



Pathways to Fiscal Sustainability: Green Literacy, Digital Inclusion, and Ecological Trust in Indonesia

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Abstract. Fiscal sustainability in decentralised regions is increasingly recognised as dependent not only on financial resources but also on legitimacy, inclusivity, and environmental accountability. This study examines the influence of green fiscal literacy, digital fiscal inclusion, and ecological trust on sustainable fiscal capacity, with perceived budgetary fairness as a mediating construct, in the context of Majene and Polewali Regency, West Sulawesi. Grounded in fiscal legitimacy theory, the study adopts a quantitative explanatory design and collects primary data through structured questionnaires from 312 respondents drawn from the general public using a random sampling technique. The data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The measurement model demonstrated robust reliability and validity, with all indicators meeting recommended thresholds. Structural model results show that green fiscal literacy, digital fiscal inclusion, and ecological trust each exert significant positive effects on perceived budgetary fairness. Fairness itself strongly predicts sustainable fiscal capacity and partially mediates the relationships between the three independent variables and fiscal sustainability. The findings provide empirical support for extending fiscal legitimacy theory by incorporating cognitive, technological, and ecological dimensions, with fairness operating as a central mechanism that links them to fiscal sustainability. Practically, the results suggest that enhancing fiscal literacy with an environmental perspective, expanding digital participation, and fostering ecological trust through transparent commitments are critical strategies for local governments seeking to strengthen fiscal capacity. By situating the analysis within a decentralised Indonesian context, this study offers both theoretical enrichment and actionable insights into pathways for achieving sustainable fiscal governance.

Keywords: Green fiscal literacy, Digital fiscal inclusion, Ecological trust, Perceived budgetary fairness, Sustainable fiscal capacity

1 Introduction

The discourse on fiscal governance has undergone a profound transformation in recent years. Initially defined primarily by concerns of efficiency and accountability, fiscal policy is now increasingly recognised as a vehicle for advancing sustainability and inclusivity. Governments, particularly in developing contexts, are under growing pressure to manage scarce resources while simultaneously addressing environmental degradation, social inequality, and the legitimacy of fiscal institutions. In decentralised settings such as Majene and Polewali Regency in West Sulawesi, this dual challenge

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becomes even more pronounced. Local governments are required not only to ensure sound financial management but also to provide fiscal frameworks that support the transition towards a blue-green economy, where economic development is pursued in parallel with environmental protection and social justice [1, 2].

Three key elements emerge as essential to this process. Green fiscal literacy equips citizens with the knowledge to understand how fiscal decisions contribute to ecological protection and sustainable development. Digital fiscal inclusion provides equitable access to fiscal information and participation through technology, thereby reducing information gaps and improving transparency [12]. Ecological trust reflects public confidence in government commitments to environmental sustainability, which is indispensable for legitimising fiscal reforms. These elements converge in shaping perceptions of budgetary fairness, which represent a normative judgement about whether fiscal resources are distributed and utilised equitably. Perceived fairness in turn influences sustainable fiscal capacity, since citizens are more likely to support fiscal policies when they regard them as legitimate, just, and trustworthy [13].

Despite the growing recognition of these issues, practical challenges remain. Evidence suggests that fiscal reforms are often met with scepticism in communities where citizens have limited knowledge of fiscal mechanisms, where access to digital platforms is uneven, and where institutional trust is fragile [3, 4]. In Majene and Polewali Regency, these challenges are compounded by disparities in education, income levels, and geographical accessibility, all of which affect citizens' capacity and willingness to participate in fiscal processes. It is therefore evident that the achievement of sustainable fiscal capacity is not simply a matter of raising revenues or managing expenditures but also of cultivating public legitimacy through literacy, inclusion, trust, and fairness in fiscal governance.

A closer review of the literature highlights several important gaps. While financial literacy has been widely examined, its environmental dimension, namely green fiscal literacy, remains underexplored despite its increasing importance for fiscal legitimacy [5, 6]. Similarly, although digital inclusion has been associated with improvements in transparency, its specific contribution to fiscal capacity has not been sufficiently studied. The role of ecological trust has been examined in environmental governance, yet its link to fiscal sustainability remains largely absent from empirical research. Furthermore, the mediating role of perceived budgetary fairness, which theory suggests is pivotal in translating literacy, access, and trust into fiscal legitimacy, has rarely been tested in the context of local governments [12, 14]. These limitations provide both the rationale and the urgency for the present study.

The purpose of this research is therefore to examine the interplay between green fiscal literacy, digital fiscal inclusion, ecological trust, and sustainable fiscal capacity, with perceived budgetary fairness as a mediating construct [15]. The analysis is grounded in the theory of fiscal legitimacy, which holds that citizens are more likely to accept and support fiscal systems when they perceive them as fair, transparent, and trustworthy. By focusing on the case of Majene and Polewali Regency, this study provides empirical evidence from a decentralised governance context where fiscal legitimacy is often contested, thus contributing to the broader discussion on sustainability in fiscal governance.

The contribution of this study is both theoretical and practical. From a theoretical perspective, it extends the framework of fiscal legitimacy by explicitly incorporating green fiscal literacy, digital fiscal inclusion, and ecological trust as determinants of sustainable fiscal capacity [13]. From a methodological perspective, it applies Partial Least Squares Structural Equation Modelling (PLS-SEM) to primary survey data, offering a robust approach for testing complex mediation models in governance research. From a practical perspective, the findings are expected to provide valuable insights for local governments such as Majene and Polewali Regency in designing policies that enhance fiscal legitimacy and long-term sustainability. By clarifying how literacy, inclusion, trust, and fairness interact, the study offers a comprehensive pathway for strengthening fiscal governance in decentralised contexts.

In light of these aims, the study is guided by the following research questions. To what extent do green fiscal literacy, digital fiscal inclusion, and ecological trust influence perceptions of budgetary fairness? How does perceived budgetary fairness affect sustainable fiscal capacity? To what degree do literacy, inclusion, and trust directly contribute to fiscal sustainability, and to what extent are these relationships mediated by perceptions of fairness? These questions form the foundation of the theoretical framework and the empirical investigation presented in the subsequent chapters.

2 Literature Review

2.1 Fiscal Legitimacy and Governance for Sustainability

This study is grounded in the theory of fiscal legitimacy, which emphasises that the success of fiscal governance relies on the acceptance of the public, shaped by perceptions of fairness, transparency, and institutional trust [3]. Within the context of sustainability, the extension of this theory into the domain of green governance highlights that the legitimacy of fiscal systems depends not only on financial performance but also on environmental accountability [1]. A further strand of the theory stresses the role of inclusivity, where digital instruments facilitate equal access to fiscal processes and reinforce governance legitimacy [2]. This theoretical framework provides the foundation for examining how green fiscal literacy, digital fiscal inclusion, and ecological trust enhance sustainable fiscal capacity, with perceived budgetary fairness serving as a mediating construct.

2.2 Effects of Independent Variables on Perceived Budgetary Fairness

According to the theory of fiscal legitimacy, citizens' evaluation of fairness in public budgeting depends on their knowledge, access, and trust in fiscal governance [3]. Green fiscal literacy enables citizens to understand how fiscal policies address environmental needs, thereby fostering perceptions of fairness [5]. Digital fiscal inclusion reduces barriers to participation, ensuring equitable access to fiscal processes [1]. Ecological trust reflects confidence in the government's ecological commitments, which strengthens perceptions of distributive and procedural fairness [4]. Based on this reasoning, the following hypotheses are formulated:

- H1: Green fiscal literacy positively influences perceived budgetary fairness.
- H2: Digital fiscal inclusion positively influences perceived budgetary fairness.
- H3: Ecological trust positively influences perceived budgetary fairness.

2.3 Effects of Independent Variables and the Mediator on Sustainable Fiscal Capacity

The theory of legitimacy asserts that fiscal sustainability is supported when citizens perceive fairness and trustworthiness in fiscal systems [7]. Green fiscal literacy and digital fiscal inclusion equip individuals with the capacity to support long-term fiscal planning, while ecological trust ensures public acceptance of fiscal commitments. Moreover, perceived budgetary fairness serves as a direct determinant of sustainable fiscal capacity, as fairness legitimises fiscal authority and enhances compliance [3]. Thus, the following hypotheses are proposed:

- H4: Perceived budgetary fairness positively influences sustainable fiscal capacity.
- H5: Green fiscal literacy positively influences sustainable fiscal capacity.
- H6: Digital fiscal inclusion positively influences sustainable fiscal capacity.
- H7: Ecological trust positively influences sustainable fiscal capacity.

2.4 Mediating Role of Perceived Budgetary Fairness

Within the legitimacy framework, fairness not only operates as a direct predictor but also as a mechanism through which knowledge, access, and trust exert their influence on long-term fiscal outcomes [4]. When citizens perceive that budgetary processes are fair, their acceptance of fiscal initiatives increases, thereby enhancing sustainable fiscal capacity. This mediating function ensures that fairness bridges the link between independent variables and the dependent construct. Accordingly, the following mediation hypotheses are advanced:

- H8a: Perceived budgetary fairness mediates the relationship between green fiscal literacy and sustainable fiscal capacity.
- H8b: Perceived budgetary fairness mediates the relationship between digital fiscal inclusion and sustainable fiscal capacity.
- H8c: Perceived budgetary fairness mediates the relationship between ecological trust and sustainable fiscal capacity.

3 Methodology

This study adopts a quantitative explanatory design to investigate the influence of green fiscal literacy, digital fiscal inclusion, and ecological trust on sustainable fiscal capacity, with perceived budgetary fairness acting as a mediating construct. The research focuses on the perceptions of the general public in Majene and Polewali Regency, Indonesia, a region with emerging digital governance initiatives and ongoing decentralised fiscal reforms. Public perceptions are central to the assessment of fiscal legitimacy and sustainability, particularly in post-pandemic governance settings [3, 7].

The unit of analysis consists of individuals aged between 18 and 60 years, who have been permanent residents of Majene and Polewali for at least one year. Respondents with backgrounds in public finance or formal government employment were excluded to capture genuine public sentiment rather than technical opinion. As suggested by Aslam and Ghouse [4], citizen perspectives are increasingly essential in assessing the perceived fairness and effectiveness of green fiscal governance.

To achieve representative data, the study employed a simple random sampling technique, consistent with recommendations for survey-based studies in decentralised fiscal contexts [2]. The population source was constructed from community facilitator rosters and neighbourhood listings, covering both urban and rural areas. A web-based random number generator was used to randomly select participants based on coded identifiers assigned to eligible individuals. This method ensured equal opportunity of selection and reduced sampling bias [4].

Sample size was calculated using Cochran's formula for finite populations, with a 5 percent margin of error and 95 percent confidence level. Given a conservative assumption of 0.5 for response proportion and an estimated eligible population of 115,000 residents, the minimum sample size required was approximately 300. This aligns with the criteria for PLS-SEM analysis provided by Hair [8], which suggest that for a model with up to four predictors, a minimum of 160 observations is required to achieve 80 percent statistical power.

A total of 312 complete responses were collected between May and June 2025. Of these, 175 respondents completed paper-based surveys distributed by trained facilitators, and 137 responded via a secure online platform. Duplicate entries were removed, and eligibility criteria were verified. Demographically, the final sample included 56 percent female and 44 percent male respondents. In terms of education, 20 percent had completed secondary education, 58 percent held undergraduate degrees, and 22 percent had postgraduate qualifications. The majority of respondents reported employment in the informal sector, small businesses, or as homemakers and community volunteers, reflecting a realistic cross-section of Majene and Polewali's general population [9].

The constructs measured include green fiscal literacy, digital fiscal inclusion, ecological trust, perceived budgetary fairness, and sustainable fiscal capacity. All constructs were measured using reflective indicators adapted from prior studies. Green fiscal literacy items were based on the work of Gedvilaitė et al. [5], while digital fiscal inclusion items followed constructs from Tay et al. [10] and Rosário and Dias [1]. Ecological trust was operationalised using instruments from Aslam and Ghouse [4]. Perceived budgetary fairness was derived from Hochstetter et al. [7], and sustainable fiscal capacity adapted from Monkam and Mangwanya [2]. All items were measured using a five-point Likert scale from strongly disagree (1) to strongly agree (5). The questionnaire was developed in Bahasa Indonesia and validated through expert review and a pilot test involving 30 respondents, in line with best practices in survey pretesting [11]. The data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) via SmartPLS version 4.0, which is suitable for theory development, small to medium sample sizes, and non-normally distributed data [8]. The analysis proceeded in two stages. First, the measurement model was evaluated for reliability and validity. Outer loadings were assessed for indicator reliability, with a minimum threshold of

0.708. Composite reliability and Cronbach's alpha were both required to exceed 0.7 to confirm internal consistency. Convergent validity was confirmed through AVE values greater than 0.5. Discriminant validity was tested using the Fornell–Larcker criterion and the HTMT ratio, where values below 0.85 are considered acceptable [9].

Second, the structural model was assessed by estimating path coefficients and their significance using a bootstrapping procedure with 5,000 resamples. R^2 and Q^2 values were examined to assess explanatory and predictive power, respectively. Multicollinearity was assessed through variance inflation factor (VIF), and effect sizes (f^2) were calculated to determine the practical relevance of each predictor. Model fit was evaluated using the Standardised Root Mean Square Residual (SRMR), with acceptable thresholds below 0.08 [8]. The mediating role of perceived budgetary fairness was analysed using indirect path estimation with bootstrapped confidence intervals and the Variance Accounted For (VAF) statistic, which helps determine partial or full mediation [9].

All ethical procedures were strictly followed. Respondents provided informed consent prior to participation, and no personal identifying information was collected. Ethical approval was granted by the institutional research ethics committee. All data were treated confidentially and stored securely.

4 Result

This chapter presents the empirical results derived from the primary data collected through structured questionnaires. The analysis follows a two-stage evaluation process using Partial Least Squares Structural Equation Modelling (PLS-SEM), as described in the previous chapter. It begins with an overview of the respondents' demographic and occupational characteristics to contextualise the subsequent analytical results. The chapter then continues with the evaluation of the measurement model, including reliability and validity assessments, before proceeding to the structural model estimation. All results are presented objectively without interpretive analysis, which is reserved for the discussion chapter.

Table 1. Demographic and Occupational Characteristics of Respondents in Majene and Polewali Regency

Category	Subcategory	Frequency	Percentage
Gender	Male	137	44.0%
	Female	175	56.0%
Age Group	18–25 years	59	18.9%
	26–35 years	121	38.8%
	36–50 years	90	28.8%
	51–60 years	42	13.5%
	Secondary education (SMA/SMK)	63	20.2%
Education Level	Undergraduate degree	181	58.0%
	Postgraduate degree	68	21.8%

Main Occupation	Informal sector / street vendors	76	24.4%
	Small business / trader	63	20.2%
	Homemaker	51	16.3%
	Community volunteer	47	15.1%
	Freelancer / ojek driver	47	15.1%
	Others (unemployed, student)	28	9.0%
Region of Residence	Majene Town	50	16%
	Polewali Town	50	16%
	Coastal Area	80	25.6%
	Inland Rural	74	23.8%
	Highland/Remote	58	18.6%
Budget Awareness	Aware and participate	115	36.9%
	Aware but never involved	135	43.3%
	Not aware	62	19.9%

Source: Primary Data (2025)

Table 1 outlines the socio-demographic and occupational profile of the 312 respondents who participated in the study across Majene Regency. The gender composition shows a relatively balanced distribution, with a slight majority of female respondents (56.0 percent), consistent with the inclusive sampling approach used during data collection. The majority of participants fell within the 26–35 years age range (38.8 percent), followed by those aged 36–50 years (28.8 percent), suggesting that economically active adults constituted the core of the respondent base.

Regarding educational attainment, more than half of the participants (58.0 percent) had completed undergraduate degrees, while 21.8 percent held postgraduate qualifications. This reflects a relatively educated sample, although 20.2 percent reported secondary education as their highest level. Occupationally, the data indicate that most respondents were engaged in informal sector work, including street vending (24.4 percent), small trading (20.2 percent), and freelance or community-based roles (30.2 percent combined). Such distribution aligns with the economic profile of Majene’s general population.

In terms of regional representation, respondents were distributed across urban (32.1 percent), coastal (25.6 percent), inland (23.7 percent), and highland areas (18.6 percent), ensuring geographical inclusivity. Awareness of local fiscal processes was varied, with 36.9 percent indicating active engagement, 43.3 percent aware but uninvolved, and 19.9 percent unaware. These figures suggest a heterogeneous understanding of public budgeting, which may influence perceptions in the subsequent model analysis.

Table 2. Measurement Model Evaluation: Descriptive Statistics and Reliability

Construct	Item	Mean	St. Dev.	Outer Loading	Cronbach’s Alpha	CR	AVE
Green Fiscal Literacy (GFL)	GFL1	4.01	0.74	0.828	0.844	0.900	0.751
	GFL2	3.97	0.72	0.864			
	GFL3	4.05	0.76	0.891			

Digital Fiscal Inclusion (DFI)	DFI1	3.88	0.78	0.837	0.870	0.914	0.726
	DFI2	3.93	0.74	0.853			
	DFI3	4.00	0.70	0.869			
	DFI4	3.96	0.75	0.861			
Ecological Trust (ECT)	ECT1	4.04	0.72	0.869	0.867	0.915	0.782
	ECT2	3.99	0.76	0.896			
	ECT3	4.10	0.68	0.875			
Perceived Budgetary Fairness (PBF)	PBF1	4.12	0.67	0.873	0.893	0.926	0.712
	PBF2	4.07	0.69	0.859			
	PBF3	4.14	0.70	0.871			
	PBF4	4.03	0.73	0.857			
	PBF5	4.00	0.74	0.842			
Sustainable Fiscal Capacity (SFC)	SFC1	4.09	0.71	0.874	0.889	0.924	0.754
	SFC2	4.13	0.69	0.893			
	SFC3	4.08	0.73	0.870			
	SFC4	4.00	0.75	0.859			

Source: Primary Data (2025)

Table 2 summarises the descriptive statistics and reliability evaluation of the measurement model. The mean values for all indicators were in the range of 3.88 to 4.14, with standard deviations generally below 0.80. This shows that responses clustered around the "agree" level of the Likert scale and that variation among respondents was relatively limited, which is often interpreted as a sign of clarity and consistency in the measurement items [11].

All outer loadings exceeded the recommended minimum threshold of 0.70, ranging between 0.82 and 0.89. This confirms that the items display sufficient indicator reliability and are strongly representative of their underlying latent constructs [8]. Similarly, Cronbach's Alpha values were above 0.80 and composite reliability (CR) values exceeded 0.90 for all constructs, surpassing the cut-off point of 0.70, which is the standard requirement for internal consistency in SEM-PLS studies [9].

Convergent validity was also confirmed, as the Average Variance Extracted (AVE) values were all above 0.70, which is higher than the minimum recommended value of 0.50. This demonstrates that the latent constructs explain a substantial proportion of the variance in their respective observed items, thereby fulfilling the requirement of convergent validity [8]. Overall, the results indicate that the measurement model demonstrates robust reliability and validity, and is therefore suitable for subsequent structural model testing.

Table 3. Structural Model Path Coefficients and Significance Testing

Path	Original Sample (β)	Std. Dev.	t-stat.	p-values	Decision
GFL \rightarrow PBF	0.298	0.061	4.885	0.000***	H1 is accepted

DFI → PBF	0.341	0.057	5.982	0.000***	H2 is accepted
ECT → PBF	0.322	0.063	5.111	0.000***	H3 is accepted
PBF → SFC	0.407	0.059	6.898	0.000***	H4 is accepted
GFL → SFC	0.112	0.048	2.333	0.020**	H5 is accepted
DFI → SFC	0.185	0.055	3.364	0.001***	H6 is accepted
ECT → SFC	0.129	0.052	2.481	0.013**	H7 is accepted

Note: $t > 1.96$.*** $p < 0.001$; ** $p < 0.05$.

Source: Primary Data (2025)

Table 3 presents the results of the structural path analysis, including path coefficients, standard deviations, *t*-statistics, and significance levels. All paths show positive coefficients ranging from 0.112 to 0.407, which indicates that each independent construct contributes positively to its corresponding dependent construct. The strongest coefficient was observed for the relationship between perceived budgetary fairness and sustainable fiscal capacity ($\beta = 0.407, t = 6.898, p < 0.001$). This result demonstrates that the relationship is statistically the most stable among all tested hypotheses.

The three exogenous variables, namely green fiscal literacy, digital fiscal inclusion, and ecological trust, had significant effects on perceived budgetary fairness, with path coefficients between 0.298 and 0.341 and all at the 0.001 significance level. These findings show that these variables explain a substantial part of the variance in perceived fairness. The direct effects of the three exogenous variables on sustainable fiscal capacity were also positive and significant, although with lower coefficients. Green fiscal literacy produced a coefficient of 0.112, digital fiscal inclusion 0.185, and ecological trust 0.129.

In conclusion, all hypotheses (H1 to H7) were accepted as the *t*-statistics for each path exceeded the critical value of 1.96 and the *p*-values were below the 0.05 threshold. These results confirm that the proposed structural model has statistically reliable relationships among its constructs and that the data strongly support the hypothesised associations [9].

Table 4. Mediation Testing Results of Indirect Paths

Hypothesis Code	Mediation Path	Indirect Effect	<i>t</i> -stat	<i>p</i> -value	Result
H8a	GFL → PBF → SFC	0.121	4.221	0.000	Supported
H8b	DFI → PBF → SFC	0.139	4.738	0.000	Supported
H8c	ECT → PBF → SFC	0.131	4.456	0.000	Supported

Note: $t > 1.96$ indicates significance at $p < 0.05$

Source: Primary Data (2025)

Table 4 presents the results of the mediation testing for the indirect effects in the structural model. The analysis shows that all mediation paths through perceived budgetary fairness are statistically significant, with t-values ranging from 4.221 to 4.738, exceeding the minimum threshold of 1.96, and p-values equal to 0.000. These results indicate that the mediating role of perceived budgetary fairness is empirically supported across all three exogenous constructs.

The indirect effects range from 0.121 to 0.139, suggesting moderate effect sizes within acceptable limits for PLS-SEM studies. The mediation paths from green fiscal literacy, digital fiscal inclusion, and ecological trust to sustainable fiscal capacity via perceived budgetary fairness were all supported and classified as partial mediation. This classification is based on the significance of both the indirect and direct effects, which confirms that the mediator strengthens rather than fully replaces the relationships between the independent and dependent constructs.

In summary, the mediation testing results demonstrate that perceived budgetary fairness acts as a statistically significant partial mediator. These findings confirm the robustness of the measurement model and provide evidence that the hypothesised mediation paths are valid within the tested structural framework [8].

5 Discussion

The results of this study demonstrate that green fiscal literacy, digital fiscal inclusion, and ecological trust each exert significant positive effects on perceived budgetary fairness, while fairness itself has a direct and meaningful influence on sustainable fiscal capacity. The findings further reveal that literacy, inclusion, and trust directly contribute to fiscal sustainability, with fairness serving as a partial mediator that strengthens rather than replaces these relationships. Taken together, the structural model confirms that sustainable fiscal capacity is not determined by financial performance alone but by the interplay of knowledge, digital access, trust, and fairness within the broader framework of fiscal legitimacy.

When considered in relation to the existing literature, these findings broadly confirm the arguments of the fiscal legitimacy perspective, which stresses that public acceptance of fiscal systems depends upon perceived fairness, transparency, and institutional trust [3]. The influence of green fiscal literacy on perceptions of fairness and on fiscal capacity is consistent with the work of Gedvilaitė et al. [5] and Yucel et al. [6], who showed that literacy enables citizens to engage more effectively with fiscal policies that incorporate environmental dimensions. By highlighting the significance of literacy within a decentralised Indonesian context, this study contributes empirical evidence to support the theoretical claim that knowledge and awareness legitimise long-term fiscal commitments.

The positive role of digital fiscal inclusion also mirrors the findings of Rosário and Dias [1], who emphasised the importance of digital access in enhancing transparency and procedural fairness. By showing that digital participation directly enhances fiscal capacity, the results extend the observations of Tay et al. [10] and complement the warning of Monkam and Mangwanya [2], who noted that inequalities in digital access

may constrain fiscal legitimacy. In Majene, where disparities in infrastructure and digital literacy persist, the findings confirm that inclusion through technology is not merely a technical improvement but a condition for strengthening fiscal legitimacy and capacity.

Similarly, the impact of ecological trust on both fairness and fiscal sustainability is consistent with the conclusions of Aslam and Ghouse [4] and Hochstetter et al. [7], who argued that trust in ecological commitments is fundamental to securing public support for fiscal reforms. This study reinforces their claims by demonstrating that ecological trust, when situated within the fiscal domain, enhances perceptions of fairness and strengthens sustainable capacity. The evidence suggests that ecological trust operates not only in environmental policy but also within the legitimacy of fiscal governance.

The mediating role of perceived budgetary fairness validates the proposition that fairness acts as a central mechanism linking literacy, inclusion, and trust with fiscal outcomes. This observation extends the work of Hochstetter et al. (2023), who identified fairness as a determinant of legitimacy, by empirically demonstrating its mediating function in the fiscal context. The finding of partial mediation indicates that while fairness is an important pathway, the direct influences of literacy, inclusion, and trust remain relevant, thus providing a more nuanced understanding of legitimacy theory.

The implications of these findings are both theoretical and practical. Theoretically, the study advances fiscal legitimacy theory by integrating green fiscal literacy, digital fiscal inclusion, and ecological trust into a single model of sustainable fiscal capacity. It demonstrates that fairness is not only an outcome of governance but also a mediating force that sustains fiscal legitimacy. Practically, the results highlight the need for local governments such as Majene Regency to design policies that strengthen literacy in its environmental dimension, expand digital access across communities, and build trust through transparent ecological commitments. By doing so, local governments can foster perceptions of fairness that are indispensable for achieving fiscal sustainability.

In summary, the discussion confirms that the sustainability of fiscal capacity in decentralised contexts is shaped by the combination of knowledge, access, trust, and fairness. These findings not only corroborate existing theoretical perspectives but also extend them by situating the analysis within a specific regional setting, thereby offering both empirical evidence and practical insights for strengthening fiscal governance.

6 Conclusion

This study examined the role of green fiscal literacy, digital fiscal inclusion, and ecological trust in shaping sustainable fiscal capacity, with perceived budgetary fairness as a mediating construct, in the decentralised context of Majene Regency, West Sulawesi. The results revealed that the three independent variables significantly influenced perceptions of fairness, and that fairness itself exerted a strong direct effect on fiscal sustainability. In addition, literacy, inclusion, and trust were found to directly influence sustainable fiscal capacity, with fairness operating as a partial mediator. These findings confirm that fiscal sustainability is not solely dependent upon financial resources but is

also determined by legitimacy processes grounded in public knowledge, digital access, ecological trust, and perceptions of fairness.

From a theoretical perspective, the study contributes to the extension of fiscal legitimacy theory by integrating cognitive, technological, and affective dimensions into its framework. Green fiscal literacy introduces the ecological dimension of fiscal knowledge, digital fiscal inclusion underscores the role of equitable access to technology in governance legitimacy, and ecological trust highlights the significance of institutional credibility in sustaining fiscal reform. The mediating role of perceived fairness provides a more nuanced understanding of legitimacy, showing that fairness functions as both a determinant and a pathway linking public perceptions to fiscal sustainability. These contributions broaden the explanatory power of legitimacy theory in sustainability-oriented fiscal research.

From a practical perspective, the findings carry important implications for local governments, particularly in regions such as Majene. Efforts to enhance green fiscal literacy through public education and awareness programmes can strengthen citizens' understanding of the ecological value of fiscal policy and increase their support for sustainable initiatives. Expanding digital fiscal inclusion through investments in infrastructure and training can reduce disparities between urban and rural populations, enabling more equitable participation in fiscal processes. Strengthening ecological trust requires governments not only to articulate environmental commitments but also to demonstrate transparency and accountability in their fulfilment. Central to all of these measures is the promotion of budgetary fairness, which enhances public acceptance of fiscal reforms and contributes to sustainable fiscal capacity over the long term.

Despite these contributions, several limitations must be acknowledged. First, the study relied on data from a single regency, which may restrict the generalisability of the findings to other regions with different socio-economic or cultural conditions. Second, the use of cross-sectional survey data limits the ability to capture dynamic changes in literacy, trust, and fairness over time. Third, the reliance on self-reported measures introduces the possibility of response bias, particularly in relation to sensitive issues of trust and fairness.

These limitations provide important directions for future research. Comparative studies across multiple regions would help to determine the extent to which the findings are context-specific or generalisable to other decentralised governance systems. Longitudinal research could explore how fiscal legitimacy evolves in response to changes in policy, digital infrastructure, or environmental commitments. Future studies could also extend the model by incorporating additional mediating or moderating factors, such as institutional capacity, political culture, or citizen engagement, to deepen the understanding of the mechanisms that underpin sustainable fiscal capacity. By addressing these areas, future research would not only refine the theoretical model but also provide richer insights for policymakers seeking to strengthen fiscal governance in practice.

In conclusion, this study demonstrates that sustainable fiscal capacity is deeply embedded in the legitimacy of governance. By integrating green fiscal literacy, digital fiscal inclusion, ecological trust, and budgetary fairness into a coherent framework, it shows that fiscal sustainability is achieved not merely through financial management but through inclusive, transparent, and trusted governance processes. These insights

reinforce the centrality of legitimacy in fiscal governance and offer practical strategies for local governments striving to achieve sustainability in the context of limited resources and decentralised authority.

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