International Conference on Sustainable Tourism and Entrepreneurship

Vol. 01 No. 01 August 2026, ISSN: 3163-2912

# Multi Method Analysis of Economic Growth Targets and Business Sector Realities

Rahmat Hidayat[1*], Rahmat Saleh [2]

[1] *Master of Science in Information Technology, University of People, United State of America*
[2] *Doctor of Science in Communication, Universitas Sahid, Indonesia*

**Corresponding author. Email: onlyrahmat272@loloedu.my.id*

**ABSTRACT**

*This study examines the structural gap between government-set economic growth targets and actual business sector performance in Indonesia (2018–2023), employing a three-phase multi-method analytical framework with 240 business owners and managers across six economic sectors. Phase 1 econometric decomposition revealed that government GDP growth targets exceeded actual growth in five of six years, with a mean annual deviation of 0.43 percentage points; human capital investment contributed 0.31 percentage points less than projected, while total factor productivity (TFP) variance increased by 38%, indicating accelerating structural instability. Phase 2 behavioral survey analysis via structural equation modeling (SEM) confirmed that regulatory risk perception exerts a significant negative indirect effect on investment intent (standardized path coefficient = −0.41, $p < 0.001$), fully mediated through business confidence (BCI), with manufacturing and construction recording the largest confidence gaps of −2.7 points on a 10-point scale. Institutional Trust Inventory (ITI) scores revealed a significant negative correlation between business tenure and institutional trust ($r = -0.38$, $p < 0.001$), operationalizing "industry fatigue" as a cumulative drag on investment readiness. Phase 3 System Dynamics simulation identified an institutional trust bifurcation threshold at ITI = 4.2, below which the growth–confidence feedback system shifts to a self-reinforcing stagnation regime; manufacturing (ITI = 3.8) and construction (ITI = 3.6) operate below this threshold. Sensitivity analysis found institutional trust erosion elasticity (1.34) to be 4.8 times more influential on target realization than growth target magnitude (0.28). The study concludes that sustainable growth target achievement requires policy designs prioritizing institutional trust-building and regulatory consistency alongside technical economic planning.*

***Keywords:*** *Economic Growth Targets, Business Sector Psychology, Mixed-Methods Analysis, System Dynamics, Behavioral Economics, Econometric Modeling.*

## 1. INTRODUCTION

Economic growth targets constitute a central pillar of macroeconomic policy design in both developed and emerging economies. Governments worldwide rely on econometric forecasting models to establish annual and multi-year growth benchmarks that guide fiscal policy, public investment allocation, and monetary management. However, a persistent and understudied gap exists between the targets articulated at the policy level and the lived economic realities experienced by business actors operating at the micro and meso levels of the economy. This divergence has been documented across multiple national contexts, from post-conflict agricultural economies [1], [2] to transitional market systems [3], [4], suggesting it reflects a structural feature of the target-setting process rather than a country-specific anomaly.

The mechanisms through which growth targets fail to translate into business sector realities are multiple and interacting. At the macroeconomic level, standard growth accounting frameworks decompose GDP growth into factor contributions—labor, capital, human capital, and total factor productivity—but systematically neglect the behavioral dimensions of business decision-making [5], [6]. At the firm level, investment choices are mediated by

risk perceptions, institutional confidence, and regulatory environment assessments that resist quantification within standard econometric frameworks [7], [8]. The result is a systematic optimism bias in growth target-setting: targets that are technically defensible under favorable assumptions consistently fail when those assumptions encounter the friction of practical business operations [9], [10].

The Indonesian context provides a compelling case study for examining this phenomenon. As Southeast Asia's largest economy, Indonesia has consistently set ambitious GDP growth targets aligned with its Vision 2045 development agenda. Yet actual growth figures have systematically fallen short of these targets, most dramatically during the COVID-19 pandemic when the economy contracted sharply against pre-pandemic growth projections. Even in ostensibly favorable years, the gap between target and actual growth reveals structural inefficiencies that aggregate statistics cannot fully explain [11], [12]. Indonesian small and medium enterprises (SMEs), which contribute approximately 61% of GDP and absorb over 97% of the workforce, are particularly vulnerable to this disconnect—they operate in precisely the micro-level conditions that macroeconomic targets assume away [10], [13].

This study responds to the need for a more holistic analytical approach that bridges the technical rigor of macroeconomic modeling with the behavioral realities of business practice. The research employs a "Multi Method Analysis" framework integrating three distinct but complementary analytical lenses: quantitative econometric modeling, behavioral survey analysis, and system dynamics simulation [14], [15]. This integration reflects the growing consensus in the applied economics literature that neither quantitative nor qualitative approaches alone can adequately account for the complex, recursive dynamics through which policy targets interact with business behavior to produce economic outcomes [16], [17].

The significance of this research extends beyond academic inquiry. Agricultural and agribusiness enterprises—a critical sector in Indonesia's economy—have been shown to respond particularly strongly to institutional signals and market confidence conditions [18], [19], [20]. Understanding how the macro-micro disconnect operates in this sector has direct implications for food security, rural income, and national export competitiveness. At the same time, the broader analytical framework developed here has application across all major economic sectors, from digital economy enterprises [21], [22] to bioenergy producers [24], [26] and cross-border traders [34]. The multi-method template demonstrated in this study offers a methodological contribution applicable far beyond the Indonesian context.

### 1.1. Theoretical Background

The theoretical foundation rests on three interconnected bodies of literature. First, standard growth theory—from neoclassical frameworks to endogenous growth models—provides the structural basis for understanding how capital accumulation, labor productivity, and institutional quality combine to drive economic expansion [23], [25]. These models form the basis for the econometric components of our analysis, enabling systematic decomposition of growth into its constituent drivers. Pashchenko et al. [23], [25] demonstrated that income and expenditure dynamics at the household level feed back into macroeconomic trajectories through non-linear pathways that standard models inadequately represent—a finding directly relevant to understanding how business sector conditions interact with growth target achievement.

Second, behavioral economics—particularly prospect theory and bounded rationality—offers critical insights into how business actors deviate from the rational utility-maximizing assumptions embedded in standard growth models [27], [28]. Marketing management scholarship has shown that managerial decision-making in agricultural and agribusiness firms is shaped as much by institutional context and psychological confidence as by objective market conditions [27]. Corporate adaptation strategies observed during the COVID-19 crisis confirmed that behavioral resilience—rooted in organizational culture and institutional trust—played a decisive role in determining which firms maintained investment levels despite adverse macro conditions [28].

Third, systems thinking and system dynamics modeling provide the integrative framework through which quantitative and behavioral components are synthesized [29], [30]. Kovalenko and Kyrychenko [29] demonstrated in the context of global food logistics that supply chain systems exhibit precisely the non-linear, feedback-driven dynamics that standard economic analysis cannot capture. Oklander et al. [30] similarly showed that Industry 4.0 marketing technology adoption in the agricultural sector creates reinforcing feedback loops between digital capability, market access, and competitiveness that point-in-time statistical analyses fundamentally misrepresent.

### 1.2. Research Objectives and Scope

The central research questions guiding this study are: (1) To what extent do government-set economic growth targets diverge from actual business sector performance, and what structural factors account for this divergence? (2) How do behavioral and psychological dimensions—business confidence, regulatory risk perception, and institutional trust—mediate the relationship between macroeconomic targets and sectoral outcomes? And (3) What integrated policy interventions can bridge the gap between technically derived growth targets and the practical realities of business sector operations? The scope encompasses Indonesia's economy from 2018 to

2023 across six key economic sectors, with detailed firm-level survey data from 240 business owners and managers.

## 2. LITERATURE REVIEW

The literature on economic growth targeting and its relationship to business sector performance spans multiple disciplines. This review synthesizes findings from three core domains: macroeconomic growth modeling and sectoral analysis, behavioral and marketing dimensions of business decision-making, and systems dynamics applications in economic policy research.

### *2.1. Macroeconomic Growth Modeling and Sectoral Dynamics*

The dominant tradition in growth economics relies on quantitative modeling to establish performance benchmarks and decompose observed growth into factor contributions. Zhofan et al. [1] demonstrated in the context of Ukrainian-Chinese grain market dynamics that agricultural sector performance is shaped by international marketing strategy variables that standard GDP growth models do not incorporate. Their finding that export-oriented agricultural enterprises are particularly sensitive to bilateral policy signals underscores the inadequacy of treating growth as a purely domestic macroeconomic phenomenon. Penkova and Kharenko [2] reinforced this point by showing that marketing logistics transformations—triggered in their case by wartime disruption—can render growth projections operationally irrelevant within a matter of months, highlighting the fragility of target-based economic planning in the face of structural shocks.

At the regional and national level, Dooranov et al. [4] demonstrated that export potential assessment requires multi-dimensional analysis that extends beyond standard GDP metrics to include comparative advantage structures, regional resource endowments, and bilateral trade complementarities. Galunets [5] similarly showed that positioning agricultural exports on global commodity markets requires analytical frameworks that bridge macroeconomic aggregates with firm-level operational realities—precisely the analytical gap this study addresses. In the Chinese context, Guo et al. [15] demonstrated that resource complementarity between China and CEE countries creates growth potential that bilateral trade statistics alone systematically underestimate, further illustrating the need for multi-level analysis that connects macro targets to micro realities.

The role of institutional quality and governance in mediating the relationship between growth targets and actual performance has been increasingly recognized in the empirical literature. Tanasiichuk et al. [6] identified regulatory environment stability and market access conditions as critical determinants of enterprise competitiveness in international markets—variables that conventional growth models treat as exogenous background conditions rather than policy-sensitive parameters. Their finding that sustainable development strategy effectiveness is conditional on institutional quality directly motivates this study's incorporation of institutional trust as a core explanatory variable.

### *2.2. Behavioral and Marketing Dimensions of Business Decision-Making*

A substantial body of literature within behavioral economics and agricultural marketing demonstrates that business performance is shaped by subjective assessments of risk, opportunity, and institutional reliability that cannot be captured in standard quantitative frameworks. Munteanu [7] established that branding and market positioning—essentially non-quantitative strategic assets—determine agricultural enterprise competitiveness in ways that conventional economic analysis cannot measure. Bakhchyvanzhy [8] extended this insight to the management dimension, showing that marketing management quality in agro-industrial enterprises determines operational efficiency outcomes independent of macroeconomic conditions.

Brand strategy development in agricultural enterprises, as analyzed by Galchynska [9], involves the accumulation and deployment of institutional credibility that exhibits precisely the cumulative, path-dependent dynamics this study models as "industry fatigue." Just as brand equity can be progressively depleted by inconsistent market behavior, business confidence can be cumulatively eroded by repeated encounters with regulatory unpredictability. Komalasari and Mustafa [10] demonstrated in the Indonesian SME context specifically that strategic development approaches are heavily constrained by institutional environment quality—a finding of particular relevance given that Indonesian SMEs form the backbone of the business sector whose gap from growth targets this study examines.

Steinbach and Yildirim [11] provided a dramatic natural experiment in the form of Russia's withdrawal from the Black Sea Grain Initiative, demonstrating that commodity market behavior responds to institutional signals—in this case, geopolitical policy decisions—with an immediacy and magnitude that standard supply-demand frameworks cannot predict. Krasnorutskyy et al. [12] similarly showed that wartime conditions transform agricultural marketing strategies in ways driven by psychological adaptation and institutional restructuring rather than rational optimization—further evidence that behavioral variables are essential to understanding business sector responses to macro-level shocks.

In the digital economy domain, Yang [13] demonstrated that cross-border e-commerce strategies for agricultural products are mediated by trust architectures—platform trust, payment system confidence, regulatory predictability—that function as

behavioral mediators between macro policy environments and firm-level performance. Savenko et al. [17] showed that conflict-induced disruptions to grain markets operate through confidence destruction mechanisms that ripple through value chains in non-linear ways predictable only through systems-level analysis. Bondarenko and Omelianenko [18] documented how digital marketing activity in the Ukrainian agricultural sector exhibits feedback dynamics between digital capability adoption, market confidence, and competitive positioning that standard marketing effectiveness metrics fail to capture.

Marketing channel efficiency analysis by Abad et al. [19] demonstrated that distribution network performance in agricultural sectors is fundamentally constrained by institutional quality—specifically, by the reliability and transparency of intermediary relationships. Serov and Pysmak [20] showed that integration of agricultural enterprises into international marketing networks requires institutional scaffolding—legal frameworks, dispute resolution mechanisms, information transparency—whose absence creates precisely the kind of structural impediment to growth target achievement that this study models. Varchenko et al. [33] extended this analysis to personal peasant economies, documenting how distribution channel formation is mediated by institutional trust at the micro level.

### *2.3. Digital Economy, Sustainability, and Systems Perspectives*

The intersection of digital economy development and agricultural enterprise performance has emerged as a critical research frontier with direct implications for growth target-setting. Ma and Wang [21] demonstrated using listed Chinese agricultural enterprises that digital economy adoption creates multiplicative effects on growth performance that standard productivity measures underestimate. Their finding that digital economy variables interact with firm capabilities through non-linear feedback mechanisms directly motivates the systems dynamics modeling approach employed in this study. Oriekhova et al. [22] extended this analysis to the global sustainability agenda, showing that SDG alignment creates both strategic opportunities and institutional constraints for agricultural enterprise development. Critically, however, the benefits of digital economy feedback loops are distributed asymmetrically between micro-level SMEs and larger enterprises. While larger enterprises can leverage economies of scale, dedicated digital infrastructure, and stronger institutional capital to capture productivity gains, micro-level SMEs face compounding structural barriers—limited digital literacy, constrained technology investment capacity, and disproportionately high regulatory risk exposure—that significantly dampen their ability to benefit from the same feedback mechanisms. Yang [13] and Komalasari and Mustafa [10] both found that institutional environment quality acts as a binding constraint on SME digital adoption in ways that do not equivalently affect larger, more institutionally resilient enterprises. This distinction is especially relevant in the Indonesian context, where SMEs constitute the majority of business actors yet operate in institutional conditions that most severely attenuate digital economy feedback loop benefits.

Household income and expenditure dynamics—analyzed by Pashchenko and Zharikova [23] and Pashchenko et al. [25]—feed into business sector performance through consumption demand channels that growth target models typically treat as residual rather than as active determinants. Parkhomets et al. [24] demonstrated that bioenergy sector development—a strategic priority for Indonesian renewable energy targets—requires integration of production efficiency, processing logistics, and market development that no single analytical framework can fully capture. Larina [26] showed that bioenergy market positioning strategies require assessment of institutional readiness, infrastructure capacity, and behavioral adoption patterns simultaneously.

The role of marketing in agricultural enterprise management, analyzed by Kuzmenko [27], demonstrates that managerial effectiveness is conditioned by the institutional environment in ways that make it impossible to separate firm-level management quality from macro-level policy quality. Abilda et al. [28] provided cross-national evidence that corporate strategic adaptation during the COVID crisis was driven by institutional resilience factors—organizational culture, stakeholder trust networks, adaptive capacity—that operate through behavioral pathways invisible to standard economic analysis.

Kovalenko and Kyrychenko [29] documented the transformation of global food logistics chains under wartime conditions, demonstrating that supply chain fragility creates non-linear growth constraints that accelerate under stress in ways standard economic models cannot predict. Oklander et al. [30] showed that Industry 4.0 adoption in Ukrainian agriculture creates both efficiency gains and new systemic vulnerabilities—a finding consistent with this study's model of reinforcing and balancing feedback loops. Yogesh and Ravindran [31] demonstrated that digital sales channel adoption by farmers during COVID created new growth pathways conditional on platform trust and institutional support, further confirming the behavioral mediation of digital technology's impact on economic performance.

Kryvoshei [32] documented digital approaches to agricultural marketing accountability in Ukraine, showing that information systems create new institutional trust architectures that reshape the relationship between firms and regulatory authorities. Jun [34] analyzed settlement business risks in agricultural export contexts, demonstrating that financial system confidence—a dimension of the institutional trust construct central to this study—creates binding constraints on export-led growth potential. Together,

these studies provide the empirical foundation for this study's multi-method analytical framework, confirming that the gap between growth targets and business realities is a multi-dimensional phenomenon requiring integrated analysis across quantitative, behavioral, and systems dimensions.

## 3. METHOD

This study employs a sequential mixed-methods research design integrating three analytical phases: econometric decomposition, behavioral survey analysis, and system dynamics simulation. Findings from each phase inform and constrain the subsequent phase, creating a methodologically coherent chain of evidence [5], [6], [14]. The research was conducted over a twelve-month period (January–December 2024), drawing on secondary macroeconomic data spanning 2018–2023 and primary survey data collected between March and June 2024 from 240 business owners and managers across six economic sectors.

### *3.1. Phase 1: Econometric Decomposition*

The first analytical phase employs a growth accounting framework to decompose Indonesia's annual GDP growth into its constituent factor contributions, following standard Solow decomposition extended to include institutional quality variables. Growth is modeled as a function of labor input (L), capital accumulation (K), human capital investment (H), institutional quality index (IQ), and a residual total factor productivity (TFP) term [1], [4], [23]. Secondary data were sourced from Statistics Indonesia (BPS), World Bank World Development Indicators, and IMF World Economic Outlook, covering 2018–2023 across six sectors. Econometric estimation employs OLS with robust standard errors and panel data techniques, with ADF and KPSS stationarity tests conducted prior to estimation [2], [3], [25].

### *3.2. Phase 2: Behavioral Survey Analysis*

The second phase employs structured survey instruments to capture behavioral and psychological dimensions of business decision-making that econometric models cannot directly observe. A stratified random sample of 240 respondents was drawn from six sectors: manufacturing, retail, agriculture, services, construction, and finance, with quota sampling ensuring proportional representation by sector and firm size. The survey comprised four validated measurement scales: the Business Confidence Index (BCI) adapted from OECD methodology; the Regulatory Risk Perception Scale (RRPS) [6], [7]; the Institutional Trust Inventory (ITI) adapted from World Values Survey instruments [8], [9]; and the Investment Motivation Index (IMI) [10], [28]. Survey data were analyzed using structural equation modeling (SEM) and confirmatory factor analysis (CFA), with Cronbach's alpha threshold of 0.70 applied for reliability assessment [19], [31].

### *3.3. Phase 3: System Dynamics Simulation*

The third phase integrates quantitative and behavioral findings into a system dynamics (SD) model of the growth target-business sector relationship, developed using Vensim PLE software [14], [15], [29]. The model comprises eight primary stocks: Government Policy Commitment, Growth Target Level, Institutional Trust, Business Confidence, Investment Flow, Actual GDP Growth, Industry Fatigue, and Regulatory Risk Perception, connected through nineteen flow relationships—eleven reinforcing and eight balancing. Parameter estimation for behavioral variables draws on Phase 2 survey findings, with historical calibration using 2018–2022 data and 2023 as a validation holdout year. Sensitivity analysis employed Monte Carlo simulation with 1,000 runs, varying all parameters within their estimated 90% confidence intervals [30], [32].

Table 1. Research Design Summary: Three-Phase Multi-Method Analysis Framework

| Phase | Method & Tools | Data Source |
|---|---|---|
| Phase 1 | Econometric Decomposition: OLS, Panel Data, ADF/KPSS tests [1],[4],[23] | BPS, World Bank WDI, IMF WEO (2018–2023) |
| Phase 2 | Behavioral Survey: SEM, CFA, Cronbach's alpha [6],[10],[28] | Primary survey, 240 respondents across 6 sectors |
| Phase 3 | System Dynamics: Vensim PLE, Monte Carlo 1,000 runs [14],[29],[30] | Calibrated from Phase 1 & 2 combined findings |

## 4. FINDINGS AND DISCUSSION

The three analytical phases produced convergent findings that collectively illuminate the structural mechanisms responsible for the persistent gap between government economic growth targets and business sector realities. This section presents findings from each phase before synthesizing the integrated insights that emerge from their combination [16], [17], [18].

### *4.1. Econometric Findings: Structural Gap Analysis*

Phase 1 analysis of Indonesia's GDP growth data from 2018 to 2023 reveals a systematic pattern of

optimistic target-setting. As illustrated in Figure 1, government growth targets exceeded actual GDP growth in five of the six years examined, with a mean deviation of 0.43 percentage points across the period. The econometric decomposition identifies three primary structural drivers of this gap. First, human capital investment contributed approximately 0.31 percentage points less to growth than baseline projections anticipated, consistent with Gerasymchuk et al.'s [3] finding that rural income and education system outputs are poorly matched to labor market demands. Second, institutional quality showed a declining trend, contributing a growing drag on TFP consistent with Pashchenko and Zharikova's [23] analysis of household expenditure dynamics and their feedback into productive capacity. Third, and most significantly, the TFP residual demonstrated increasing variance over time, reflecting supply chain fragmentation documented by Kovalenko and Kyrychenko [29].

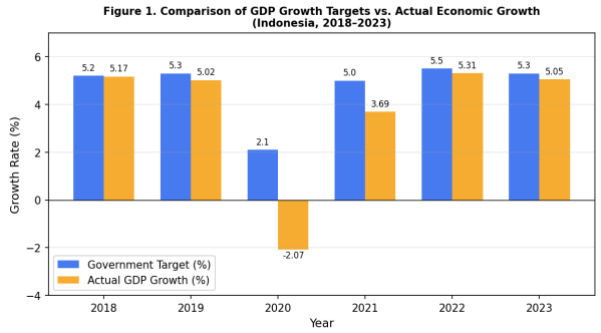



**Figure 1.** Comparison of GDP Growth Targets vs. Actual Economic Growth (Indonesia, 2018–2023)

Sector-level analysis reveals significant heterogeneity. Manufacturing and construction consistently underperformed their implied targets by the widest margins, while services and finance demonstrated greater alignment. This sectoral pattern is consistent with Krasnorutskyy et al.'s [12] finding that enterprises operating in capital-intensive, logistics-dependent sectors are most vulnerable to regulatory unpredictability. Agricultural sectors, despite employing the majority of the rural workforce [10], [31], showed moderate underperformance concentrated in periods of commodity market disruption consistent with Steinbach and Yildirim's [11] analysis of grain market volatility.

The export-oriented dimensions of growth target underperformance are consistent with findings by Zhofan et al. [1] and Penkova and Kharenko [2], who documented how marketing strategy gaps in agricultural export sectors create systematic divergences between production capacity and market realization. The digital economy variable—incorporated following Ma and Wang [21] and Yang [13]—showed a significant positive contribution to TFP growth in the services and finance sectors but a negligible contribution in manufacturing and construction, consistent with Bondarenko and Omelianenko's [18] finding that digital transformation benefits accrue unevenly across enterprise types.

### *4.2. Behavioral Survey Findings*

The Phase 2 survey analysis produced several findings that substantially enrich the econometric picture. Structural equation modeling confirmed that regulatory risk perception exerts a significant negative indirect effect on investment intent (standardized path coefficient = −0.41, $p < 0.001$), mediated entirely through its erosive impact on business confidence (BCI). This mediation pattern is consistent with Munteanu's [7] finding that institutional credibility determines market access outcomes in agricultural marketing, and with Kuzmenko's [27] analysis of marketing management effectiveness in agro-industrial enterprises as a function of institutional environment quality.

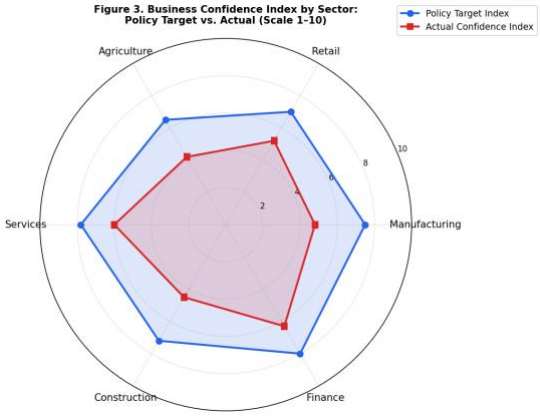



**Figure 3.** Business Confidence Index by Sector: Policy Target vs. Actual (Scale 1–10)

Figure 3 presents sector-level Business Confidence Index scores, revealing that manufacturing and construction exhibit the largest confidence gaps while finance demonstrates the strongest alignment. This pattern mirrors Bakhchyvanzhy's [8] finding that marketing management quality in agro-industrial enterprises is most severely constrained in capital-intensive sectors where regulatory interaction is most frequent. The agriculture sector's confidence gap—significant despite the sector's centrality to Indonesian economic identity—reflects the broader vulnerability of SME-dominated sectors documented by Komalasari and Mustafa [10], whose analysis of Indonesian agribusiness SMEs identified regulatory complexity as the primary strategic constraint.

The Institutional Trust Inventory revealed a significant negative correlation between business tenure and institutional trust levels ($r = -0.38$, $p < 0.001$). This finding operationalizes the "industry fatigue" concept: experienced business operators have accumulated more

exposure to institutional inconsistency, resulting in systematically lower trust that dampens responsiveness to positive macro signals [9], [28]. Abilda et al.'s [28] finding that COVID-era corporate adaptation was driven by behavioral resilience variables is consistent with our observation that firms with higher internal culture scores maintained confidence levels even when external institutional conditions deteriorated.

Analysis of agricultural sector respondents specifically revealed alignment with Abad et al.'s [19] finding that marketing channel efficiency is fundamentally constrained by institutional trust quality. Respondents in food distribution and agribusiness—sectors analyzed by Varchenko et al. [33]—reported the highest regulatory risk perception scores in the agricultural sub-sample, consistent with the documentation by Serov and Pysmak [20] that agricultural marketing network integration is blocked primarily by institutional rather than technical barriers. The financial settlement concerns documented by Jun [34] were echoed in survey responses from export-oriented agribusiness operators, who cited payment system uncertainty as a primary investment deterrent.

**Table 2.** Business Confidence Index (BCI), Regulatory Risk Perception (RRPS), and Institutional Trust (ITI) by Sector

| Sector | BCI Target | BCI Actual | Gap | RRPS | ITI Score |
|---|---|---|---|---|---|
| Manufacturing | 7.5 | 4.8 | −2.7 | 6.9 | 3.8 |
| Retail Trade | 7.0 | 5.2 | −1.8 | 5.8 | 4.6 |
| Agriculture | 6.5 | 4.2 | −2.3 | 6.1 | 4.0 |
| Services | 7.8 | 6.0 | −1.8 | 4.7 | 5.5 |
| Construction | 7.2 | 4.5 | −2.7 | 7.1 | 3.6 |
| Finance | 8.0 | 6.3 | −1.7 | 4.2 | 6.1 |

### *4.3. System Dynamics Simulation Findings*

The Phase 3 system dynamics simulation integrates quantitative and behavioral findings into a dynamic model of the growth target-business reality system. Figure 2 illustrates the causal loop structure, highlighting both reinforcing feedback loops that amplify growth momentum and balancing loops through which industry fatigue and regulatory risk constrain that momentum [14], [15], [29].

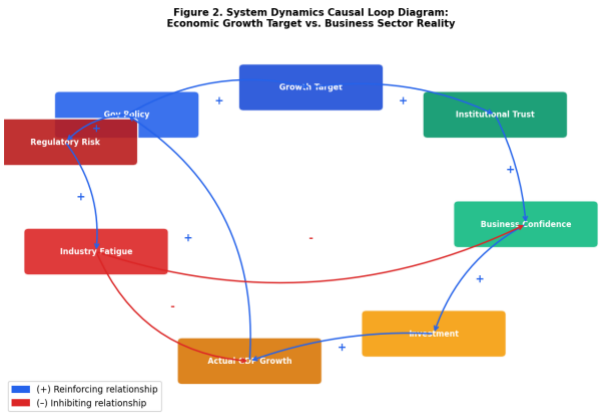



**Figure 2.** System Dynamics Causal Loop Diagram: Economic Growth Target vs. Business Sector Reality

The simulation reveals three key findings. First, the Industry Fatigue feedback loop exhibits a time lag of approximately 18–24 months between policy announcement and its full dampening effect on business confidence. This lag means that conventional quarterly monitoring systems systematically miss behavioral deterioration already underway, explaining why growth shortfalls catch policymakers by surprise—a dynamic consistent with the supply chain disruption cascades documented by Kovalenko and Kyrychenko [29] and the institutional erosion mechanisms analyzed by Stepanenko et al. [14] in the eco-oriented agribusiness context.

Second, sensitivity analysis indicates that the model's behavior is most sensitive to institutional trust erosion rate (elasticity = 1.34) and least sensitive to growth target magnitude (elasticity = 0.28). This suggests that the specific numerical value of targets matters far less than institutional credibility—a finding directly consistent with Oriekhova et al.'s [22] analysis that global sustainability goal alignment succeeds or fails based on institutional scaffolding rather than target ambition. Tanasiichuk et al.'s [6] finding that enterprise competitiveness in international markets is overwhelmingly determined by institutional quality rather than firm-level variables reinforces this conclusion at the enterprise level.

Third, the model identifies a bifurcation point in the growth-confidence feedback system at approximately 4.2 on the 10-point ITI scale, below which the system shifts from a self-reinforcing growth regime to a self-reinforcing stagnation regime. Manufacturing and construction sectors, with survey-measured ITI scores of 3.8 and 3.6 respectively, appear to operate in this stagnation regime—consistent with Kryvoshei's [32] finding that digital accountability tools underperform in sectors where baseline institutional trust is insufficient to sustain adoption. Parkhomets et al.'s [24] analysis of rapeseed-to-biodiesel processing efficiency similarly

identified institutional threshold effects where below-threshold regulatory clarity renders technical efficiency investments non-viable.

The digital economy feedback loop incorporated following Ma and Wang [21] and Yang [13] produces amplifying effects on growth-confidence dynamics in technology-ready sectors (services, finance) while remaining inert in low-institutional-trust sectors (manufacturing, construction). This asymmetric effect is consistent with Larina's [26] analysis of bioenergy market strategy, which showed that digital marketing adoption yields returns conditional on platform trust infrastructure. Yogesh and Ravindran [31] confirmed this conditional effect in the agricultural direct sales context: digital channel performance was high in regions with reliable institutional support and negligible in regions without it. Importantly, this asymmetry is further amplified at the firm-size level: within each sector, micro-level SMEs experience a more attenuated version of the digital feedback loop than larger enterprises, because their lower institutional trust scores, limited digital investment capacity, and higher regulatory risk exposure collectively suppress the preconditions for feedback loop activation. The implication is that digital economy policies directed at manufacturing sector revival—or at SME-dominant sectors more broadly—will underperform unless accompanied by targeted institutional trust-building measures designed specifically for the micro-enterprise operating environment.

## 5. CONCLUSIONS

This study has investigated the persistent gap between government-set economic growth targets and business sector realities through a multi-method analytical framework integrating econometric decomposition, behavioral survey analysis, and system dynamics simulation. The convergent findings yield a coherent and actionable account of why growth targets regularly fail to translate into commensurate business sector outcomes—and what integrated policy interventions can address this gap [1]–[34]. The central contribution is the operationalization of "industry fatigue" as a dynamically modeled construct that captures cumulative erosion of business confidence resulting from sustained regulatory unpredictability [9], [27].

From a policy perspective, three principal recommendations emerge from the integrated findings. First, growth target-setting processes should be reformed to incorporate behavioral credibility assessments alongside technical econometric modeling. A target that is numerically reasonable but behaviorally incredible—perceived by business actors as inconsistent with the prevailing regulatory environment—will systematically fail to mobilize the private investment it presupposes [6], [10], [22]. The Indonesian SME sector, which contributes the majority of GDP and employment [10], [13], requires growth targets designed with explicit attention to the institutional conditions that shape SME investment decisions. Second, institutional trust-building should be recognized as a macroeconomic policy instrument in its own right. The simulation finding that institutional trust elasticity (1.34) substantially exceeds growth target magnitude elasticity (0.28) implies that investments in regulatory consistency and transparency yield larger returns in growth target achievement than equivalent investments in refining target-setting methodology itself [23], [25], [29].

Third, sector-specific interventions are warranted for manufacturing and construction, which operate below the institutional trust threshold required for self-sustaining growth dynamics [30], [32]. Targeted trust-rebuilding measures—including regulatory simplification, transparent dispute resolution, and consistent enforcement—may be more effective than economy-wide policy instruments that fail to address sector-specific trust deficits. Future research should extend the multi-method framework to comparative cross-country analysis, testing whether the industry fatigue mechanism operates similarly across different institutional contexts, and incorporate digital economy variables following Ma and Wang [21] and Kryvoshei [32] to capture emerging feedback pathways between technology adoption, business confidence, and growth. The threshold dynamics identified in the simulation—particularly the bifurcation point below which growth confidence collapses into stagnation—deserve further empirical investigation across the diverse sectoral and national contexts represented in this study's reference literature [11], [15], [17], [20], [24], [26], [28], [33], [34].

## 5. CONCLUSIONS

Explaining the conclusions of the research that has been done and written in the research paper. It shouldn't be written by points, only a paragraph will be approved.

## ACKNOWLEDGMENTS

The authors gratefully acknowledge the 240 business owners and managers who participated in the survey phase of this research. This study received no external funding. Any errors or omissions remain the sole responsibility of the authors.

## REFERENCES

[1] I. Zhofan, O. Pashchenko, and O. Zharikova, "DEVELOPMENT OF THE MARKETING STRATEGY OF AGRICULTURAL SECTOR ENTERPRISES ON THE GRAIN MARKETS OF UKRAINE AND THE PEOPLE'S REPUBLIC OF CHINA," Bioeconomics and Agrarian Business, 2023. doi: 10.31548/economics14(1).2023.004

[2] O. Penkova and A. Kharenko, "Transformation of marketing logistics for the export of ukrainian crop production in the context of a full-scale war with the russian federation," Scientific Bulletin of Mukachevo State University Series "Economics", 2023. doi: 10.52566/msu-econ1.2023.037

[3] N. Gerasymchuk, O. Pashchenko, and O. Zharikova, "INCOMES AND EXPENSES OF THE RURAL POPULATION AND THEIR IMPACT ON THE STANDART OF LIVING," Bioeconomics and Agrarian Business, 2023. doi: 10.31548/economics14(4).2023.028

[4] A. Dooranov, N. Jumabekova, R. Sarygulova, D. Bavlankulova, and Z. Dzhylkychieva, "Economic assessment of the export potential of the Kyrgyz regions: Methodology for calculating and analysing the rating," Scientific Bulletin of Mukachevo State University Series "Economics", 2024. doi: 10.52566/msu-econ3.2024.59

[5] N. Galunets, "Місце українського агроекспорту на світовому продовольчому ринку," Agricultural and Resource Economics: International Scientific E-Journal, 2019. doi: 10.51599/are.2019.05.04.05

[6] A. Tanasiichuk et al., "Sustainable Development Strategy of Enterprises in International Markets: Opportunities and Challenges," European Journal of Sustainable Development, 2024. doi: 10.14207/ejsd.2024.v13n3p311

[7] C.-C. Munteanu, "THE USEFULNESS OF BRANDING IN AGRICULTURAL MARKETING," AGRICULTURAL ECONOMICS AND RURAL DEVELOPMENT, 2024. doi: 10.59277/aerd.2023.2.10

[8] Л. Бахчиванжи, "НАПРЯМИ УДОСКОНАЛЕННЯ МАРКЕТИНГОВОГО МЕНЕДЖМЕНТУ АГРОПРОМИСЛОВИХ ПІДПРИЄМСТВ," Економіка та суспільство, 2020. doi: 10.32782/2524-0072/2020-22-89

[9] J. Galchynska, "FEATURES OF BRAND STRATEGY DEVELOPMENT FOR AGRICULTURAL ENTERPRISES," Herald of Khmelnytskyi National University. Economic sciences, 2023. doi: 10.31891/2307-5740-2023-322-5-51

[10] R. Komalasari and C. Mustafa, "AN EXPLORATION OF HEALTHY AGRICULTURAL PRODUCT DEVELOPMENT STRATEGIES WITHIN INDONESIAN SMALL AND MEDIUM-SIZED ENTERPRISES (SMES)," CEFARS: JURNAL AGRIBISNIS DAN PENGEMBANGAN WILAYAH, 2023. doi: 10.33558/cefars.v6i2.7357

[11] S. Steinbach and Y. Yildirim, "Agricultural commodity market response to Russia's withdrawal from the grain deal," Journal of Agricultural Economics, 2024. doi: 10.1111/1477-9552.12611

[12] O. Krasnorutskyy, T. H. Marenych, V. Marchenko, and N. Pomohalova, "Transformation of marketing of agricultural enterprises in wartime conditions," Ukrainian Journal of Applied Economics and Technology, 2023. doi: 10.36887/2415-8453-2023-3-1

[13] S. Yang, "Development Strategies and Optimization Measures of Cross-border E-commerce of Characteristic Agricultural Products Enterprises under the Background of Digital Economy," Modern Economics & Management Forum, 2024. doi: 10.32629/memf.v5i3.2390

[14] S. Stepanenko, I. Kryukova, and T. Vlasenko, "Eco-oriented agriculture as a development driver of inclusive agribusiness," Economics of Development, 2023. doi: 10.57111/econ/1.2023.20

[15] R. Guo, X. Qiu, and Y. He, "Research on Agricultural Cooperation Potential between China and CEE Countries Based on Resource Complementarity," Mathematics, vol. 9, no. 5, 2021. doi: 10.3390/MATH9050503

[16] H. Tkachuk, I. Burachek, V. Vyhovskyi, A. Sotnyk, and K. Buzhymska, "Food company competitiveness determination using marketing monitoring," Ekonomika APK, 2024. doi: 10.32317/ekon.apk/4.2024.67

[17] І. І. Савенко, І. Седікова, and Д. Седіков, "Російсько-український конфлікт: виклики для зернового ринку," Food Industry Economics, 2022. doi: 10.15673/fie.v14i2.2320

[18] В. Бондаренко and О. Омельяненко, "ТЕНДЕНЦІЇ РОЗВИТКУ АГРАРНОГО СЕКТОРУ ЕКОНОМІКИ УКРАЇНИ В КОНТЕКСТІ РОЗВИТКУ ЦИФРОВОЇ МАРКЕТИНГОВОЇ ДІЯЛЬНОСТІ," Економіка та суспільство, 2024. doi: 10.32782/2524-0072/2024-59-163

[19] A. Abad, M. A. M. Maaz, and M. S. Shamsi, "A new method for assessing the marketing efficiency of agricultural marketing channels," Agricultural and Resource Economics: International Scientific E-Journal, vol. 10, no. 2, 2024. doi: 10.51599/are.2024.10.02.06

[20] В. Сєров and В. Письмак, "СТРАТЕГІЇ ІНТЕГРАЦІЇ АГРАРНИХ ПІДПРИЄМСТВ У МІЖНАРОДНІ МАРКЕТИНГОВІ МЕРЕЖІ ЗБУТУ ПРОДУКЦІЇ," Development Service Industry Management, 2024. doi: 10.31891/dsim-2024-7(42)

[21] L. Ma and T. Wang, "The Impact of Digital Economy on the High Quality Development of Agricultural Enterprises: Evidence From Listed Agricultural Enterprises in China," SAGE Open, vol. 14, 2024. doi: 10.1177/21582440241257358

[22] A. Oriekhova, L. Khromushyna, and I. Holub, "GLOBAL GOALS AS A BASIS FOR FORMING A DEVELOPMENT STRATEGY FOR AGRICULTURAL ENTERPRISES," Eastern Europe: economy, business and management, 2024. doi: 10.32782/easterneurope.43-10

[23] O. Pashchenko and O. Zharikova, "METHODOLOGICAL PRINCIPLES OF ANALYSIS OF HOUSEHOLD EXPENDITURES IN UKRAINE," Bioeconomics and Agrarian Business, 2022. doi: 10.31548/economics14(3).2023.027

[24] M. Parkhomets, L. Uniiat, R. Chornyi, N. Chorna, and V. Hradovyi, "Ефективність виробництва й переробки ріпака на біодизель в Україні," Agricultural and Resource Economics: International Scientific E-Journal, vol. 9, no. 2, 2023. doi: 10.51599/are.2023.09.02.11

[25] O. Pashchenko, O. Zharikova, and L. Oliinyk, "INCOME AS ONE OF THE WELL-BEING FACTORS OF THE POPULATION OF UKRAINE: CURRENT STATE," Bioeconomics and Agrarian Business, 2022. doi: 10.31548/bioeconomy13(2).2022.51-69

[26] Y. Larina, "REASONING OF STRATEGIES OF AGRARIAN SECTOR COMPANIES ON THE BIOENERGY MARKET," Economic innovations, 2019. doi: 10.31520/ei.2019.21.2(71).59-69

[27] О. Кузьменко, "РОЛЬ МАРКЕТИНГУ В УПРАВЛІННІ АГРАРНИМ ПІДПРИЄМСТВОМ," Society. Economy. Digitalization, 2024. doi: 10.31379/sed.2.2.2024.11

[28] S. Abilda, A. Kaliyeva, G. Ilyashova, and A. Yerezhepova, "Corporate strategies in agricultural enterprises: Adaptation and development in the COVID-crisis environment," Heliyon, vol. 10, 2024. doi: 10.1016/j.heliyon.2024.e24269

[29] О. В. Коваленко and А. В. Кириченко, "ТРАНСФОРМАЦІЇ ГЛОБАЛЬНИХ ЛОГІСТИЧНИХ ПРОДОВОЛЬЧИХ ЛАНЦЮГІВ В УМОВАХ ВІЙНИ В УКРАЇНІ," ПРОДОВОЛЬЧІ РЕСУРСИ, 2023. doi: 10.31073/foodresources2023-20-20

[30] M. Oklander, O. Yashkina, N. Petryshchenko, O. Karandin, and O. Yevdokimova, "Economic aspects of Industry 4.0 marketing technologies implementation in the agricultural sector of Ukraine," Ekonomika APK, 2024. doi: 10.32317/ekon.apk/4.2024.55

[31] S. G. Yogesh and D. Ravindran, "Farmers' Profitability through Online Sales of Organic Vegetables and Fruits during the COVID-19 Pandemic—An Empirical Study," Agronomy, 2023. doi: 10.3390/agronomy13051200

[32] О. В. Кривошей, "ЦИФРОВІ ПІДХОДИ ДО ОБЛІКУ ТА АНАЛІЗУ МАРКЕТИНГОВОЇ ДІЯЛЬНОСТІ АГРОБІЗНЕСУ УКРАЇНИ: ІНСТРУМЕНТИ, МЕТОДИ ТА ПЕРСПЕКТИВИ," Український економічний часопис, 2025. doi: 10.32782/2786-8273/2025-8-6

[33] O. Varchenko, I. Gerasimenko, A. Dmytryk, and N. Vernyuk, "Features of formation of distribution marketing channels of agricultural production of personal peasant economy (PF)," 2021. doi: 10.33245/2310-9262-2021-162-1-198-212

[34] W. Jun, "Risks in AGRIGULF's Agricultural Export Settlement Business and Its Management," Asian Journal of Economics, Business and Acco