knowledge acquisition and assimilation) and realised absorptive capacity (knowledge transformation and exploitation). This reconceptualisation is directly relevant to the present framework because it clarifies the mechanism through which enhanced financial capability translates into innovation outcomes: firms with greater financial resources can invest in knowledge acquisition (R&D expenditure, technology licensing, skilled personnel) and knowledge assimilation processes (training, knowledge-management systems), thereby building the potential absorptive capacity that feeds realised innovation outputs.

In the digital economy context, innovation capacity acquires additional dimensions. Digital innovation involves not only product and process innovation but also business-model innovation, platform-mediated innovation, and data-driven innovation (Nambisan et al., 2017; Yoo et al., 2012). Firms operating in India's digital economy increasingly innovate through API integrations, ecosystem partnerships, and data analytics capabilities that presuppose a threshold level of financial investment and digital

infrastructure — both of which are shaped by the prevailing financial-policy environment (Bharadwaj et al., 2013).

The literature establishes robust positive associations between innovation capacity and firm performance (Damanpour, 1991; Crossan & Apaydin, 2010), but the pathway from innovation capacity to sustainability — particularly the triple-bottom-line conception of sustainability — is less thoroughly theorised. Innovation can enhance economic performance while simultaneously generating negative environmental or social externalities (Schumpeter, 1942; Adams et al., 2016). This ambiguity motivates the moderating role of strategic resilience in the present framework: strategic resilience is hypothesised to determine whether innovation capacity translates into genuine organisational sustainability rather than into narrow financial performance gains that come at the expense of environmental or social outcomes.

2.4 Organisational Sustainability

Organisational sustainability is defined as the capacity of a firm to create value simultaneously across economic, social, and environmental dimensions — the triple bottom line — without compromising the ability of future stakeholders to meet their own needs (Dyllick & Hockerts, 2002; Elkington,

1997). This definition moves beyond corporate social responsibility (CSR) conceived as philanthropy or reputation management and positions sustainability as an integrated strategic objective (Hart & Milstein, 2003; Porter & Kramer, 2011).

The academic discourse on organisational sustainability has evolved through several phases. The early literature treated environmental and social performance as costs to be minimised or constraints to be managed (Friedman, 1970). The stakeholder-theory phase (Freeman, 1984; Donaldson & Preston, 1995) reframed sustainability as a response to diverse stakeholder demands. The strategic-sustainability phase, which the present study aligns with, positions sustainability as a source of competitive advantage and long-term value creation (Hart, 1995; Bansal, 2005; Eccles et al., 2014).

In the Indian regulatory context, organisational sustainability has acquired specific institutional salience through the Business Responsibility and Sustainability Reporting (BRSR) framework mandated by the Securities and Exchange Board of India (SEBI) for the top listed companies, the Companies Act 2013 provisions on CSR expenditure, and the growing integration of Environmental, Social, and Governance (ESG) criteria into investment decision-making. These regulatory instruments create institutional pressures

— coercive, mimetic, and normative (DiMaggio & Powell, 1983) — that shape how firms define and pursue sustainability. Measuring organisational sustainability remains a contested domain. The Global Reporting Initiative (GRI) Standards, the Sustainability Accounting Standards Board (SASB) framework, and the integrated reporting framework (IIRC) offer distinct but partially overlapping measurement architectures (Hahn & Kühnen, 2013). For survey-based research targeting firms that may not produce formal sustainability reports, perceptual measures of sustainability performance across the three dimensions — economic, social, and environmental — remain the norm (Bansal, 2005; Paulraj, 2011). The present study adopts a multi-dimensional perceptual scale informed by the GRI's materiality approach.

2.5 Strategic Resilience

Strategic resilience is the capacity of an organisation to anticipate, prepare for, respond to, and adapt to incremental change and sudden disruptions in order to survive and prosper (Denyer, 2017; Hamel & Välikangas, 2003). Unlike operational resilience, which focuses on the ability to recover from specific shocks, strategic resilience emphasises continuous renewal — the capacity to transform business models, strategies, and capabilities

proactively rather than reactively (Lengnick-Hall et al., 2011; Ducheck, 2020).

Hamel and Välikangas (2003) introduced strategic resilience as a response to what they termed the “gap between the pace of change in the business environment and the pace of adaptation in the typical organisation.” They argued that resilience requires four capacities: cognitive resilience (the ability to interpret ambiguous signals), strategic resilience proper (the ability to generate novel strategic options), political resilience (the ability to reallocate resources from yesterday’s priorities to tomorrow’s), and ideological resilience (the ability to embrace values that favour experimentation over efficiency). Subsequent work has refined and operationalised these dimensions (Lengnick-Hall et al., 2011; Linnenluecke, 2017; Ducheck, 2020), but most studies treat resilience as a main-effect predictor or as an outcome variable rather than as a moderating boundary condition.

This study’s theoretical contribution centres on specifying strategic resilience as a second-stage moderator in a serial-mediation model. The rationale is straightforward: innovation capacity generates a portfolio of new products, processes, and business models, but whether that portfolio translates into

genuine organisational sustainability — rather than into short-term performance gains, innovation theatre, or sustainability-washing — depends on the firm’s capacity for strategic renewal. A firm with high innovation capacity but low strategic resilience may innovate prolifically without adapting its core strategic logic to sustainability imperatives; conversely, a firm with high strategic resilience can channel innovation outputs toward sustainability outcomes because it possesses the adaptive architecture needed to integrate sustainability into its renewal processes. This moderating specification is consistent with recent calls to move beyond main-effect resilience models (Williams et al., 2017; Ducheck, 2020) and to examine the conditions under which innovation translates — or fails to translate — into sustainability (Adams et al., 2016).

2.6 Digital Economy as Contextual Setting

The digital economy serves as the contextual frame for this study rather than as a measured variable. Bukht and Heeks (2017) distinguish between the digital sector (ICT/IT industries), the digital economy proper (digital services, platform businesses, the sharing economy), and the digitalised economy (the broader economy as transformed by digital technologies). This study adopts the broadest framing —

firms whose operations are significantly shaped by digital technologies, platforms, and data-driven practices — because financial policy in the digital era affects firms across sectors, not only those in the ICT industry per se.

India's digital economy provides a particularly instructive research context for several reasons. First, India has implemented one of the most ambitious digital financial-infrastructure programmes globally (Aadhaar-linked identity, UPI, DigiLocker), creating a natural laboratory for studying the policy-capability-innovation-sustainability nexus. Second, the Indian regulatory environment combines activist financial-inclusion policies with a rapidly evolving fintech regulatory framework, generating substantial variation in how firms experience and respond to financial policy (RBI, 2021). Third, India's sustainability challenges — environmental degradation, social inequality, resource constraints — are pressing enough to make organisational sustainability a matter of national strategic importance rather than a discretionary corporate activity (NITI Aayog, 2020).

3. Theoretical Foundations

The FPCIS framework is grounded in five theoretical traditions, each contributing a distinct explanatory mechanism to the overall causal architecture.

3.1 Institutional Theory

Institutional theory (DiMaggio & Powell, 1983; North, 1990; Scott, 2014) provides the macro-level explanation for the Financial Policy → Financial Capability link. Financial policies constitute formal institutional arrangements — coercive pressures — that constrain and enable firm behaviour. When a government introduces a credit guarantee scheme or mandates priority-sector lending, it alters the institutional environment in which firms make financial decisions. Institutional theory predicts that firms will respond to these pressures through isomorphic adaptation: they develop financial capabilities that align with the requirements and opportunities created by the prevailing policy regime.

The institutional perspective also illuminates the sustainability end of the model. SEBI's BRSR mandate, the Companies Act CSR provisions, and ESG reporting norms represent normative and coercive institutional pressures that shape how firms define sustainability and allocate resources toward it. The framework thus traces a complete institutional arc from the macro-level

policy environment through firm-level capability development to sustainability outcomes that are themselves institutionally conditioned.

3.2 The Capability Approach

Sen's (1985, 1999) capability approach provides the theoretical logic for the distinction between financial access (resources) and financial capability (the substantive freedom to use resources effectively). In the original formulation, capabilities are the real freedoms people enjoy to achieve functionings — states of being and doing — they have reason to value. Applied at the organisational level (Robeyns, 2005; Nussbaum, 2011), the capability approach implies that financial policy creates potential by expanding the resource set available to firms, but financial capability is the conversion factor that determines whether potential translates into actual strategic action. This resource-to-capability conversion logic is the theoretical backbone of the Financial Policy → Financial Capability pathway.

3.3 Absorptive Capacity Theory

Cohen and Levinthal's (1990) absorptive capacity theory explains the Financial

Capability → Innovation Capacity link. Absorptive capacity — the ability to recognise the value of new external information, assimilate it, and apply it commercially — depends on the firm's prior related knowledge and its investment in knowledge-development processes. Financial capability provides the resource foundation for these investments: firms with stronger financial-management capabilities can allocate resources more effectively to R&D, technology acquisition, human capital development, and knowledge-management systems, thereby building the absorptive capacity that feeds innovation outputs.

Zahra and George's (2002) reconceptualisation distinguishes between potential absorptive capacity (acquisition and assimilation) and realised absorptive capacity (transformation and exploitation). This distinction maps onto the financial-capability-to-innovation pathway: financial capability enhances potential absorptive capacity by funding knowledge inputs, but converting potential into realised absorptive capacity — and thence into innovation outputs — requires organisational processes (learning routines, cross-functional integration) that financial capability alone does not guarantee. This partial mediation logic informs the hypothesis structure.

3.4 Dynamic Capabilities Framework

Teece's (2007) dynamic capabilities framework — comprising sensing, seizing, and transforming capacities — provides the overarching theoretical architecture for understanding how firms convert innovation capacity into sustainable competitive advantage. Sensing involves identifying opportunities and threats; seizing involves mobilising resources to address them; transforming involves continuously realigning the organisation's asset base and routines. Innovation capacity feeds the sensing and seizing dimensions; strategic resilience — as operationalised in this study — is most closely aligned with the transforming dimension: the capacity to reconfigure the firm's strategic logic in response to changing conditions, including the sustainability transition.

The dynamic capabilities framework also provides the theoretical justification for treating strategic resilience as a moderator rather than a mediator. Strategic resilience does not lie on the direct causal pathway from innovation to sustainability; rather, it conditions the effectiveness of that pathway. A firm with high dynamic transforming capability (high strategic resilience) can channel innovation outputs toward sustainability; a firm with low

transforming capability cannot, regardless of its innovation capacity. This moderating logic is consistent with Teece's (2007) argument that the three capacities are complementary but not substitutable.

3.5 Strategic Resilience as a Boundary Condition

The specification of strategic resilience as a boundary condition draws on two additional theoretical sources. First, Hamel and Välikangas (2003) argue that the primary threat to organisational survival in turbulent environments is not operational failure but strategic atrophy: the inability to abandon strategies and business models whose relevance has expired. Strategic resilience, in their formulation, is the antidote to strategic atrophy — it enables the continuous renewal that keeps the organisation aligned with its changing environment. Applied to the innovation-sustainability link, this implies that strategically resilient firms are better positioned to direct innovation toward sustainability outcomes because they can release resources from legacy strategies and reallocate them to sustainability-oriented innovation.

Second, contingency theory (Donaldson, 2001) and the broader strategy literature on moderating boundary conditions (Aguinis et al., 2017) provide methodological precedent for treating a

strategic variable as a conditional factor rather than a main-effect predictor. The argument is that the innovation-to-sustainability relationship is not invariant across firms but depends on the firm's strategic-renewal capacity — a classic moderation hypothesis. This specification contributes to the literature by moving strategic resilience from its usual position as a predictor or outcome to a moderating role that has been theorised (Duchek, 2020; Williams et al., 2017) but not formally tested in a mediation architecture.

3.6 Theoretical Integration: The FPCIS Model

The five theoretical traditions integrate as follows. Institutional theory explains why financial policy shapes firm behaviour (the macro-micro link). The capability approach explains why the effect of financial policy is mediated by financial capability (the resource-to-capability conversion). Absorptive capacity theory explains why financial capability translates into innovation capacity (the knowledge-investment mechanism). The dynamic capabilities framework explains why innovation capacity can produce sustainability outcomes (the sensing-seizing-transforming chain). And the strategic resilience construct explains why the innovation-to-sustainability link is contingent rather than deterministic (the

boundary-condition specification). The resulting FPCIS model is a theoretically integrated architecture, not an eclectic aggregation of unrelated theories — each theory occupies a specific position in the causal chain and contributes a specific explanatory mechanism.

4. Conceptual Framework and Hypothesis Development

4.1 Overview of the FPCIS Framework

The Financial Policy–Capability–Innovation–Sustainability (FPCIS) framework specifies the following causal architecture:

- **Independent variable:** Financial Policy (FP)
- **First-stage mediator:** Financial Capability (FC)
- **Second-stage mediator:** Innovation Capacity (IC)
- **Dependent variable:** Organisational Sustainability (OS)
- **Second-stage moderator:** Strategic Resilience (SR), conditioning the IC → OS path
- **Contextual setting:** Digital Economy

The model specifies six hypotheses: a direct effect (H1), two simple mediations (H2, H3), a serial mediation (H4), a

moderation (H5), and a conditional indirect effect (H6).

4.2 Financial Policy and Organisational Sustainability (H1)

Institutional theory predicts that financial-policy instruments — credit guarantees, priority-sector lending, digital-payment infrastructure, fintech regulation — create coercive and enabling institutional pressures that shape firm behaviour toward sustainability outcomes. The logic is both direct (policy mandates sustainability-related reporting and resource allocation) and indirect (policy creates the financial conditions that make sustainability investments feasible). Empirical evidence supports a positive association between financial-development indicators and sustainability-related firm outcomes (Beck et al., 2005; Demirgüç-Kunt et al., 2018), although the mechanisms are underspecified.

H1: Financial Policy is positively associated with Organisational Sustainability.

4.3 Financial Capability as a Mediator (H2)

The capability approach predicts that financial policy creates potential — expanded access to financial instruments and services — but that the conversion of

potential into actual strategic action depends on the firm's financial capability. Financial capability, in turn, enables the resource allocation, risk management, and strategic investment decisions that contribute to sustainability outcomes. The mediation logic is: $FP \rightarrow FC \rightarrow OS$. Financial policy expands the financial-resource set; financial capability converts resources into strategic action; strategic action encompasses the investments and practices that produce sustainability outcomes.

H2: Financial Capability mediates the relationship between Financial Policy and Organisational Sustainability.

4.4 Innovation Capacity as a Mediator (H3)

Absorptive capacity theory and the dynamic capabilities framework predict that financial capability provides the resource foundation for innovation investments, and that innovation capacity translates into sustainability outcomes through the development of new products, processes, and business models that address economic, social, and environmental challenges simultaneously. The mediation logic is: $FC \rightarrow IC \rightarrow OS$. Financial capability funds knowledge acquisition and assimilation; absorptive capacity converts knowledge into innovation outputs; innovation outputs —

when directed toward the triple bottom line — produce sustainability outcomes.

H3: Innovation Capacity mediates the relationship between Financial Capability and Organisational Sustainability.

4.5 Serial Mediation: The Full Pathway (H4)

The serial-mediation hypothesis integrates H2 and H3 into a single sequential pathway: $FP \rightarrow FC \rightarrow IC \rightarrow OS$. Financial policy shapes the financial-resource environment; financial capability converts resources into strategic capacity; innovation capacity converts strategic capacity into new products, processes, and business models; and these innovation outputs produce sustainability outcomes. This serial-mediation specification represents the study's primary theoretical contribution: it traces a complete, theoretically grounded causal chain from macro-level policy to micro-level sustainability, integrating institutional, capability-based, and innovation-based explanations into a single testable pathway.

H4: Financial Policy influences Organisational Sustainability through the serial mediation of Financial Capability and Innovation Capacity ($FP \rightarrow FC \rightarrow IC \rightarrow OS$).

4.6 Strategic Resilience as a Moderator (H5)

The specification of strategic resilience as a second-stage moderator rests on the argument that innovation capacity generates a portfolio of potential sustainability-relevant outputs, but the conversion of that portfolio into actual organisational sustainability depends on the firm's capacity for strategic renewal. Firms with high strategic resilience possess the adaptive architecture — cognitive flexibility, resource fluidity, strategic optionality — to channel innovation toward sustainability. Firms with low strategic resilience may innovate actively but fail to integrate innovation outputs with sustainability objectives because their strategic logic is rigid and path-dependent.

This moderating logic is distinct from both a main-effect specification (SR directly predicts OS) and a mediating specification ($IC \rightarrow SR \rightarrow OS$). The moderating specification argues that strategic resilience does not lie on the causal pathway; rather, it conditions the strength of the $IC \rightarrow OS$ link. At high levels of strategic resilience, the $IC \rightarrow OS$ relationship is stronger (positive interaction); at low levels, it is weaker or nonsignificant.

H5: Strategic Resilience moderates the relationship between Innovation Capacity and Organisational Sustainability, such that the relationship is stronger when Strategic Resilience is high.

4.7 Conditional Indirect Effect: Moderated Serial Mediation (H6)

The final hypothesis integrates the serial mediation (H4) with the moderation (H5) to specify a conditional indirect effect: the strength of the full indirect pathway $FP \rightarrow FC \rightarrow IC \rightarrow OS$ varies as a function of strategic resilience. When strategic resilience is high, the entire serial-mediation chain transmits the effect of financial policy to sustainability more strongly because the final link ($IC \rightarrow OS$) is amplified. When strategic resilience is low, the chain is attenuated because the innovation-to-sustainability conversion is impaired. This specification corresponds to Hayes's (2022) PROCESS Model 83 (serial mediation with moderation of the final path).

H6: The indirect effect of Financial Policy on Organisational Sustainability through Financial Capability and Innovation Capacity is conditional on Strategic Resilience, such that the indirect effect is stronger at higher levels of Strategic Resilience.

5. Research Problem

Financial policy — encompassing inclusion mandates, digital-payment regulation, fintech licensing regimes, and monetary and prudential instruments — has expanded rapidly across developing economies, and particularly in India, where the convergence of the Jan Dhan–Aadhaar–Mobile (JAM) trinity, the Unified Payments Interface (UPI), and a series of credit guarantee and priority-sector lending schemes has dramatically broadened the financial-policy surface area that firms encounter. Yet this expansion has not produced uniformly sustainable firm-level outcomes. Firms exposed to the same policy environment — the same credit guarantee schemes, the same digital-payment infrastructure, the same fintech regulatory sandbox — diverge sharply in whether they convert that policy exposure into durable organisational sustainability or merely into short-term performance fluctuations that fail to sustain across economic, social, and environmental dimensions.

Existing firm-level research has begun to link innovation capability and organisational resilience to sustainable performance. A 2024 study of Nigerian small and medium enterprises published in *Sustainability*, for instance, models precisely this pair — innovation capability and resilience — against business-sustainability outcomes. However, that

literature starts from firm-level environmental dynamism, not from the policy environment itself. It treats the financial-policy context as exogenous background rather than as the originating construct whose effects must be traced through intermediate capabilities. Moreover, the resilience construct employed in such studies is almost invariably Duchek-style (2020) operational or coping resilience — the capacity to absorb and recover from disruptions — rather than the strategic, business-model-reinvention capacity that Hamel and Välikangas (2003) specifically named “strategic resilience.” Neither the policy origin nor that specific conceptual distinction between operational and strategic resilience has been integrated into a single model.

The central research problem, therefore, is not whether financial policy, innovation capability, and resilience individually matter for organisational sustainability — the evidence for each link, taken separately, is substantial. The problem is that the mechanism through which financial policy converts into sustainability is incompletely specified: the intermediate capability that translates policy exposure into innovation capacity (financial capability), the sequential ordering of that translation (financial capability preceding innovation capacity, not running in parallel

with it), and the boundary condition that determines whether innovation capacity converts into sustainability or dissipates into non-sustaining churn (strategic resilience of the Hamel–Välikangas variety, not generic operational resilience) have not been modelled together.

6. Research Gap

The gaps that motivate this study are stated against the closest neighbouring work in the literature rather than against the literature in the abstract, because a gap that cannot survive contact with the nearest existing study is not a genuine gap.

The first gap is an origin gap. Firm-sustainability models in the innovation and resilience literatures consistently start at the level of firm-level capability or environmental turbulence. They treat financial policy as part of the institutional backdrop — a contextual variable that may appear in the discussion section but does not serve as the originating construct in the causal chain. This omission is consequential because it means existing models cannot explain why firms in the same policy environment diverge in sustainability outcomes: if policy is not modelled as an origin, the differential effects of policy cannot be traced. The present study addresses this gap by positioning financial policy as the

independent variable — the construct whose effects are transmitted through the mediating chain to organisational sustainability.

The second gap is a mechanism gap. Financial capability — a firm's capacity to plan, manage, and deploy financial resources, conceptually distinct from mere access to finance — is rarely modelled as the bridge between policy exposure and innovation capacity. Most existing models treat innovation capacity as if it followed directly from environmental conditions or from generic resource availability, bypassing the specific managerial competence that converts financial-policy inputs into the resource base from which innovation draws. The present study addresses this gap by specifying financial capability as the first-stage mediator that converts policy exposure into the resource and competence foundation upon which innovation capacity is built.

The third gap is a boundary-condition gap. The resilience construct in the innovation-sustainability literature is almost universally Duchek-style (2020) operational or coping resilience: the capacity to absorb, respond to, and recover from disruptions. Hamel and Välikangas's (2003) strategic resilience — the capacity to continuously reinvent the business model before circumstances force it, to reallocate resources from yesterday's

priorities to tomorrow's opportunities, and to embrace experimentation over efficiency — is conceptually distinct. Strategic resilience is better suited as the condition that determines whether innovation capacity actually converts into organisational sustainability rather than evaporating into innovation churn: the proliferation of new products and processes that does not aggregate into durable economic, social, and environmental value. The present study addresses this gap by specifying strategic resilience as a second-stage moderator — a boundary condition on the innovation-capacity-to-sustainability path — rather than as a main-effect predictor or an undifferentiated resilience variable.

7. Aim of the Study

The aim of this study is to develop and test an integrative model explaining how financial policy converts into organisational sustainability through the sequential mechanisms of financial capability and innovation capacity, conditioned on a firm's strategic resilience. Specifically, the study aims to construct, theoretically ground, and provide a replicable empirical protocol for the Financial Policy–Capability–

Innovation–Sustainability (FPCIS) framework — a moderated serial-mediation model that traces the complete causal chain from the macro-level policy environment to micro-level sustainability outcomes, with strategic resilience specified as the boundary condition that determines the strength of the innovation-capacity-to-sustainability conversion.

8. Research Objectives

The study pursues five research objectives. First, it examines the direct and indirect effects of financial policy on organisational sustainability, distinguishing between the total effect, the direct effect net of mediators, and the specific indirect effects transmitted through the mediating chain. Second, it establishes financial capability as the mechanism converting policy exposure into innovation capacity — testing whether the financial-policy-to-innovation-capacity relationship is mediated by the firm's capacity to plan, manage, and deploy the financial resources that policy makes available. Third, it establishes innovation capacity as the mechanism converting capability into sustainability outcomes — testing whether the financial-capability-to-sustainability relationship is mediated by the firm's capacity to transform knowledge and resources into new products,

processes, and business models that serve the triple bottom line. Fourth, it tests strategic resilience as a boundary condition on the innovation-capacity-to-sustainability path — assessing whether the relationship between innovation capacity and organisational sustainability is contingent on the firm's capacity for continuous strategic renewal. Fifth, it situates all of the above within the digital economy as the study's operating context by sampling firms above a digital-maturity threshold and specifying the digital-economy policy instruments (UPI, fintech sandbox, digital lending regulations) that constitute the financial-policy construct in the Indian context.

9. Research Questions

Four research questions guide this investigation.

First, to what extent does financial policy influence organisational sustainability, directly and through indirect pathways? This question addresses both the total association between financial policy and sustainability and the decomposition of that association into direct and mediated components.

Second, does financial capability mediate the financial-policy-to-innovation-capacity

relationship? This question tests whether the translation of policy exposure into innovation capacity depends on the firm's financial-management competence — whether firms that are better at planning, managing, and deploying financial resources are also better at converting favourable policy environments into innovation outputs.

Third, does innovation capacity mediate the financial-capability-to-sustainability relationship? This question tests whether the link between financial capability and organisational sustainability operates through the firm's capacity to generate new products, processes, and business models, rather than through a direct resource-to-sustainability pathway.

Fourth, does strategic resilience moderate the innovation-capacity-to-sustainability relationship? Specifically, do only strategically resilient firms — those with the capacity for continuous business-model reinvention, resource reallocation, and strategic experimentation — convert innovation capacity into durable organisational sustainability, while firms lacking strategic resilience convert the same innovation capacity into churn: new products and processes that do not aggregate into sustainable economic, social, and environmental value?

10. Scope of the Study

The unit of analysis is the firm. The target population comprises micro, small, medium, and large enterprises operating within India's digital economy, defined operationally as firms that derive a substantial portion of their revenue from digitally enabled transactions, employ digital technologies in their core business processes, or operate within digitally intensive sectors including information technology, IT-enabled services, fintech, e-commerce, digital media, and digitally transformed manufacturing and services. The study's jurisdiction is India, and the operating window of the financial-policy regime under investigation encompasses the current generation of digital-era financial-policy instruments: the Reserve Bank of India's priority-sector lending norms as revised for digital lending, the Pradhan Mantri Mudra Yojana (PMMY) micro-enterprise credit scheme, the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), the RBI's regulatory sandbox for fintech innovations, and the digital-payment infrastructure centred on the Unified Payments Interface (UPI). The study does not examine pre-digital financial-policy instruments (interest-rate controls, directed credit schemes of the pre-liberalisation era) except as historical context.

Sectoral scope encompasses firms across multiple digital-economy sectors rather

than a single industry, because the financial-policy instruments in scope (priority-sector lending, UPI, fintech sandbox) cut across sectors. Firm-size scope includes MSMEs as well as larger firms, because the financial-policy instruments studied target firms at different scales (PMMY targets micro-enterprises; the fintech sandbox is sector-neutral but disproportionately accessed by technology firms; UPI is universal). Respondent scope is limited to senior managers — CEOs, CFOs, chief strategy officers, heads of innovation — with sufficient knowledge of the firm's financial management, innovation activities, and sustainability practices to provide reliable perceptual assessments.

11. Significance of the Study

The significance of this study lies not in the abstract fact that it fills a research gap but in the specific consequences of that gap for identifiable audiences.

For firm strategists, the study provides a diagnostic framework for deciding where to invest ahead of sustainability reporting cycles. A firm that discovers its financial capability is the weakest link in the policy-to-sustainability chain faces a different strategic priority than a firm whose bottleneck is innovation capacity or strategic resilience. The FPCIS model

enables that differential diagnosis by specifying where in the causal chain the conversion from policy to sustainability is breaking down — and by identifying strategic resilience as the boundary condition that determines whether investments in innovation capacity yield sustainability returns or dissipate into non-sustaining innovation churn.

For policymakers — at the Reserve Bank of India, the Ministry of Finance, SEBI, NITI Aayog, and the MSME Ministry — the study addresses a specific blind spot: current policy evaluation frameworks measure whether financial-policy instruments reach firms (disbursement rates, account-opening numbers, digital-transaction volumes) but typically cannot see past the point where firms diverge in converting policy inputs into sustainability outcomes. The FPCIS model provides a conceptual and empirical tool for tracing policy effects through the capability chain, enabling policymakers to identify not only whether policy is reaching firms but whether firms possess the intermediate capabilities needed to convert that reach into sustainability.

For the academic literatures on financial policy, innovation capacity, and strategic resilience, the study addresses a citation-network fragmentation that limits theoretical progress. These three literatures develop in largely separate streams: the

financial-policy literature engages the development economics and institutional theory traditions; the innovation-capacity literature engages the dynamic capabilities and knowledge-management traditions; and the strategic resilience literature engages the crisis management and organisational adaptation traditions. These streams rarely cite each other, and the constructs they develop are rarely integrated into a single model. The FPCIS framework bridges this fragmentation by providing a theoretically grounded architecture in which financial policy, financial capability, innovation capacity, and strategic resilience occupy specific, non-substitutable positions in a single causal chain.

12. Novelty Statement

The novelty of this study resides specifically in the strategic-resilience boundary-condition specification, not merely in demonstrating that financial policy, financial capability, and innovation capacity matter for sustainability — associations that the existing literature, taken piecemeal, has already established. The contribution is in identifying when the effect of the financial-policy-to-sustainability chain is strongest and when it collapses.

The nearest neighbouring model in the extant literature — exemplified by the 2024 study of Nigerian SMEs that models innovation capability and resilience against business-sustainability outcomes — differs from the FPCIS framework in three specific respects. First, the origin construct differs: the neighbouring model starts from firm-level environmental dynamism, while the FPCIS model starts from the financial-policy environment, tracing a macro-to-micro causal pathway that the neighbouring model does not attempt. Second, the mediating sequence differs: the neighbouring model does not include financial capability as a first-stage mediator, and therefore cannot explain how policy exposure converts into the resource base from which innovation capacity draws. Third, the boundary condition differs: the neighbouring model employs a generic resilience construct aligned with Duchek's (2020) operational-coping conceptualisation, while the FPCIS model specifies Hamel and Välikangas's (2003) strategic resilience — the capacity for continuous business-model reinvention — as the boundary condition. This is not a semantic distinction: operational resilience concerns recovery from disruption, while strategic resilience concerns proactive renewal. The FPCIS model predicts that firms with high innovation capacity but low strategic resilience will generate

innovation outputs that do not aggregate into sustainability — a specific, testable prediction that the neighbouring model's generic resilience construct does not yield. This novelty claim is deliberately bounded. The study does not claim to be the “first” to examine any of its individual constructs or any pairwise relationship among them. It claims to be the first to integrate the financial-policy origin, the financial-capability-then-innovation-capacity sequential mediation, and the strategic-resilience boundary condition into a single moderated serial-mediation model — and it states explicitly how that integration differs from the nearest existing attempt to model innovation, resilience, and sustainability together.

13. Research Methodology

13.1 Research Philosophy and Design

This study adopts a post-positivist research philosophy (Creswell & Creswell, 2018), which holds that reality exists independently of the observer but can only be apprehended imperfectly through empirical investigation. Post-positivism is the appropriate philosophy for a deductive, hypothesis-testing study that employs quantitative methods while acknowledging the imperfections inherent in survey-based measurement.

The research design is cross-sectional and survey-based. A structured questionnaire will be administered to senior managers (CEOs, CFOs, heads of strategy or innovation) in firms operating within India's digital economy. The cross-sectional design is appropriate for testing the proposed structural relationships but limits causal inference; this limitation is acknowledged and paired with a future-research direction (Section 16).

13.2 Population and Sampling

The target population comprises firms operating in India's digital economy across multiple sectors, including information technology and IT-enabled services, fintech, e-commerce, digital media, and digitally transformed manufacturing and services firms. The inclusion criteria are: (a) the firm has been operational for at least three years, (b) the firm employs digital technologies in its core business processes, and (c) the respondent occupies a senior management position with knowledge of the firm's financial management, innovation activities, and sustainability practices.

A multi-stage stratified purposive sampling strategy will be employed. In the first stage, firms will be identified through industry databases (Prowess, CMIE), industry association membership lists (NASSCOM, FICCI), and government

registries (DPIIT Startup India, MSME Udyam). In the second stage, stratification by firm size (micro, small, medium, large) and sector will ensure representativeness across the digital economy landscape. In the third stage, purposive selection within strata will target respondents at the senior management level.

Sample size determination follows two criteria. First, the minimum sample size for PLS-SEM is ten times the maximum number of structural paths directed at any construct in the model (Hair et al., 2019); with a maximum of [VALUE] paths, the minimum is [VALUE]. Second, for conditional process analysis using Hayes's (2022) PROCESS macro, a minimum of 200 observations is recommended for models with serial mediators and a moderator. A target sample of [VALUE] usable responses provides adequate statistical power (Cohen, 1992) and accommodates potential data-quality attrition.

13.3 Measurement Instrument

All constructs are measured using multi-item reflective scales on a seven-point Likert scale (1 = strongly disagree to 7 = strongly agree). Scales are adapted from established instruments where available and developed de novo where existing measures are insufficient.

13.3.1 Financial Policy (FP)

Financial policy is measured through [VALUE] items capturing firm-level perceptions of the accessibility, relevance, and effectiveness of government financial-policy instruments. Items are adapted from Demirgüç-Kunt et al. (2018) and the World Bank Enterprise Survey financial-access module, with new items developed to capture digital-specific policy instruments (UPI infrastructure, fintech sandbox, digital lending regulations). Sample items include: "Government financial policies have improved our access to affordable credit"; "The digital payment infrastructure enables efficient financial transactions for our business."

13.3.2 Financial Capability (FC)

Financial capability is measured through [VALUE] items across four subdimensions: financial-resource access, financial-management sophistication, financial-technology adoption, and financial-strategic integration. Items draw on the OECD/INFE (2011) financial-literacy framework, adapted to the organisational level, and supplemented with items from Lusardi and Mitchell (2014) and the financial-management-practices literature. Sample items include: "Our organisation has sophisticated systems for financial planning and budgeting"; "We effectively integrate

financial analysis into strategic decision-making.”

13.3.3 Innovation Capacity (IC)

Innovation capacity is measured through [VALUE] items adapted from Lawson and Samson (2001), Zahra and George (2002), and Crossan and Apaydin (2010). Items capture product innovation, process innovation, business-model innovation, and digital innovation. Sample items include: “Our organisation regularly introduces new products or services that address market needs”; “We have established processes for identifying and assimilating external knowledge.”

13.3.4 Organisational Sustainability (OS)

Organisational sustainability is measured through [VALUE] items across three dimensions: economic sustainability, social sustainability, and environmental sustainability. Items are adapted from Bansal (2005), Paulraj (2011), and the GRI Standards materiality categories. Sample items include: “Our organisation achieves consistent financial performance without compromising environmental standards”; “We actively invest in the social well-being of the communities in which we operate.”

13.3.5 Strategic Resilience (SR)

Strategic resilience is measured through [VALUE] items adapted from Hamel and Välikangas (2003), Lengnick-Hall et al. (2011), and Duchek (2020). Items capture anticipation capacity, coping capacity, and adaptation capacity as dimensions of strategic resilience. Sample items include: “Our organisation continuously scans the environment for emerging threats and opportunities”; “We can rapidly reallocate resources from declining activities to new strategic priorities.”

13.3.6 Control Variables

The model controls for firm size (log of total employees), firm age (years since incorporation), industry sector (categorical), export orientation (percentage of revenue from exports), and respondent tenure (years in current role). These controls address alternative explanations for the observed relationships.

13.4 Instrument Validation

The measurement instrument will undergo a multi-stage validation process. First, content validity will be established through expert review by a panel of [VALUE] academics and [VALUE] industry professionals with expertise in finance, innovation management, and sustainability. Second, a pilot test with

[VALUE] respondents from the target population will assess item clarity, response variance, and preliminary reliability (Cronbach's $\alpha \geq 0.70$ threshold). Third, exploratory factor analysis (EFA) on the pilot data will assess dimensionality and identify problematic items. The refined instrument will then be deployed in the main survey.

13.5 Data Collection Procedure

Data will be collected through a structured online questionnaire distributed via Qualtrics. The survey link will be sent to identified respondents via email with a cover letter explaining the study's purpose, assuring confidentiality, and providing institutional ethics approval details. Two follow-up reminders will be sent at two-week intervals. To mitigate common method bias (Podsakoff et al., 2003), the following procedural remedies will be implemented: (a) psychological separation of predictor and criterion variables by placing them in different sections with distinct instructions, (b) assurance of anonymity to reduce socially desirable responding, (c) counterbalancing of item order, and (d) use of different scale anchors for selected constructs.

13.6 Data Analysis Strategy

13.6.1 Preliminary Analysis

Data screening will assess missing values, outliers, normality (skewness and kurtosis within ± 2.0), and common method variance (Harman's single-factor test, correlation matrix inspection, and the unmeasured latent method factor approach).

13.6.2 Measurement Model Assessment (PLS-SEM)

The measurement model will be assessed using SmartPLS 4. Reflective measurement model evaluation follows Hair et al.'s (2019) systematic criteria: indicator loadings (≥ 0.708), composite reliability (≥ 0.70), average variance extracted (AVE ≥ 0.50), and discriminant validity via the heterotrait-monotrait (HTMT) ratio of correlations (< 0.85 for conceptually distinct constructs, < 0.90 for conceptually similar constructs). Indicators with loadings between 0.40 and 0.70 will be retained only if their removal does not improve AVE or composite reliability.

13.6.3 Structural Model Assessment

The structural model will be assessed by examining the variance inflation factor (VIF < 5.0 for all predictor blocks), path coefficients (β , significance via bootstrapping with 5,000 resamples), coefficient of determination (R^2), effect sizes (f^2), and predictive relevance (Q^2 via blindfolding). The direct effect of FP on

OS (H1) will be tested first, followed by the mediation and moderation tests.

13.6.4 Mediation Testing

Simple mediation (H2, H3) will be tested using the bootstrapped indirect effect with 5,000 resamples and bias-corrected 95% confidence intervals (Preacher & Hayes, 2008). Serial mediation (H4) will be tested by estimating the specific indirect effect through the sequential path $FP \rightarrow FC \rightarrow IC \rightarrow OS$, again with bootstrapped confidence intervals. An indirect effect is significant if the confidence interval excludes zero.

13.6.5 Moderation and Conditional Process Analysis

The moderation hypothesis (H5) will be tested by including the $IC \times SR$ interaction term in the structural model and assessing its significance and the change in R^2 for OS. Simple-slopes analysis will be conducted at one standard deviation above and below the mean of SR to examine the nature of the interaction.

The conditional indirect effect (H6) — the moderated serial mediation — will be tested using Hayes's (2022) PROCESS macro (Model 83) in SPSS. PROCESS provides the index of moderated mediation and the conditional indirect effects at specified values of SR (mean, ± 1 SD), with bootstrapped confidence intervals.

The index of moderated mediation is significant if its confidence interval excludes zero, confirming that the indirect effect of FP on OS through FC and IC varies as a function of SR.

13.6.6 Robustness Tests

Three robustness tests will be conducted. First, an alternative model specification that places strategic resilience as a first-stage moderator (conditioning the $FC \rightarrow IC$ link rather than the $IC \rightarrow OS$ link) will be estimated to test whether the hypothesised second-stage moderation is empirically superior. Second, the endogeneity of financial capability will be assessed using the Gaussian copula approach (Hult et al., 2018), which does not require instrumental variables. Third, nonlinear effects will be explored by including quadratic terms for the mediators to test whether the mediation pathways exhibit diminishing or accelerating returns.

14. Discussion

14.1 Interpretation Against Existing Theory and Evidence

The FPCIS framework advances the existing literature by specifying a complete causal architecture from macro-level financial policy to micro-level organisational sustainability — a pathway that prior studies have examined in

fragments but not as an integrated chain. The direct-effect hypothesis (H1) aligns with the financial-development literature (Beck et al., 2005; King & Levine, 1993) but extends it by articulating the intermediate mechanisms. The mediation hypotheses (H2–H4) operationalise the theoretical predictions of the capability approach (Sen, 1999), absorptive capacity theory (Cohen & Levinthal, 1990), and the dynamic capabilities framework (Teece, 2007) within a single empirical model, addressing the common criticism that these theories are invoked individually but rarely integrated (Peteraf et al., 2013).

The moderation hypothesis (H5) represents the study's most distinctive theoretical contribution. Prior studies have examined strategic resilience as a predictor of firm performance (Lengnick-Hall et al., 2011), as a predictor of crisis-recovery outcomes (DesJardine et al., 2019), and as an antecedent of adaptive capacity (Duchek, 2020). The present framework relocates strategic resilience to a boundary-condition position, arguing that its contribution is not additive (more resilience → more sustainability) but multiplicative (resilience amplifies the translation of innovation into sustainability). This specification responds to Williams et al.'s (2017) call for research on resilience as a contingency factor and to Adams et al.'s (2016) observation that

innovation does not automatically produce sustainability — the conditions under which it does so require explicit theorisation.

The conditional indirect effect (H6) integrates the entire framework into a single testable proposition: the transmission of financial-policy effects to sustainability through the capability-innovation chain depends on the firm's strategic-renewal capacity. This proposition has significant implications for both theory and policy. Theoretically, it implies that the effectiveness of financial policy in promoting organisational sustainability is not only mediated by firm-level capabilities but also contingent on firm-level strategic attributes — a multi-level, multi-mechanism explanation that goes beyond the single-theory accounts that dominate the existing literature. Policy-wise, it implies that financial-policy design alone is insufficient; policies must be complemented by interventions that build firms' strategic resilience if the sustainability promise of the digital economy is to be realised.

14.2 Theoretical Contribution

The FPCIS model contributes to the strategic management and sustainability literatures in three specific ways. First, it provides a formally specified, testable boundary-condition model for strategic

resilience, moving the construct from its current descriptive and main-effect treatment to a moderating role within a mediation architecture. The nearest neighbouring model — resilience as a dynamic capability (Duchek, 2020) — treats resilience as a process model without specifying its position in a causal chain relative to innovation and sustainability. The FPCIS model fills this gap.

Second, the framework bridges institutional and capability-based explanations that are typically pursued in separate research streams. Institutional theory explains why firms respond to financial policy; the capability approach explains how they convert policy inputs into strategic resources; absorptive capacity and dynamic capabilities explain why those resources translate into innovation and sustainability. The integration is not additive but sequential: each theory contributes a specific causal link, and the overall architecture is greater than the sum of its theoretical parts.

Third, the framework contributes a novel dependent-variable specification. Most studies in the financial-policy literature use firm performance (profitability, growth) as the outcome; most studies in the innovation literature use innovation outcomes (patents, new-product counts) as the outcome. The FPCIS model uses

organisational sustainability — the triple bottom line — as the ultimate dependent variable, acknowledging that in the contemporary policy and strategic environment, sustainability is not a secondary objective but a primary measure of organisational success.

14.3 Methodological Contribution

The moderated serial-mediation design (Hayes PROCESS Model 83) applied to a policy-to-sustainability causal chain represents a methodological contribution to this literature. Serial mediation is well established in psychology (Hayes, 2022) but underutilised in strategy and sustainability research, where simple mediation or moderated mediation (but not both in a serial architecture) is the norm. The combination of PLS-SEM for measurement-model validation and PROCESS for conditional process analysis addresses a complementary-methods gap: PLS-SEM handles the latent-variable measurement rigorously, while PROCESS provides the specific conditional-indirect-effect tests that PLS-SEM implements less precisely.

The study also contributes a structured instrument for measuring the five focal constructs in the digital-economy context, including de novo items for digital-specific financial-policy instruments and digital innovation capacity that existing scales do

not adequately capture. The instrument-development protocol (expert review, pilot testing, EFA, CFA, HTMT) provides a replicable template for future studies.

14.4 Empirical Contribution

As a Track B study, the empirical contribution lies in the research design and instrument rather than in findings. The study provides a complete, implementable research protocol — sampling strategy, measurement instrument, validation procedure, and analysis plan — for testing the FPCIS model in India's digital economy. This design can be replicated, with appropriate adaptations, in other national contexts, enabling the cross-country comparisons that are essential for assessing the generalisability of the proposed relationships.

15. Implications

15.1 Academic Implications

The FPCIS framework opens several productive avenues for academic research. For strategy scholars, it provides a formal specification of strategic resilience as a boundary condition that can be tested across multiple contexts — not only the digital economy but also traditional industries undergoing sustainability transitions. For innovation researchers, it positions innovation capacity within a

policy-originating causal chain rather than treating it as an exogenous predictor, prompting attention to the upstream conditions (financial policy, financial capability) that enable or constrain innovation. For sustainability scholars, it provides a multi-mechanism explanation of organisational sustainability that goes beyond the CSR-as-strategy framing (Porter & Kramer, 2011) to incorporate the institutional and financial-policy conditions that shape whether firms can pursue sustainability at all.

15.2 Managerial Implications

For firm-level strategy and financial-management functions, the framework has three practical implications. First, it highlights the importance of financial capability as a strategic — not merely administrative — function: firms that invest in financial-management sophistication, financial-technology adoption, and financial-strategic integration are better positioned to convert favourable financial-policy environments into innovation and sustainability outcomes. Second, it identifies strategic resilience as a critical enabling condition for translating innovation into sustainability: firms that invest in anticipation capacity, adaptive capacity, and resource-reallocation capability will extract greater sustainability value from

their innovation portfolios. Third, it suggests that senior leaders should assess their firm's position across the entire FPCIS chain — financial-policy awareness, financial capability, innovation capacity, strategic resilience — rather than investing in any single capability in isolation.

15.3 Industry and SME Implications

For small and medium enterprises (SMEs) operating in India's digital economy, the framework highlights a specific risk: SMEs often possess innovation capacity (they are frequently more agile and innovative than large firms) but lack strategic resilience (they have limited resources for continuous strategic renewal). The FPCIS model predicts that this configuration — high innovation capacity, low strategic resilience — will produce a weak innovation-to-sustainability conversion. Industry associations (NASSCOM, FICCI, CII) and SME-support organisations could use this insight to design programmes that build strategic resilience alongside innovation capacity, rather than treating them as separate development objectives.

15.4 Policy and Government Implications

The framework generates specific implications for the Indian regulatory

bodies with jurisdiction over the financial-policy instruments in scope.

The **Reserve Bank of India (RBI)**, as the monetary and prudential policy authority, designs the priority-sector lending norms, regulates digital lending, and oversees the fintech regulatory sandbox. The FPCIS model implies that the effectiveness of these instruments in promoting organisational sustainability depends not only on their design but also on the financial capability of the firms they target. RBI policy evaluations could incorporate financial-capability assessments as an intermediate outcome metric alongside traditional credit-disbursement metrics.

The **Ministry of Finance / Department of Financial Services**, which designs financial-inclusion and fintech policy, can draw on the framework's serial-mediation logic to sequence policy interventions: financial-access programmes should be paired with financial-capability-building programmes to ensure that access translates into capability and thence into innovation and sustainability.

The **Securities and Exchange Board of India (SEBI)** and the **Ministry of Corporate Affairs**, which administer the BRSR sustainability-reporting mandate and the Companies Act CSR provisions, create the institutional pressures that define the sustainability end of the FPCIS

model. The framework suggests that sustainability mandates will be more effective when firms possess the upstream capabilities (financial capability, innovation capacity, strategic resilience) needed to respond to those mandates substantively rather than performatively.

NITI Aayog, which coordinates India's Sustainable Development Goal (SDG) alignment, can use the FPCIS framework to assess how financial-policy design contributes to SDG-relevant firm-level outcomes. The serial-mediation logic implies that SDG progress depends not only on the quantity of financial resources directed toward sustainable development but also on the capability chain that converts resources into sustainable organisational outcomes.

The **MSME Ministry / Department for Promotion of Industry and Internal Trade (DPIIT)**, which oversees the Startup India and Udyam registration programmes, can apply the framework's insight about the strategic-resilience bottleneck for SMEs. Programmes that fund innovation capacity without also building strategic resilience may produce innovation outputs that do not translate into sustainability — a pattern the FPCIS model explicitly predicts and that policy design should anticipate.

15.5 Societal Implications

At the broadest level, the FPCIS framework speaks to the relationship between financial-policy design and the sustainability of the firms upon which a digital economy depends. If digital-economy firms — the engines of employment, innovation, and economic growth in an increasingly digitalised world — do not achieve organisational sustainability, the social and environmental costs will be borne by society as a whole. The framework's serial-mediation logic implies that the link between financial policy and societal sustainability is neither direct nor automatic; it passes through a chain of firm-level capabilities that can break at any link. Building that chain — from financial access through financial capability and innovation capacity to sustainability, with strategic resilience as the enabling condition — is a collective undertaking that requires coordinated action by policymakers, industry, and firms.

16. Limitations and Future Research Agenda

This study has several limitations, each of which suggests a direction for future research.

First, the cross-sectional design limits causal inference. While the theoretical framework specifies a sequential causal pathway ($FP \rightarrow FC \rightarrow IC \rightarrow OS$), a cross-sectional survey can only test associations, not temporal precedence. **Future research** should employ a longitudinal design — panel data collected at multiple time points — to test whether changes in financial policy precede changes in financial capability, whether changes in financial capability precede changes in innovation capacity, and so forth. A two-wave or three-wave panel design with time lags calibrated to the expected speed of each causal link would provide stronger evidence of temporal precedence.

Second, the single-jurisdiction context (India) limits the generalisability of the findings. India's financial-policy environment — the combination of activist financial-inclusion policies, a maturing fintech regulatory framework, and the digital-infrastructure investments of the JAM trinity — is distinctive. **Future research** should replicate the FPCIS model in other national contexts to assess how financial-policy-regime differences moderate the relationships. A cross-country comparison of India with other large developing digital economies (Indonesia, Brazil, Nigeria) or with a developed-economy comparator (the United Kingdom, South Korea) would be a

natural next step, given how differently financial-policy regimes vary across jurisdictions.

Third, the measurement of financial capability and innovation capacity relies on self-report perceptual scales, which are subject to common method bias and social desirability bias. **Future research** should incorporate objective indicators of financial capability (e.g., financial-management-maturity indices derived from audited financial statements) and innovation capacity (e.g., patent counts, R&D-expenditure ratios, new-product revenue shares) where obtainable. The combination of perceptual and objective measures would enable a multi-method validation of the constructs.

Fourth, strategic resilience is specified as a second-stage moderator (conditioning the $IC \rightarrow OS$ link) based on theoretical reasoning, but an equally plausible alternative specification — strategic resilience as a first-stage moderator (conditioning the $FC \rightarrow IC$ link) — is not tested. **Future research** should estimate both specifications and compare model fit, effect sizes, and substantive interpretation. The robustness-test protocol described in Section 13.6.6 provides for this comparison within the present study design, but independent replication with different samples would strengthen the conclusion.

Fifth, the measurement of organisational sustainability through perceptual scales, while standard in survey-based sustainability research, does not capture the objective sustainability performance that external stakeholders — investors, regulators, communities — ultimately care about. **Future research** should link the perceptual sustainability measure to objective sustainability indicators drawn from BRSR reports, ESG ratings, or GRI-aligned disclosures, enabling a convergent-validity assessment and reducing the risk of sustainability self-assessment bias.

17. Conclusion

This study has addressed a significant gap in the strategic management, innovation, and sustainability literatures: the absence of a theoretically integrated, empirically testable framework that traces the complete causal pathway from macro-level financial policy to micro-level organisational sustainability in the digital economy. The proposed Financial Policy–Capability–Innovation–Sustainability (FPCIS) framework specifies a moderated serial-mediation model in which financial capability and innovation capacity sequentially mediate the financial-policy-to-sustainability relationship, with strategic resilience serving as a boundary

condition that moderates the innovation-capacity-to-sustainability link.

Grounded in institutional theory, the capability approach, absorptive capacity theory, the dynamic capabilities framework, and the strategic resilience literature, the FPCIS model integrates five theoretical traditions into a coherent causal architecture. Each theory contributes a distinct explanatory mechanism: institutional pressures drive firm responses to financial policy; the capability approach explains the resource-to-capability conversion; absorptive capacity theory explains the capability-to-innovation translation; the dynamic capabilities framework explains the innovation-to-sustainability pathway; and the strategic resilience construct explains why that pathway is contingent rather than deterministic.

The study contributes to the literature in three ways. Theoretically, it advances strategic resilience from a descriptive attribute or main-effect predictor to a formally specified boundary condition in a mediation architecture. Methodologically, it provides a replicable moderated serial-mediation design and measurement instrument for testing policy-to-sustainability pathways. In terms of policy relevance, it generates actionable implications for the Reserve Bank of India, the Ministry of Finance, SEBI, NITI

Aayog, and the MSME Ministry, demonstrating that the sustainability effectiveness of financial policy depends on the strength of the firm-level capability chain it activates.

The framework invites empirical testing. Its six hypotheses are specified at a level of precision that permits direct estimation using PLS-SEM and conditional process analysis. The research design and measurement instrument provided in this paper equip researchers with the operational tools needed for that empirical step. In a digital economy where the pace of financial-policy innovation increasingly outstrips the pace of academic theorising, the FPCIS model offers a structured, theoretically grounded architecture for understanding how financial policy can — and under what conditions it cannot — promote the organisational sustainability that society increasingly demands.

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