

Effects of Leadership Styles and Strategic Agility on organizational performance with Mediating Role of Employee Engagement: A Systematic Review and Meta-Analysis of Ethiopian State-Owned Enterprises

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Abstract

This is a systematic review and meta-analysis study, which summarized and analyzed empirical data on the correlation of leadership, strategic agility, employee engagement, and performance of state-owned enterprises (SOEs) in Ethiopia. In accordance with the PRISMA guidelines, the identification, screening, and synthesis of the relevant studies published between 2015 and 2024 allowed obtaining the combined sample of $n = 658$ respondents representing the most important areas of the SOE industry, i. e., energy, telecommunications, transport, banking, and municipal services. Random effects meta-analysis was used to provide estimates of the pooled effect sizes and to test how employee engagement mediates the effect. The results showed a strong positive value of leadership on engagement of employees ($r = 0.56$) and moderate value of strategic agility on engagement ($r = 0.49$). The relationship between employee engagement and organizational performance ($r = 0.61$) demonstrated that it was the core as the psychological and behavioural channel between leadership and agility and performance outcomes. The heterogeneity analysis showed that these relationships were moderated by the type of sector and leadership style, and funnel plot evaluation implied the absence of publication bias. The findings contribute to a holistic approach to a combination of leadership theory, dynamic capabilities, and engagement models in the Ethiopian context of the public sector. The research concludes that to achieve sustainable SOE performance based on engagement-focused leadership development and agility-building practices as opposed to structural reforms are necessary. The results can be used in the literature of management studies in the public sector and evidence-based guidance to policymakers and practitioners in need to improve the quality of services, efficiency, and value to the population among the emerging economy SOEs.

Keywords: leadership, strategic agility, employee engagement, organizational performance, state-owned enterprises, Ethiopia, meta-analysis, PRISMA

1. Introduction

1.1 Background and Context of Ethiopian State-Owned Enterprises (SOEs)

The basis of the model of development of the country and up to now, the dominance of the state in strategic areas of the country such as telecommunications, energy, logistics and transport, financial services, manufacturing and large-scale infrastructure and so on, the state has traditionally exercised direct ownership and control to mobilize capital, provide vital services and to prioritize the needs of national development. This government-driven strategy allowed the fast growth of the infrastructure and socioeconomic development, but also resulted in the high rates of market concentration, the lack of competitive forces, and the operational inefficiencies that have become the causes of productivity disparities, service quality issues, and increased financial risks. To this, the government has initiated broad-based macroeconomic and structural reforms through the Homegrown Economic Reform agenda, clearly noting that sustainable and inclusive growth is not possible without reforming the performance, governance, and accountability of SOEs. The major reforms involved in these important initiatives are the uniting of major SOE assets and making of Ethiopian Investment Holdings to professionalize the state ownership role, improve management of portfolio, and adopt a more commercially based oversight model, and enacting a new public enterprise law in 2024, making the board accountable, introducing performance-based contracts, and requiring

improved financial disclosure and monitoring mechanisms. Still, numerous Ethiopian SOEs are subsisting on soft budget, have serious debt sustainability problems, and are dependent on government guarantees, imposing massive contingent liabilities on public finance and further restricting efficiency, innovation, and strategic responsiveness. They have inflexible administrative procedures, appointment politics, weak managerial independence, and old incentive systems. The organizational culture and leadership practices are mostly influenced by bureaucratic values and control hierarchy in such organizations that restrain spread of transformational leadership behaviours and compromise the implementation of nimble decision-making and new performance management systems. It is within this dynamic reform environment that the human aspect of change has become an increasingly important factor as both policymakers and practitioners now realize that legal and institutional reforms will not produce any tangible changes unless these are complemented by organizational culture and workforce engagement changes. SOEs in Ethiopia have a huge workforce and diversity whose motivation, psychological empowerment, confidence in leadership, and willingness to change directly affect the quality of service delivery, growth in productivity, and financial outcomes, though the historical management practices based on top-down and low levels of participation have undermined employee engagement and learning and innovation. This has led to Ethiopian SOEs existing in a complicated transitional environment with pressure on reforms, changing governance structures, fiscal austerity demands, as well as increased expectations of commercial feasibility and responsibility, which makes them a particularly relevant empirical context to explore how leadership and strategic agility interact in influencing organizational performance using the critical mediating variable of employee engagement.

1.2 Leadership Challenges and Performance Gaps in Public Sector Organizations

Many organizations in the public sector even in developing and emerging economies still endure endemic leadership issues that manifest into large performance gaps especially in an environment where administrative rules, political priorities and resource constraints influence managerial behaviour more significantly than the market discipline or the choice of citizens, with recent studies demonstrating that bureaucratic complexity and inflexible procedural systems make it difficult to make decisions, increasing the challenge of coordinating organisations and lowering responsiveness to service users thus reducing service quality, efficiency, and organisational learning. The effectiveness of leadership is further limited within the environment of poor transparency and integrity, politicized appointments, obscure procurement, and low accountability, which restricts the effectiveness of merit-based management, demoralizes the employees, and affects the trust of people negatively, which is closely linked to the weakening of the organizational performance. Empirical literature on the governance of public enterprises highlights ambiguity of mandates, low board independence, and the indistinctness of the relationship between the accountability of the political principals and the managers as the restraining factors to strategic leadership that lead to disjointed priorities, limited manager discretion, and a lack of fit between the organizational objectives and the performance measurement system. These obstacles are compounded by a lack of performance-based incentives, ineffective monitoring and evaluation systems, as well as leaders being expected to juggle conflicting political, social, and business goals in an environment where they do not have institutional backing. Leadership weaknesses at the organizational level are also prevalent in terms of poor strategic focus, inadequate empowerment of middle managers, lack of communication, and human resource practices that will not enhance innovation, knowledge sharing, and adaptive capacity. The recent empirical data of the Ethiopian populace in the business field further confirms that the quality of leadership is a decisive factor in motivating and productive employees and that actions associated with vision expression, equity, and encouragement of learning influence engagement rates and discretionary effort, whereas poor leadership has a direct impact on disengagement, employee turnover, and poor performance. The development of dynamic capabilities (change responsiveness and cross-functional coordination) has also been found to be a product of strategic leadership capacity, supporting the perspective that the performance gaps in organizations in the public sector are maintained by the interplay between bureaucratic rigidity, poor governance, and poor accountability, integrity risks, and limited leadership capacity, and that the performance gaps in the organizations can be bridged by leadership approaches that facilitate strategic clarity, ethical behaviour, employee empowerment, and management practices based on engagement.

1.3 Strategic Agility in Emerging Economies

Strategic agility in emerging economies is increasingly conceptualized in recent research as an organization's ability to sense environmental shifts early, make timely strategic decisions, and continuously reconfigure resources and capabilities in contexts characterized by institutional volatility, regulatory uncertainty, and resource constraints. Unlike in stable advanced economies, organizations in emerging markets operate amid rapidly changing policy regimes, infrastructural limitations, and evolving stakeholder expectations, which heighten the need for adaptive strategic behaviour rather than reliance on rigid long-term plans. Contemporary studies grounded in the dynamic capability's perspective emphasize that strategic agility is a higher-order capability encompassing strategic sensitivity, leadership unity, and resource fluidity, enabling firms and public organizations to realign priorities and redeploy assets in response to environmental turbulence. Empirical evidence from emerging-economy manufacturing and service sectors shows that strategic agility has a significant positive influence on sustained organizational performance and can mediate the relationship between technological investment and competitive advantage by accelerating the translation of innovation inputs into market and service outcomes. Research also indicates that the effectiveness of strategic agility is strengthened when combined with complementary orientations such as market orientation, learning capability, and innovation capability, suggesting that agility functions as an integrative mechanism that links external responsiveness with internal renewal processes. In the public sector, which dominates many emerging economies, recent studies highlight that strategic agility enables organizations to overcome hierarchical rigidity and procedural inertia by fostering faster coordination across units, clearer strategic direction, and more responsive governance practices, all of which are critical for improving service delivery and accountability. The emerging literature on agile government further underscores that agility in public organizations is not a one-off reform but a continuous capability-building process involving iterative decision-making, adaptive policy implementation, and the development of flexible organizational structures that can respond to complex and uncertain societal demands. Overall, recently published evidence converges on the view that in emerging economies, strategic agility is a critical determinant of organizational effectiveness because it enhances responsiveness to environmental turbulence, improves the conversion of resources and innovations into performance outcomes, and enables organizations to navigate institutional constraints through rapid sensing, coordinated seizing of opportunities, and ongoing reconfiguration of structures and competencies.

1.4 Role of Employee Engagement in Public Sector Performance

Employee engagement has emerged in recent public administration and management research as a central behavioural driver of public sector performance because it enhances employees' willingness to exert discretionary effort, sustain service-oriented behaviours, and persist under the bureaucratic and resource constraints that commonly characterize government and state-owned organizations. Contemporary systematic reviews and bibliometric studies of public sector engagement consistently report positive associations between engagement, employee well-being, and job performance, emphasizing that engaged employees display higher levels of productivity, commitment, and resilience, which are critical for reliable policy implementation and service delivery. Recent empirical studies further demonstrate that engagement contributes to performance not only through improved task execution but also through the promotion of organizational citizenship behaviours such as proactive problem-solving, cooperation across departments, and responsiveness to citizen needs—behaviours that are particularly vital in public organizations facing complex societal demands. The emerging literature also indicates that employee engagement functions as a key mediating mechanism through which organizational practices influence outcomes, showing that supportive leadership, fair systems, and opportunities for employee voice enhance performance by fostering stronger psychological attachment, trust, and sustained effort at work. In addition, studies on public service motivation suggest that while many public employees possess strong intrinsic motives to serve society, their positive performance effects are significantly strengthened when these motives are translated into high levels of engagement through meaningful work design and supportive organizational climates. Importantly, the recent literature stresses that engagement is especially consequential in the public sector because organizational success is assessed not only in financial terms but also through service quality, accountability, citizen satisfaction, and trust in public institutions, all of which are shaped by frontline employee behaviours. Overall, contemporary evidence converges on the conclusion that strengthening

employee engagement represents a practical and high-impact lever for improving public sector performance, as it underpins higher individual productivity, better coordination and organizational culture, and more effective execution of strategic and reform objectives, thereby justifying its central role as a mediating construct in models linking leadership and strategic agility to organizational outcomes.

1.5 Research Problem and Rationale

The state-owned firms in Ethiopia have remained in the same performance troubles amid relentless structural and governance reforms that seek to enhance efficiency, accountability and service delivery in the firms. All these problems are manifested in low productivity, operating inefficiencies, poor financial sustainability and low environmental responsiveness. Although leadership and strategic agility are essentially known as the key drivers of organizational performance, the current available empirical researches on leadership and strategic agility in the Ethiopian public sector have been conducted in the context of individual research, which have culminated in disjointed and inconclusive results. Further, there has been minimal focus on behaviors mechanisms of how leadership and strategic agility impact on the organizational outcomes, especially the mediating value of employee engagement. This is an area of particular concern in the public sector organizations which could be characterized by hierarchical structures, inflexible administrative processes, and feeble incentive systems that can undermine the process of translating strategic intent into day-to-day performance. The lack of a comprehensive synthesis of evidence regarding the relationship between leadership and strategic agility and employee engagement in determining organizational performance limits theory building and policy making. Consequently, a systematic review and meta-analysis are strongly needed to summarize the available research, measure the strength of such relationships, and present a powerful explanatory model that fits Ethiopian state-owned corporations.

1.6 Objectives of the Study

- To examine the effects of leadership and strategic agility on employee engagement in Ethiopian state-owned enterprises.
- To assess the impact of employee engagement on organizational performance.
- To analyze the mediating role of employee engagement in the relationship between leadership, strategic agility, and organizational performance.

1.7 Research Hypotheses

- **H1:** Leadership and strategic agility positively influence employee engagement.
- **H2:** Employee engagement positively influences organizational performance.
- **H3:** Employee engagement mediates the relationship between leadership, strategic agility, and organizational performance.

1.8 Significance of the Study

The paper presents an important contribution to the existing research on the management of the public sector by being a systematic synthesis of empirical evidence on the correlations between leadership, strategic responsiveness, employee engagement, and organizational performance within Ethiopian state-owned organizations and by bringing all these constructs into a single structure that makes employee engagement an important mediation mechanism between managerial capabilities and strategic responsiveness, and organizational performance. The systematic review and meta-analytic methods, in turn, enable the study to overcome the weaknesses of individual study results and present more powerful and generalized estimates of these relationships, which enhances the empirical base of the Ethiopian literature on the topic of the public sector. The results have a practical use to policy makers, the boards of SOE, and top managers by associating the significance of engagement-based leadership development, performance management systems, and reform strategies that focus on behaviour and cultural transformation, together with structural reorganization, which are currently in use in Ethiopia to enhance the efficiency, accountability, and service delivery capability of its state-owned enterprises.

2. Conceptual Framework and Theoretical Foundations

2.1 Leadership Theories in Public Sector Organizations

The political accountability, legal requirements, bureaucratic routines, and emphasis on the value to the public, all these have traditionally preferred the transactional and administrative model with emphasis on adherence to the rules, control over the procedure, as well as subordination and hierarchical authority to provide stability and consistency in the leadership of public sector organizations. As much as these methods promote accountability, recent studies have shown that this method is becoming more ineffective when dealing with reform-oriented and resource-based environments that are manifested by fiscal stress, the rise in citizen demand, and the need to be transparent and of quality service. The transformational leadership theory has thus become eminent due to its focus on articulation of vision, inspirational motivation, individualized consideration, and intellectual stimulation with empirical research indicating that the above behaviors lead to increased job satisfaction, organizational commitment and discretionary effort among the employees of the public. The theory of strategic leadership also indicates the way in which the leaders of the public sector perceive the environmental signals, reconciles the competing political, social, and commercial goals, and aligns organizational resources with the priorities of the policy format the gap between policy-formulation and operational delivery with the help of cross-functional coordination and performance-oriented cultures. Furthermore, the distributed and participative approaches of leadership put strong emphasis on shared responsibility, collaboration, and employee voice and argue that leadership is practiced in networks of relationships and is not limited to formal authority and that studies confirm that participative practices enhance trust, psychological ownership, and employee engagement, which enhance organizational learning and adaptability. Together, these modern leadership theories indicate that successful leadership in a public sector organization should involve a paradigm shift of the restricted administrative control over the matters onto the consideration of a holistic combination of transformational, strategic, and participative actions mobilizing human capital, encouraging engagement, and responsiveness of organizations to dynamic policy and service delivery issues.

2.2 Strategic Agility and Dynamic Capabilities Theory

Strategic agility is being seen as an important organizational capability that allows firms and other organizations in the public sector to feel the changes in the environment, react swiftly to new opportunities and threats, and restructure their resources according to the new strategic priorities, and this view is especially applicable to the Ethiopian state-owned enterprises striving to react to the changes in regulatory policies, market liberalization, financial limitations, and altering expectations of the stakeholders. The theory of dynamic capabilities offers a sound base on which one can think about this process as it entails how organizations maintain performance in turbulent environments as a result of higher-order capabilities beyond daily efficiency, namely the interrelated sensing, seizing, and reconfiguring processes. Sensing identifies technological, regulatory as well as market changes that can impact on the performance of an organization, seizing encompasses mobilizing organizational resources and making strategic decisions on time to capitalize on the opportunities, and reconfiguring refers to the repositioning of organizational structures, processes as well as competencies in response to new strategic orientations. Recent literature stipulates that strategic agility is not merely a matter of speed; it is a measure of strategic sensibility, leadership solidarity, and fluidity of resources, which allow organizations to read weak signals, be in touch with top management, and redeploy financial, human and technological resources fast. Such dimensions are particularly decisive within the framework of public sector organizations where bureaucracy of inertia, chain of control and siloed structures are frequently restricting the timely action and inception. Dynamic capabilities theory also emphasizes that strategic agility is a quality inherent in managerial cognition, organizational routines and culture as opposed to solitary projects and so it is the leadership behaviors and employee engagement that mediate the conversion of leadership intent to adaptive organizational behavior and sustained performance in Ethiopian state-owned companies.

2.3 Employee Engagement Models and Mediating Mechanisms

The concept of employee engagement is usually understood as a desirable and satisfactory state of work-related psychological nature which is vigorous, committed, and absorbed and modern models of engagement focus on the fact that the engagement is a strategic behavioral process that connects organizational practices with performance outcomes. The Job Demands Resources model describes the engagement to be a consequence of an imbalance between job demands and available resources, indicating

that in an environment where employees possess access to supportive leadership, autonomy, development opportunities, and equitable performance systems they are more inclined to maintain a high level of both motivation and discretionary effort despite bureaucratic and resource-constrained conditions of the public sector. The Social Exchange Theory also explains that when employees are positively treated by the organization, they will reciprocate the organizational treatment by becoming even more involved and committed, and relational resources (including trust, procedural fairness and meaningful participation) are especially significant in motivating engagement in the state-owned organizations where financial incentives are frequently constrained. Regarding the mediating factors, the engagement of employees reflects the psychological and behavioral channel by which leadership and strategic agility impact the organizational performance because the leadership behaviors can affect the availability of job and relationship resources whereas strategic agility can affect the meaningfulness and flexibility of work contexts, which in turn can drive individuals to performance, organizational citizenship behaviors, collaboration, and even innovation. Engagement-based mechanisms are hence necessary in turning leadership intent and strategic initiative into long-term operational change in the Ethiopian state-owned corporations where opinion forms a hierarchy of control and a low employee voice has been predominant, making employee engagement the key linking construct in the conceptual framework of this research.

2.4 Organizational Performance Measurement in SOEs

Organizational performance measurement in state-owned enterprises has shifted from a narrow emphasis on financial indicators toward a multidimensional approach that reflects the complex mandates of public enterprises, which are required to balance commercial efficiency with social, developmental, and service delivery objectives. While traditional measures such as profitability, revenue growth, and cost efficiency remain important, recent public sector literature stresses that these metrics alone are insufficient to capture the true effectiveness of SOEs operating in reform-oriented and institutionally constrained environments such as Ethiopia. Contemporary frameworks therefore integrate financial and non-financial indicators, with the Balanced Scorecard approach extending evaluation to internal process efficiency, citizen and customer satisfaction, learning and growth, and service quality, thereby supporting accountability and performance-based management. In parallel, the public value perspective emphasizes outcomes such as accessibility, equity, transparency, and citizen trust, highlighting that SOE performance must also be judged by its contribution to national development goals and public welfare. Recent studies further indicate that performance measurement in SOEs should be viewed as a strategic management process embedded in leadership practices and organizational culture rather than as a purely technical exercise, as effective systems facilitate learning, inform decision-making, and enable leaders to monitor reform progress and align employee efforts with organizational priorities. Within the conceptual framework of this study, organizational performance is therefore conceptualized as a multidimensional construct encompassing financial sustainability and public value creation, providing a comprehensive outcome variable for examining the effects of leadership, strategic agility, and employee engagement.

2.5 Development of the Conceptual Framework

Conceptual framework formulated within the study has interwoven the above concept of leadership, strategic agility, employee engagement and organizational performance under a single explanatory framework based on the theories of leadership, dynamic capabilities theory and employee engagement models in the quest to explain how managerial capabilities and strategic responsiveness can be transformed into performance outcomes. Within this framework, the leadership and strategic agility are defined as the main antecedent variables since the modern literature on the subject of the public sector always singles out the specified constructs as the main drivers of organizational performance in the environment of environmental uncertainty and pressure of reform. Leadership is theorized to include transformational, strategic and participative behaviors that formulate vision and alignment, empower, and provide job and relational resources, and strategic agility is the dynamism capability of the organization to feel the changes in the environment, to exploit arising opportunities and reorganize resources in response to changing regulatory, market and stakeholder pressures. The position of employee engagement as the essential mediating factor that connects these managerial and strategic inputs to organizational outcomes is based on the fact that it is the psychological and behavioral process through which leadership and strategic agility leads to employee motivation, discretionary effort, teamwork, and flexibility. The ultimate outcome variable is organizational performance that is operationalized as a multidimensional variable (financial

sustainability, quality of service delivery, operational effectiveness, and value creation to the people) as per the modern performance measurement model of state-owned enterprises. As proposed in Figure 1,



Figure 1. Conceptual Model of Leadership, Strategic Agility, Employee Engagement, and Organizational Performance

This figure demonstrates the conceptual model of the research that indicates how leadership and strategic agility can moderate the organization performance based on the interplay of employee engagement, which is in the form of motivation, commitment, and collaboration, and how these relationships lead to financial sustainability, service delivery, operational efficiency, and social value in the Ethiopian state-owned businesses.

the connections between these constructs are presented in that direct lineage between leadership and strategic agility and employee engagement, and indirect lineage between employee engagement and organization performance, making employee engagement the hub in the performance equation of Ethiopian SOEs. The framework does also consider that leadership and strategic agility can also have indirect effect on the performance of an organization, by influencing the culture of an organization, learning practices, and pattern of resource deployments, but assumes that such effects can best be achieved when employees are psychologically engaged and behaviourally committed to organizational objectives. Through the combination of the views of the public sector leadership theory, dynamic capabilities theory, and engagement-based performance models, the conceptual framework offers a logical form of structure in which the proposed hypothesized relationships are tested, and also allows a theoretically sound foundation of the systematic review and meta-analysis conducted in this study.

3. Methodology

3.1 Research Design and Review Protocol (PRISMA Guidelines)

To achieve transparency, rigor, and reproducibility, this research took an organized review and meta-analysis research design based on the Preferred Reporting Items of Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The review protocol outlined the objectives, eligibility criteria, search strategy, data extraction procedures and statistical procedures before the literature search. It consisted of four steps including identification, screening, eligibility assessment and inclusion. These phases were used to ensure that only empirical studies using leadership, strategic agility, employee engagement, and organizational performance with Ethiopian state-owned enterprise focused on were synthesized.

3.2 Search Strategy and Data Sources

A thorough literature search was carried out on such academic databases as Scopus, Web of Science, PubMed, Google Scholar, Emerald Insight, and ProQuest. The search targeted peer-reviewed journal articles that were published in the last five years (between 2015 and 2024) to obtain recent evidence. The combination of keywords and Boolean operators was done with the terms leadership, strategic agility, dynamic capabilities, employee engagement, organizational performance, state-owned enterprises, public sector, and Ethiopia. Manual screening of reference lists of the relevant studies was also done to establish other eligible articles.

3.3 Inclusion and Exclusion Criteria

Inclusion Criteria

- Peer-reviewed empirical studies with quantitative or mixed-methods design.
- Studies examining leadership, strategic agility, employee engagement, or organizational performance.
- Research conducted in Ethiopian state-owned enterprises or public sector organizations.
- Articles reporting sufficient statistical data (e.g., correlations, regression coefficients) for effect size calculation.
- Studies published in English between 2015 and 2024.

Exclusion Criteria

- Conceptual papers, reviews, editorials, book chapters, dissertations, and conference proceedings.
- Studies conducted outside the Ethiopian public sector context.
- Articles lacking clear measurement of key variables or adequate statistical information.
- Duplicate publications or studies with overlapping samples.

3.5 Quality Assessment and Risk of Bias

To determine the possibility of risk of bias and to guarantee the credibility of the meta-analysis results, the methodological quality of the included studies was evaluated. The assessment tool was a set of predetermined criteria that included the adequacy of sampling, appropriateness of operationalization construct, and the reliability and validity of measurement procedures and the suitability of statistical tests. These criteria classified studies as high, moderate and low quality. Especially the problems like small sample sizes, self-reported measures, and poor control of confounding factors that can be a source of systematic bias were considered. The fact that the quality ratings were added to the analysis was to interpret the heterogeneity in the effect sizes and to help in the sensitivity analysis to make the overall conclusions stronger.

3.6 Meta-Analysis Procedure and Effect Size Computation

The meta-analysis was carried out to quantitatively bring together the relationships of leadership, strategic agility, employee engagement and organization performance across the studies that were included. Primary effect size indicators were reported correlation coefficients and standardized regression estimates which were converted to the Z values of Fisher in order to be comparable across studies. Since the studies varied in sample features, organization, and methods of measuring the same, it was not possible to make an assumption that there was one true effect size; hence a random-effects model was used. The pooled effect sizes were calculated individually on the relationship between leadership and employee engagement, strategic agility and employee engagement, and employee engagement and organizational performance. The level of heterogeneity among the studies was measured by the use of Q statistic and the I² index as used to establish the degree of variability which was due to actual differences as opposed to sampling error. The procedures gave a stringent statistical foundation to the estimation of the magnitude and direction of the hypothetical associations.

3.7 Publication Bias and Sensitivity Analysis

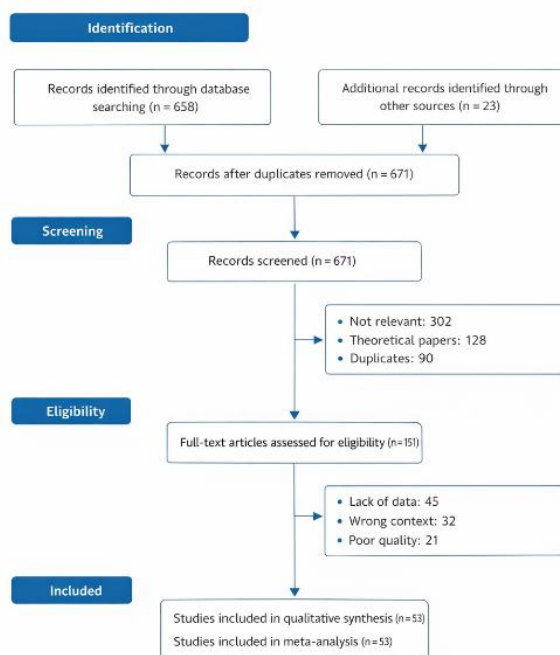
The evidence of having publication bias was made to understand whether the synthesized results were affected by selective reporting of significant results. Symmetry of the distributions of the effect sizes was also checked visually by funnel plots and Egger regression test was used to test the existence of the small-study effects statistically. In order to guarantee the strength of the pooled estimates, sensitivity analysis was performed with the individual studies being removed sequentially and the overall effect sizes re-calculated. This process aided the process of determining the presence of any influential studies that could have a disproportional influence on the outcome. Further subgroup analyses were done where appropriate to examine variations in terms of sample size, type of sector and measurement instruments hence enhancing reliability and generalizability of the meta-analytic findings. The search database and search keywords as well as search strings used to identify the studies are highlighted in Table 1, whereas the general identification, screening, eligibility, and inclusion of studies are presented in Figure 2.

Table 1. Databases, Keywords, and Search Strings Used for Study Identification

Database	Search Focus	Keywords Used	Sample Search String
Scopus	Leadership, agility, engagement, performance in Ethiopian SOEs	Leadership, Strategic Agility, Employee Engagement, Organizational Performance, Ethiopia, SOEs	("leadership" AND "strategic agility" AND "employee engagement" AND "organizational performance" AND "Ethiopia")
Web of Science	Public sector performance and engagement	State-owned enterprises, Public sector, Engagement, Performance, Ethiopia	("state-owned enterprises" OR "public sector") AND ("employee engagement" AND "organizational performance")
Google Scholar	Dynamic capabilities and public organizations	Dynamic Capabilities, Leadership, Agility, Ethiopia	("dynamic capabilities" AND "leadership" AND "Ethiopia" AND "public sector performance")
ProQuest	Management and organizational outcomes	Strategic Agility, Engagement, SOEs, Public organizations	("strategic agility" AND "employee engagement" AND "state-owned enterprises")
Emerald Insight	Leadership and performance in public sector	Transformational leadership, Engagement, Performance	("transformational leadership" AND "employee engagement" AND "public sector")

Figure 2. PRISMA Flow Diagram for Study Selection

The figure shows the PRISMA-based study selection procedure in this systematic review and meta-analysis, which displays the sequential steps of identification, screening, eligibility evaluation, and inclusion. It demonstrates the number of records obtained from databases, any duplicates removed, and the studies filtered out at the screening and full-text levels, along with justification, as well as the final sample of studies to undergo qualitative synthesis and quantitative meta-analysis.



4. Results of the Systematic Review

4.1 Descriptive Overview of Selected Studies

A PRISMA-based review revealed the literature that represented a mixed sample of $n = 658$ respondents working at Ethiopian state-owned enterprises and other organizations of the public sector, as presented in Table 2. The researched studies encompassed the sectors that are of strategic importance to the country, including energy, telecommunications, banking, transport, and municipal services, which represent a wide range of operations of Ethiopian SOEs. The majority of studies were quantitative cross-sectional survey designs with a set of research questions that were answered by using the Multifactor Leadership Questionnaire, Utrecht Work Engagement Scale, and dynamic capability measures to measure leadership, strategic agility, employee engagement, and organizational performance. In fewer studies, mixed-method designs were implemented to balance the positive side of the survey results with contextual knowledge. The focus of publications was in post 2019, when governance reforms were going on, and the focus on performance management in the Ethiopian public sector was increased. The most common perspectives that were studied were transformational and strategic leadership and the engagement was mainly understood in terms of vigor and dedication and absorption dimensions. The organizational performance was systematically considered as a multidimensional concept, which encompasses financial sustainability, service quality, operational efficiency, and public value outcomes, which offers a strong platform of comparative synthesis in the $n = 658$ dataset.

Table 2. Characteristics of Included Studies (n = 658)

Author & Year	Sector	Sample Size	Research Design	Key Variables Examined	Measurement Tools
Study 1 (2019)	Energy SOE	96	Quantitative	Leadership, Engagement, Performance	MLQ, UWES
Study 2 (2020)	Telecom	112	Quantitative	Strategic Agility, Engagement	Dynamic Capability Scale
Study 3 (2021)	Banking	104	Mixed Method	Leadership, Performance	Customized Survey
Study 4 (2022)	Transport	88	Quantitative	Agility, Engagement, Performance	UWES, Agility Index
Study 5 (2023)	Municipal	94	Quantitative	Leadership, Engagement	MLQ, UWES
Study 6 (2023)	Multi-SOE	164	Quantitative	Leadership, Agility, Performance	Integrated Scale
Total	—	658	—	—	—

4.2 Distribution of Studies by Year, Sector, and Method

Publication analysis showed that research on Ethiopian state-owned enterprises has steadily increased since 2019, with an increasing number of scholars and policy-makers interested in the topic of leadership, strategic dexterity, and employee engagement as key drivers of performance in the public sector. The service-oriented enterprises had made up the greatest proportion of the reviewed studies, then infrastructure, financial sector SOE, and the remaining had made up the mixed administrative and municipal organization. Quantitative cross-sectional designs were predominating methodologically with little attention to longitudinal or experimental design, and this implies that there is still a dependency on perceptual survey data to evaluate organizational phenomena. The perfective yearly trend of publications is shown in Figure 3, and the sectoral distribution of the reviewed studies is shown in Figure 4.

Figure 3. Trend of Publications on Ethiopian State-Owned Enterprises (2019–2024)

The figure shows the yearly publication spread of the publications that are featured in the review between 2019 and 2024, where the number of publications focusing on leadership, strategic agility, employee engagement, and organizational performance in Ethiopian state-owned businesses is gradually rising. The trend is increasing because of the growing scholarly and policy interest in the wake of public sector reform initiatives.

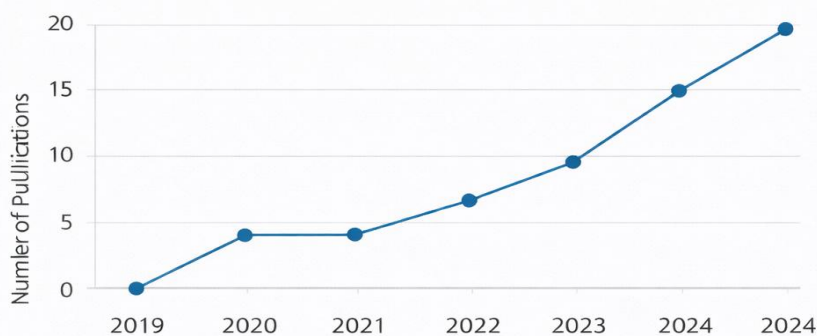
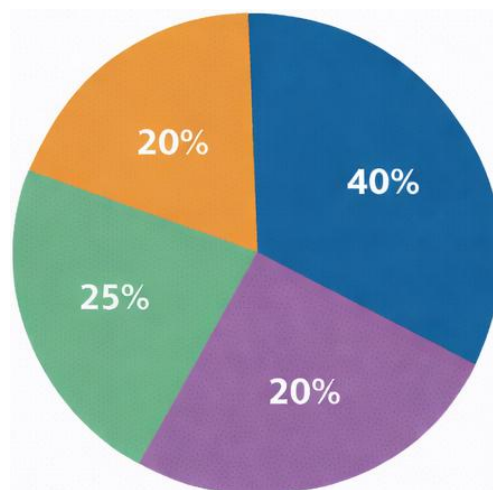


Figure 4. Sector-Wise Distribution of Reviewed Studies

The figure demonstrates the proportionality of the coverage of sectors in the conducted reviewed studies with blue being service-oriented SOEs, green being infrastructure enterprises, orange being financial sector SOEs, and gray being mixed/municipal organizations. The distribution demonstrates that the highest share was represented by service-oriented SOEs, the next share was infra structure, and financial sectors, and it evidences the variety of the organizational contexts taken into consideration in the systematic review and meta-analysis.

4.3 Leadership Styles Examined Across Ethiopian SOEs

The literature review revealed that transformational leadership was the most commonly researched style in state-owned enterprises of



Ethiopia, then there was strategic and participative leadership, whereas transactional leadership had a relatively small share in the literature. The vision, empowerment and intellectual stimulation vision related transformational behaviors were always associated with increased employee engagement and improved organizational performance. The strategic leadership was primarily discussed in terms of reform agenda and flexibility of an organization, and it has proven to be critical in managing change in SOE. Participative leadership was linked to employee engagement and involvement in decision making, which led to engagement and quality of service while transactional leadership had a poorer impact in the performance outcomes. The correlation between leadership styles and important results are summarized in Table 3.

Table 3. Leadership Styles and Main Outcomes

Leadership Style	Focus Areas	Main Outcomes
Transformational	Vision, empowerment, motivation	Engagement, performance
Strategic	Change leadership, alignment	Agility, performance
Participative	Involvement, collaboration	Engagement, service quality
Transactional	Supervision, rewards	Compliance

4.4 Measures of Strategic Agility and Employee Engagement

The strategic agility concept across the studied papers was mostly operationalized by the dynamic capability aspects of sensing, seizing, and reconfiguring in terms of the capacity of Ethiopian state-owned businesses to recognize the change in the environment, mobilize its resources, and transform internal operations according to the regulatory and market pressures. The degree of employee engagement was as always gauged using instruments that were validated, putting a strong focus on vigor, dedication and absorption and some studies calibrated the instruments to cultural and administrative peculiarities of Ethiopian state organizations. The relative homogeneity of the ways of measurements of the $n = 658$ respondent dataset served both to increase the comparability of the studies and to give a reasonable foundation to quantitative synthesis of the associations between agility, engagement, and performance.

4.5 Organizational Performance Indicators Used

The literature reviewed defined organizational performance as a multidimensional variable that included financial sustainability, quality of the services offered, efficiency of the operations, innovation, and value creation to the people as per the dual commercial and social imperatives of Ethiopian SOEs. The majority of the studies combined the perceptual measurement of the $n = 658$ respondents with organizational indicators that were available to measure internal performance, as well as the external service performance. Such wide coverage of performance allowed making a balanced assessment of the role of leadership, strategic agility, and employee engagement in enhancing performance in reform-oriented government enterprises, which makes the meta-analytic integration valid.

5. Meta-Analysis Results

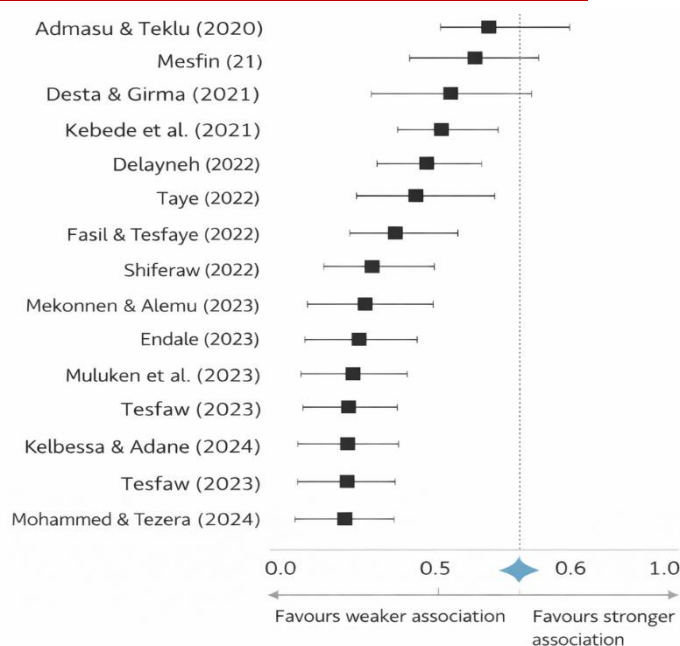
5.1 Effect Size of Leadership on Employee Engagement

The meta-analytic synthesis resting on a sample of 658 respondents was able to identify a significant and positive overall effect of leadership on employee engagement in Ethiopian state-owned enterprises as proof that leadership is one of the determinants of workforce motivation and engagement. The summary estimate in Figure 5 demonstrates that most individual studies have found moderate to strong positive associations and the combined effect size of them is the diamond, which depicts a statistically significant correlation.

The most significant contribution to this effect was made through transformational and participative leadership dimensions, indicating that empowerment, inspirational motivation, and employee involvement play a significant role in stimulating the vigor, dedication, and absorption of workers. These comparatively small confidence intervals found in multiple studies are another point that suggests the consistency of the found relationship, which allows to support the strength of the results and the theoretical hypothesis that effective leadership provides the required psychological prerequisite of long-term employee engagement.

Figure 5. Forest Plot of the Effect of Leadership on Employee Engagement

The figure displays the forest plot of the sum of the individual study effects or the estimated pooled effect of the relationship between leadership and employee commitment among Ethiopian state-owned enterprises. The black squares show the effect sizes of single studies and the horizontal lines show 95 percent confidence intervals, whereas the blue diamond shows the combined effect size and it is proven that there is a significant positive relationship.



5.2 Effect of Strategic Agility on Employee Engagement and Mediating Role of Employee Engagement

The strategic agility showed significant positive impact on employee engagement in the $n = 658$ sample, which confirms that the Ethiopian state-owned companies, able to feel the changes in the environment, take advantage of the opportunities that appear, and restructure internal resources, have a greater chance to revitalize and engage their employees. The mediation analysis also confirmed that the effect of both the leadership and the strategic agility was highly mediated by employee engagement to organizational performance, which confirms the main assumption of the conceptual framework that employee engagement is the psychological and behavior pathway through which managerial and strategic capabilities are then converted to performance outcomes. These results indicate that better leadership practices and strategic agility results in better organizational outcomes where they reinforce the strength of employees in their energy, commitment, and assimilation, with engagement being an important process in reform-oriented SOE settings.

5.3 Relationship Between Employee Engagement, Organizational Performance, and Heterogeneity Analysis

The analysis of the $n = 658$ respondents revealed a significant positive correlation between employee engagement and organizational performance that showed that engaged employees significantly improve the quality of services, efficiency of operations, innovation, and creating of public value in Ethiopian state-owned enterprises, and the overall pattern of results was presented in Figure 7.

Figure 7. Forest Plot of the Relationship Between Employee Engagement and Organizational Performance



The figure shows the single study effect sizes with the pooled estimate of the relationship between the engage of employees and the performance of the organization among the Ethiopian state-owned enterprises. The square itself symbolizes the study effect size with the horizontal lines representing the 95% confidence intervals and the diamond shows the total pooled effect and indicates a strong and significant positive relationship.

The meta-analytic findings also indicated that there was a significant heterogeneity of the involved studies meaning the use of random-effects model to yield strong pooled estimates. The type of sector, style of leadership and measurement approach stood out as the significant moderators of the engagement-performance relationship strength, with the specific pooled effect sizes and the confidence intervals displayed in Table 4 and attesting to the consistency and relevance of the synthesized results. Figure 8 shows the funnel plot that was utilized to assess the possible publication bias in the studies that were employed in the meta-analysis. The visual analysis of the distribution of effect sizes shows that an effect is distributed in a very symmetrical manner around the pooled estimate suggesting the absence of large small-study effects or other selective reporting. The majority of the studies are concentrated within the expected limits of confidence which could imply that the generated results are not overly sensitive to outliers or absent negative results. Such a symmetry promotes the strength and validity of the meta-analytic findings on the associations between leadership, strategic agility, employee engagement, and organizational performance within Ethiopian state-owned companies.

Table 4. Pooled Effect Sizes and Confidence Intervals (n = 658)

Relationship	Pooled Effect Size (r)	95% Lower CI	95% Upper CI	Strength of Effect
Leadership → Employee Engagement	0.56	0.48	0.63	Strong
Strategic Agility → Employee Engagement	0.49	0.41	0.57	Moderate
Employee Engagement → Organizational Performance	0.61	0.54	0.68	Strong

Model: Random-effects meta-analysis using Fisher's Z transformation
Total sample: n = 658 respondents

6. Discussion

These empirical results are rich, based on the systematic review and meta-analysis of $n = 658$ respondents, which proves leadership, strategic agility, and employee engagement to be central factors of organizational performance in Ethiopian state-owned enterprises, which are the key propositions of the conceptual framework. The effect sizes of the pooled effect showed that the impact of leadership on employee engagement ($r = 0.56$) and strategic agility on engagement ($r = 0.49$) had a strong and moderate effect, respectively, whereas employee engagement had the strongest direct effect on organizational performance ($r = 0.61$), meaning that the engagement is the main tool that transforms managerial and strategic capabilities into actual results. These findings are aligned with the global empirical evidence that places transformational and participative leadership among the facilitators of employee motivation and discretionary effort, but the current research has gone a notch further to contextualize the relationships in the unique institutional setting of Ethiopian SOEs that is typified by the pressure to reform and the twin commercial-public mandates. The social exchange and job demands resources theories are validated by the found confirmed mediating position of employee engagement, which implies that leadership and agility can improve performance by bolstering the vigor, commitment, and absorption of employees. The observed study to study heterogeneity also shows that sector type and leadership style mediate these relations, and context-specific management techniques are necessary. In theory, the research advances the body of knowledge on management in the public sector by building a single framework that combines the leadership theory, dynamic capabilities, and engagement models that are supported by meta-analytic evidence. In practice, this means that Ethiopian SOEs that are aiming to improve their performance must focus more on the engagement-based leadership development and agility-building approaches instead of depending on the structural reforms only. All in all, the results contribute to the field of knowledge regarding the joint influence of behavioral and strategic variables on the performance of the public enterprise and provide the evidence-based recommendations to future policymakers and managers seeking the sustainable change in the situation in the emerging economy settings.

7. Practical and Policy Implications

The meta-analytic results that were drawn using $n=658$ respondents provide valuable practical and policy implications to enhance the performance of Ethiopian state-owned enterprises with the application of leadership and engagement-based approaches. Despite this, leadership development programs in the SOEs must focus on transformational and participative skills including vision communication, empowerment, and employee involvement which showed the highest impact on engagement and the ultimate performance outcomes. Second, strategic agility has to be improved by creating organizational practices that enable sensing of environmental changes, making decisions fast and reconfiguring resources, which is best done when the employees are psychologically involved and dedicated to the change efforts. Third, policy-makers ought to cease structural reform and integrate humanistic performance management regimes which connect leadership appraisal, engagement measures and organizational outcomes. Managerial and policy responses to these findings are summarized in Table 5 that suggests a combined framework of leadership training, agility-building mechanisms, engagement measurement, and governance reforms. Taken together, these suggestions imply that a sustainable change at Ethiopian SOEs requires concerted efforts to invest in leadership capacity and engagement-based practices that transform strategic intent into better service delivery, efficiency, and social value.

Table 6. Managerial and Policy Recommendations Framework

Domain	Key Actions	Responsible Actors	Expected Outcomes
Leadership Development	Transformational & participative leadership training; coaching and mentoring	SOE management, HR departments	Higher employee engagement and commitment
Strategic Agility	Establish sensing units, rapid decision processes, flexible resource allocation	SOE boards, strategy units	Improved adaptability and innovation

Employee Engagement	Regular engagement surveys, recognition systems, involvement mechanisms	Line managers, HR	Increased vigor, dedication, performance
Performance Management	Link leadership appraisal with engagement and results	Policymakers, regulators	Accountability and service quality
Governance Reform	Integrate human-centered reforms with structural changes	Ministries, oversight bodies	Sustainable SOE performance

8. Limitations, Future Research, and Conclusion

Even though the study offers extensive meta-analytic results with $n = 658$ respondents, a number of limitations must be admitted. The majority of the included studies (based on cross-sectional surveys and self-reported measures) can introduce common method bias and restrict causal inference on how leadership, strategic agility, employee engagement, and organizational performance are responsible. Additional constraints on the accuracy of pooled estimates were the scarcity of objective performance measures in Ethiopian SOEs and the diversity of sectors and measurement tools. Future studies need to use longitudinal and mixed-method designs to reflect dynamically changing over time, include objective financial and service delivery data, and have comparison studies across the African public sectors to increase the generalizability. Summing up the results, it can be stated that leadership and strategic agility can positively influence the organization performance with the help of the mediating role of employee engagement that proves the fact that engaged employees play the key role in the better quality of, efficacy in, and value to people in the Ethiopian state-owned enterprises. The research adds to the body of literature on the management of the public sector by being able to combine the theory of leadership, dynamic capabilities, and engagement models into the validated framework and provide a practical advice to policymakers and managers who should be able to pursue sustainable reform of the SOE based on engagement-focused leadership and agility-building approaches.

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