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**STRENGTHENING LOCAL FISCAL RESILIENCE: GOVERNANCE AND POLICY RESPONSES TO FINANCIAL DISTRESS**Anggi Mega Rizki<sup>1a</sup>, Rindu Rika Gamayuni<sup>2b</sup>, Pigo Nauli<sup>3c</sup><sup>123</sup>Accounting Department, Economic and Business Faculty, University of Lampung, Bandar Lampung, 35141, Indonesia  
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<http://doi.org/10.23960/jak.v31i1.4639>**ABSTRACT**

Fiscal resilience at the local government level has become a critical issue in public financial management, particularly in the context of rising fiscal pressures and persistent dependence on intergovernmental transfers. These conditions have direct implications for the quality of public service delivery and the stability of the national fiscal system. This study examines the role of governance and policy interventions in addressing financial distress as a pathway to achieving fiscal resilience in local governments. Departing from prior studies that predominantly emphasize financial ratios, this research underscores the significance of governance arrangements and central government interventions as strategic responses to local fiscal stress, offering a more comprehensive and systematic synthesis of the existing literature. Using a Systematic Literature Review approach based on the SPAR-4-SLR framework, this study analyzes 15 Scopus-indexed articles published between 2007 and 2025 through thematic analysis. The results indicate that local fiscal resilience is shaped not only by financial indicators but also by the quality of governance, local political structures, and the effectiveness of policy interventions in responding to fiscal pressures. These findings suggest that sustainable fiscal resilience can be achieved through the strengthening of local governance capacities and the implementation of adaptive and responsive policy interventions aligned with the dynamics of local fiscal risks.

**Keywords:** Financial Distress, Fiscal Resilience, Governance, Local Government, Policy Intervention.**ABSTRAK**

Ketahanan fiskal pemerintah daerah menjadi isu yang semakin penting dalam pengelolaan keuangan publik, terutama di tengah meningkatnya tekanan fiskal dan ketergantungan pada transfer antar-pemerintah. Kondisi ini berdampak langsung pada kualitas pelayanan publik dan stabilitas fiskal nasional. Penelitian ini mengkaji peran tata kelola dan intervensi kebijakan dalam menangani financial distress sebagai upaya mencapai ketahanan fiskal daerah. Berbeda dengan penelitian sebelumnya yang lebih berfokus pada rasio keuangan, studi ini menyoroti pentingnya tata kelola dan intervensi pemerintah pusat sebagai respons strategis terhadap tekanan fiskal daerah, serta menyajikan sintesis literatur yang lebih komprehensif dan sistematis. Dengan pendekatan Systematic Literature Review berbasis kerangka SPAR-4-SLR, penelitian ini menganalisis 15 artikel terindeks Scopus periode 2007-2025 melalui analisis tematik. Hasil kajian menunjukkan bahwa ketahanan fiskal daerah tidak hanya ditentukan oleh indikator keuangan, tetapi juga dipengaruhi oleh kualitas tata kelola, struktur politik lokal, dan efektivitas intervensi kebijakan dalam merespons tekanan fiskal. Temuan ini menegaskan bahwa ketahanan fiskal yang berkelanjutan memerlukan penguatan kapasitas tata kelola pemerintah daerah serta intervensi kebijakan yang adaptif terhadap dinamika risiko fiskal daerah.

**Kata Kunci:** Financial Distress, Intervensi Kebijakan, Ketahanan Fiskal, Pemerintah Daerah, Tata Kelola**Corresponding author :**

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Email: [anggimegarizki@gmail.com](mailto:anggimegarizki@gmail.com)**A. INTRODUCTION**

Local governments play a strategic role in ensuring the availability of quality and sustainable public services. However, over the past two decades, an increasing number of local governments across various countries have encountered serious challenges in the form of financial distress a condition of fiscal incapacity that threatens the continuity of local government functions. This phenomenon reflects not only technical issues in budget management but also reveals systemic vulnerabilities in fiscal governance, financial planning, and internal oversight mechanisms.

In Indonesia, this situation has grown increasingly complex following the issuance of Presidential Instruction No. 1 of 2025 concerning Spending Efficiency in the Implementation of the National and Regional Budgets. While this policy is intended to strengthen national fiscal consolidation, it simultaneously imposes additional financial pressures on local governments especially those that remain highly dependent on central government transfers and lack fiscal autonomy. Data from the Ministry of Finance indicates that more than 80% of local government revenues still originate from central transfers, and at least 114 local governments have been recorded as running budget deficits.

Similar fiscal pressures have been observed in countries such as Italy, Israel, and Finland countries that are the focus of analysis in this study. Several peer-reviewed articles published in Scopus-indexed journals suggest that financial distress may lead to widespread consequences, ranging from declining public service quality and development stagnation to administrative interventions by central governments, which ultimately reduce local autonomy (Fiorelli, Pontarollo, & Serpieri, 2025; Guarini, De Toni, & Vallone, 2015; Reingewertz & Beerli, 2018). These circumstances raise a fundamental question: What role do governance and policy intervention play in addressing financial distress to achieve local fiscal resilience? To answer this question, it is essential to understand the primary causes of financial distress and assess how governance and policy interventions can function as effective and sustainable solutions.

Although previous studies have extensively examined financial distress through financial indicators and fiscal determinants, limited attention has been given to how governance capacity and policy interventions contribute to strengthening local fiscal resilience across different institutional contexts. This gap indicates the need for a more comprehensive synthesis that integrates governance dimensions with policy responses in addressing financial distress. This study aims to systematically examine how empirical literature over the past two decades has conceptualized financial distress at the local government level. The analysis focuses on two core aspects: (1) the effectiveness of governance as an instrument for mitigating fiscal risks, and (2) the forms of policy interventions designed to restore the financial condition of local governments. This investigation employs a Systematic Literature Review (SLR) approach, drawing on 15 Scopus-indexed articles published between 2007 and 2025.

The main contribution of this study lies in its thematic synthesis, which not only highlights the determinants of fiscal distress but also maps out the policy interventions that have been implemented, along with their effectiveness across diverse institutional contexts. This research also seeks to address gaps in the existing literature, which has predominantly focused on deterministic factors such as deficits, debt, and revenue ratios without giving sufficient attention to institutional capacity, financial governance, and varying local contexts. Accordingly, this study positions itself to bridge these gaps by providing a systematic understanding of how governance and policy interventions shape local fiscal resilience beyond conventional financial indicators. Through this approach, the findings of this study are expected to provide both theoretical insights and practical guidance for the formulation of more adaptive, responsive, and governance-based fiscal policies.

## **B. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### **Financial Distress in Local Governments**

Financial distress in local governments refers to fiscal incapacity that limits the ability to meet financial obligations and sustain public service delivery. Early studies identify financial distress through indicators such as budget deficits, rising debt, declining liquidity, and fiscal imbalances (García-Sánchez, Cuadrado-Ballesteros, Frías-Aceituno, & Mordan, 2012; Jones & Walker, 2007). However, later studies argue that financial distress extends beyond accounting problems and reflects broader weaknesses in institutional governance and fiscal management (Cohen, Costanzo, & Manes-Rossi, 2017). In decentralized systems, structural mismatches between expenditure responsibilities and fiscal capacity further increase vulnerability to recurring fiscal stress, particularly where local governments face high service demands but limited revenue autonomy (Padovani, Porcelli, & Zanardi, 2024). Thus, financial distress is increasingly viewed as a multidimensional condition shaped by both financial performance and institutional factors.

### **Governance and Institutional Quality**

Governance quality is a critical determinant of local government financial conditions. Effective governance through strong internal controls, transparency, accountability, and stable leadership can reduce fiscal risk and improve responses to fiscal pressures (Guarini et al., 2015; Wakwabubi, Nkundabanyanga, Orobia, & Kaawaase, 2023). Conversely, weak governance contributes to inefficiencies, delayed fiscal adjustments, and political opportunism, potentially escalating fiscal distress into systemic failure requiring higher-level intervention (Cohen et al., 2017; Reingewertz & Beerli, 2018). Political dynamics, bureaucratic capacity, and dependence on intergovernmental transfers also influence fiscal solvency and resilience (Kooij & Groot, 2021; Onyango-Delewa & Nkote, 2021). Overall, governance functions as a key mechanism that either mitigates or amplifies fiscal stress.

### **Policy Interventions and Fiscal Recovery**

Policy interventions are commonly used when local governments face severe fiscal distress beyond their corrective capacity. These interventions include fiscal bailouts, administrative oversight, audit-based action plans,

and conditional transfers (Carmeli, Yitzhak, & Vinerski-Peretz, 2008). While such measures may improve short-term fiscal stability, their long-term effectiveness remains debated, particularly when they fail to address structural causes of fiscal distress (Yang, 2023). Excessive reliance on central support may also increase dependency and weaken fiscal discipline (Chudaieva, Sukach, & Sarana, 2024; Nasution, 2024). Studies suggest that interventions emphasizing institutional reform, capacity building, and governance strengthening are more effective in enhancing long-term fiscal resilience (Fiorelli et al., 2025; McKenzie & Marx, 2025).

### Fiscal Resilience as an Integrated Concept

Recent literature conceptualizes fiscal resilience as the ability of local governments to anticipate, absorb, and adapt to fiscal shocks while maintaining financial sustainability and service delivery. Fiscal resilience depends not only on financial indicators but also on governance quality, political structures, and policy effectiveness (Guarini et al., 2015; Padovani et al., 2024). This perspective shifts attention from identifying financial distress to understanding the institutional and policy capacities that enable proactive fiscal risk management. Consequently, governance and policy interventions emerge as strategic components for strengthening long-term fiscal resilience (De Widt, 2021).

### Research Positioning

Given its Systematic Literature Review design, this study does not aim to test empirical hypotheses. Instead, it synthesizes existing empirical evidence to address the research question concerning how governance and policy interventions contribute to managing financial distress and fostering fiscal resilience in local governments. By integrating fiscal, institutional, and policy-oriented perspectives, this literature review provides a conceptual foundation for interpreting the thematic findings and advancing a more comprehensive understanding of local fiscal resilience.

## C. RESEARCH METHODOLOGY

This study adopts a Systematic Literature Review (SLR) approach by following the framework of Scientific Procedures and Rationales for Systematic Literature Reviews (SPAR-4-SLR) developed by Paul et al. (2021). This framework is designed to provide both scientific justification and procedural guidance for conducting systematic, transparent, and replicable SLRs. SPAR-4-SLR consists of three main stages: assembling, arranging, and assessing. This structured approach ensures a comprehensive and rigorous synthesis of existing literature, enabling the identification of key themes, gaps, and future research directions relevant to local fiscal resilience (Paranata, 2025). The overall research procedure, including the article selection and thematic analysis process, is illustrated in Figure 1.



Figure 1. Research Flow Based on the SPAR-4-SLR Framework

### Assembling: Identification and Acquisition of Literature

The first step involves identifying the research domain, namely financial distress in local governments. The review focuses on the roles of governance and policy intervention in explaining and addressing financial distress.

Relevant literature was retrieved from the Scopus database using the search keywords: financial distress and local government. The inclusion criteria used are presented in Table 1.

**Table 1.** Inclusion Criteria

No.	Filter Category	Limited to
1	Subject area	Social Science Business, Management and Accounting Economics, Econometrics and Finance
2	Document Type	Article
3	Publication Stage	Final
4	Keyword	Financial Distress Local Government
5	Source Type	Journal

An initial search yielded a total of 22 articles. These articles were then reviewed individually to ensure their relevance to the context of the public sector. A total of 7 articles were excluded because their research objects pertained to the financial or corporate (non-governmental) sectors, making them irrelevant to the objectives of this study. After the exclusion process, 15 articles remained that met all inclusion criteria and were deemed suitable for further analysis.

### **Arranging: Organization and Purification of the Literature**

The next stage involves organizing the selected articles based on metadata such as publication year, country/geographical context, thematic focus, and analytical methods. These articles are classified into five main themes according to their content and objectives: (1) fiscal factors as determinants of distress, (2) governance and institutional control, (3) forms and effectiveness of policy interventions, (4) socio-political factors and local characteristics, and (5) predictive models and approaches to measuring fiscal distress. A purification process is carried out to ensure the absence of duplication, publication bias, or information irrelevant to the local government sector. All articles are thoroughly analyzed through full-text reading, then extracted into a matrix to facilitate a systematic thematic synthesis.

### **Assessing: Evaluation and Reporting of the Literature**

At the final stage, each article was qualitatively analysed to identify similarities, differences, and unique findings that contribute to a deeper understanding of the phenomenon of financial distress in the local government sector. The evaluation was conducted thematically based on five major predefined themes, and the results were synthesized in the form of narrative explanations and summary tables. In addition, the analysis included the identification of existing research gaps, whether in terms of geographical coverage, methodological approaches, or the integration of fiscal, institutional, and socio-political dimensions. The outcomes of this stage served as the foundation for developing the discussion, policy implications, and recommendations for future research agendas.

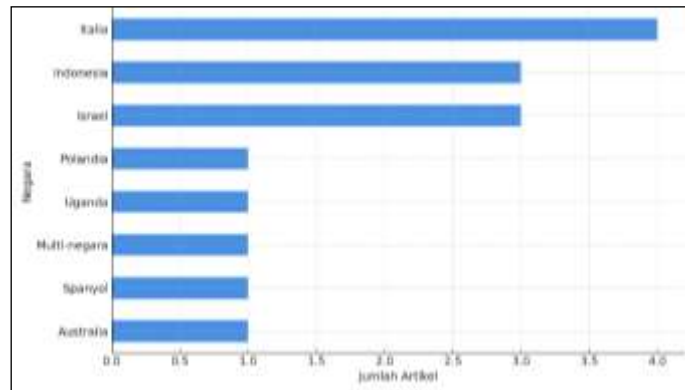
## **D. RESULT AND DISCUSSION**

### **Conceptual Definition**

In the context of local government, financial distress refers to a condition of short-term or long-term fiscal incapacity to effectively and sustainably meet financial obligations, including operational expenditures, debt repayments, and the provision of public services. Although definitions vary across the literature, the majority of articles in this SLR agree that financial distress constitutes a combination of deteriorating fiscal indicators and weak fiscal governance. Financial distress defined as a condition in which local governments are unable to maintain budgetary balance due to a low revenue-to-expenditure ratio (Jones & Walker, 2007). Distress as a financial condition that generates potential medium-term instability due to reliance on external funding sources and recurring deficits (García-Sánchez et al., 2012). Meanwhile, other argue that distress occurs when there are anomalies in profitability and budget efficiency indicators, even if the budget appears to be in surplus nominally (Winarna, Widagdo, & Setiawan, 2017).

Several studies have added non-financial dimensions as critical elements in defining distress. That distress should not be assessed solely through budgetary imbalances, but also by the declining quality of public services and increasing administrative interventions by the central government (Cohen et al., 2017). In the case of Israel, they highlight fiscal distress as a legally recognized condition that triggers a fiscal takeover by the central government due to a local government's failure to meet minimum financial standards (Reingewertz & Beerli, 2018). In many countries, fiscal vulnerabilities are driven by a combination of weak structural conditions and inadequate fiscal frameworks (Chandia, Iqbal, & Bahadur, 2022). From a predictive perspective, define distress as the final outcome of a fiscal failure process that can be anticipated through early warning indicators (Antulov-Fantulin, Lagravinese, & Resce, 2021). They view distress as the result of a combination of fiscal pressures and the local government's inability to respond appropriately, whether through policy actions or structural adjustments.

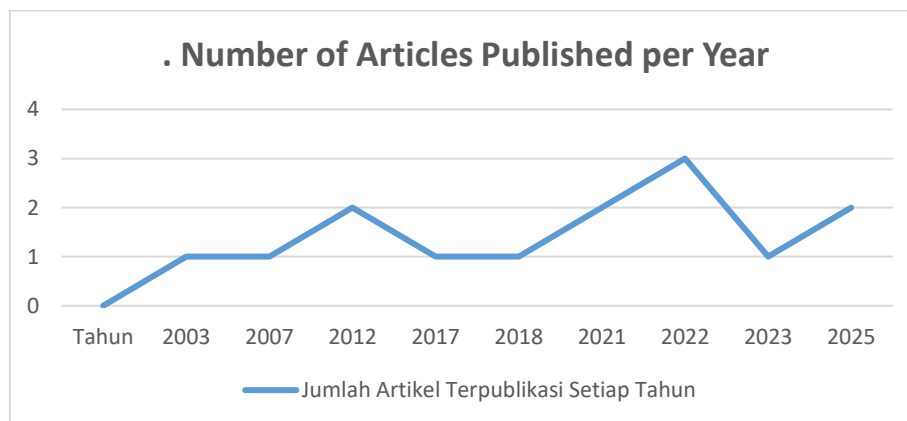
## Research Development



**Figure 2.** Number of Articles by Country

Figure 2 shows the distribution of publications based on the country context of the studies. Out of the 15 articles analyzed, Italy ranks highest with four studies, followed by Indonesia and Israel with three studies each. Other countries such as Poland, Uganda, Spain, and Australia, along with one cross-country study, each contributed one article. The significant number of publications from Italy indicates consistent academic attention to the issue of financial distress at the local government level. This corresponds with empirical realities, as Italy experienced a substantial wave of subnational fiscal crises, particularly following the 2008 European debt crisis. More than 300 local governments in Italy were classified as fiscally distressed between 2012 and 2017, prompting extensive fiscal intervention policies and comprehensive reforms in local financial governance. The central government even allocated several billion euros in emergency funds to help municipalities repay debts and fulfill basic obligations.

In contrast, studies from Indonesia highlight the dynamics of emerging regions grappling with classical challenges such as dependence on central government transfers, weak local revenue (PAD), and low budget efficiency. Research in Israel predominantly focuses on administrative interventions through fiscal committees, illustrating a technocratic model of distress management. Although countries like Poland and Uganda have not been widely explored through quantitative studies, they offer compelling perspectives on the influence of local politics and clientelism in subnational financial management.



**Figure 3.** Number of Articles Published per Year

Figure 3 illustrates the publication trend from 2003 to 2025. Notably, there are significant spikes in publication volume in the years 2012 and 2022, each reflecting academic responses to critical fiscal developments at both global and local levels. The year 2012 marked heightened academic interest in the fiscal crisis across Europe, particularly in countries like Italy and Spain. The European sovereign debt crisis triggered widespread reforms in subnational fiscal governance, including enhanced budget oversight, public expenditure cuts, and vertical fiscal bailouts from central governments. Studies from this period highlighted the importance of early warning systems and fiscal ratio indicators as tools for predicting distress.

In 2022, publication activity peaked in conjunction with mounting fiscal pressures in the aftermath of the COVID-19 pandemic. Many local governments around the world faced increasing deficits, declining own-source revenues, and urgent demands to reallocate spending toward health services and economic recovery. In Indonesia, two articles published in that year explored the effects of financial and institutional characteristics on fiscal distress. Meanwhile, countries like Uganda and Italy served as focal cases to examine how governance and fiscal interventions influence local financial performance. The year 2025 represents an emerging trend toward evaluating policy interventions and strengthening data-driven fiscal governance. Articles published this year predominantly

examine the effectiveness of audit planning, institutional design, and the integration of machine learning approaches in detecting fiscal distress.

### **Fiscal Factors as Determinants of Financial Distress**

Fiscal indicators serve as primary determinants in identifying potential financial distress among local governments. Several studies have demonstrated that ratios such as budget deficits, capital expenditure ratios, and dependence on intergovernmental transfers are consistently associated with elevated fiscal risk. Research conducted in Australia, for example, indicates that the ratio of infrastructure expenditure to total revenue significantly contributes to fiscal distress (Jones & Walker, 2007). Meanwhile, research in Indonesia highlights indicators such as the Road Program to Total Asset (RPCTA) ratio and carrying value as benchmarks for evaluating the efficiency of government asset utilization (Winarna et al., 2017). Beyond their diagnostic role, fiscal indicators also function as early warning signals that enable governments to anticipate rollover and refinancing risks and to adjust fiscal policies before vulnerabilities escalate into fiscal stress events (Chandia et al., 2022). However, it is important to note that a budget surplus does not necessarily reflect a healthy fiscal condition. Surpluses may obscure inefficiencies, particularly when not accompanied by effective budget management (Cohen et al., 2017). Profit margin and return on equity must be assessed in conjunction with the efficiency and effectiveness of budget execution (Winarna et al., 2017).

In addition to financial indicators such as debt and expenditure efficiency, revenue capacity is also a key element in explaining the fiscal vulnerability of local governments. Empirical evidence suggests that local governments with higher levels of financial independence are less likely to experience financial distress, while the degree of fiscal decentralization exerts a partial but positive influence on fiscal conditions (Islamiyah, Ratifah, & Firdaus, 2022). In fact, the commonly held assumption regarding the positive effect of population growth on fiscal health can be misleading (Drew, Miyazaki, & A. Kortt, 2023). Through a ten-year panel data analysis, the study found that population growth is negatively associated with local government unit revenue, indicating that an increase in population may reduce per capita revenue ratios if not accompanied by reforms in local revenue instruments. This finding underscores the notion that fiscal resilience requires an approach that not only stabilizes expenditures but also strengthens the revenue base in an adaptive manner, responsive to demographic changes and migration trends.

### **Governance and Institutional Control**

Various studies in this literature indicate that institutional governance plays a critical role in shaping the financial condition of local governments. Weak internal oversight capacity and low fiscal accountability emerge as dominant factors contributing to fiscal distress, particularly in regions with a high degree of autonomy (Cohen et al., 2017). In this context, monitoring local fiscal health by higher levels of government serves as a critical governance mechanism, enabling early detection of fiscal distress, facilitating preventive policy responses, and strengthening coordination and communication between central and local governments. Such oversight allows higher-tier governments to better understand local fiscal constraints while supporting local governments in managing potential fiscal shocks (Maher, Oh, & Liao, 2020). In the case of Israel, inadequate internal control systems accelerated the emergence of fiscal crises, ultimately leading to administrative intervention.

In addition, leadership and managerial stability within local governments significantly influence the effectiveness of fiscal governance (Guarini et al., 2015). Local governments that experience frequent turnover of officials without robust audit and monitoring systems tend to struggle in maintaining consistency in long-term fiscal policies. Good governance extends beyond formal regulations; it also encompasses organizational culture and the integrity of public actors. In the context of East Africa, local political influence and clientelism have been found to further undermine the structure of fiscal governance (Wakwabubi et al., 2023). Low levels of public engagement and weak bureaucratic incentive systems hinder local governments from consistently implementing financial control programs. Consequently, effective institutional governance becomes a crucial element in preventing and managing fiscal distress.

### **Forms and Effectiveness of Policy Interventions**

The literature indicates that policy interventions by central governments have a significant impact on the success of local fiscal recovery. The administrative intervention model in Israel, which involves the establishment of Convened Committees, has been found to significantly enhance fiscal efficiency, although it may also provoke resistance from local political actors (Reingewertz & Beeri, 2018). The success of an intervention largely depends on the integration of technocratic policies with their social legitimacy. In Indonesia, the audit action plans implemented following audits by the Supreme Audit Board (BPK) serve as an important form of indirect intervention. A study by McKenzie and Marx (2025) emphasized that the effectiveness of action plans heavily depends on internal commitment and the implementation capacity of each local government. Without clear follow-up actions and regular monitoring, audit interventions remain merely symbolic and lack tangible impact.

Beyond administrative and audit-based interventions, strengthening local revenue policies also represents an important policy response to fiscal distress. This includes the harmonization of local taxes and user charges with central tax systems to enhance own-source revenue performance. In addition, the role of Regionally-Owned Enterprises (BUMD) as a source of local revenue needs to be reinforced through professional management practices,

accompanied by measurable performance monitoring and evaluation to improve competitiveness and fiscal contributions (Ansori, Nasir, Diantimala, & Abdullah, 2021). Interventions should not be limited to sanctions or the takeover of fiscal authority, but may also be carried out through dialogic approaches and efforts to strengthen the capacity of local institutions (Carmeli et al., 2008). This approach enables the creation of sustainable changes that not only improve the financial balance sheets but also strengthen local fiscal governance.

### **Socio-Political Factors and Local Characteristics**

In addition to fiscal and governance aspects, socio-political dynamics and local characteristics also contribute to financial distress conditions. Disparities in fiscal capacity across regions reinforce structural dependency and amplify the risk of distress (Padovani et al., 2024). Regions with low fiscal capacity but high public service burdens are particularly vulnerable to recurring fiscal crises. Vertical fiscal interventions such as bailouts or conditional fiscal transfers do not always succeed in resolving financial distress, primarily because they are often not accompanied by adequate incentives for local institutional reform (Fiorelli et al., 2025). In some cases, such interventions even create a moral hazard, where local governments are disincentivized to pursue fiscal efficiency due to the expectation of external financial rescue. Additionally, bureaucratic culture and the local political system significantly influence how a region responds to fiscal pressures (Galiński, 2023). The level of public participation, budget transparency, and the quality of intergovernmental relationships are critical variables in preventing prolonged fiscal crises. These factors foster accountability and collective ownership, which are essential for building sustainable fiscal governance at the local level.

Socio-political factors such as group identity, welfare levels, and public trust in local governments have been shown to play a significant role in the dynamics of fiscal distress. A notable example is the case of Dublin's administrative boundary expansion in 1901. The city government's decision to annex wealthier surrounding areas was strategically aimed at broadening the tax base to rescue its deteriorating fiscal condition. This historical case illustrates how fiscal strategies are often deeply intertwined with political calculations and social dynamics (Berger, Mariuzzo, & Ormosi, 2022). However, this policy triggered an exodus of wealthy and Protestant residents from the annexed areas to regions that remained independent. This finding highlights that fiscal decisions made without considering citizens' perceptions and preferences regarding governance structures can provoke social resistance, accelerate territorial disintegration, and exacerbate long-term fiscal pressures. In the modern context, this phenomenon underscores the importance of considering social legitimacy and community cohesion when designing fiscal interventions or institutional reforms. Public responses to tax expansion or governance reforms can critically influence the success or failure of fiscal policies, particularly in regions marked by income inequality or complex identity structures.

### **Predictive Models and Measurement Approaches for Financial Distress**

Predictive approaches to financial distress have developed rapidly over the past decade. García-Sánchez examined various predictive approaches in Spain and concluded that a combination of fiscal indicators such as debt ratio, personnel expenditure, and operational spending efficiency can be used as a fairly accurate early warning system (García-Sánchez et al., 2012). However, they also caution that predictive models are contextual and must be adapted to each country's budgeting system. Antulov-Fantulin et al. (2021) proposed the use of machine learning methods such as Gradient Boosting Machine (GBM) to identify distress patterns in thousands of cities in Italy. This model has proven effective in capturing the complex interactions between fiscal and social variables, and provides more accurate predictive results compared to traditional linear models.

Several predictive frameworks conceptualize local government financial distress through multiple solvency dimensions, including cash, budgetary, service-level, and long-term solvency (Kooij & Groot, 2021). These frameworks emphasize that predictive accuracy improves when models account not only for current fiscal performance but also for risk factors associated with future fiscal stress and institutional capacities that support long-term financial sustainability. However, existing empirical applications tend to focus on selected dimensions only, resulting in a fragmented assessment of fiscal distress. Nevertheless, the main challenge in developing predictive models lies in the limited availability of high-quality and consistent data, especially in developing countries. Therefore, it is necessary to develop a predictive framework that not only considers financial indicators but also incorporates broader institutional and contextual variables, including demographic, social, and local fiscal policy characteristics.

### **Key Findings**

To provide a comprehensive and structured overview of how subnational financial distress manifests globally, Table 1 synthesizes the key empirical findings, core variables, and analytical themes identified across the various country contexts within this systematic literature review.

**Table 1.** Matrix of Key Findings Across Country Contexts and Themes

Country Context (No. of Articles)	Analysed Themes	Key Variables & Indicators	Core Findings & Mechanisms
Italy (4 articles)	<ul style="list-style-type: none"> <li>•Research Development</li> <li>•Predictive Models</li> <li>•Socio-Political Factors</li> </ul>	<ul style="list-style-type: none"> <li>•Post-2008 European debt crisis</li> <li>•Gradient Boosting Machine (GBM)</li> <li>•Vertical fiscal bailouts</li> </ul>	A substantial wave of subnational fiscal crises affected over 300 municipalities between 2012 and 2017. Machine learning (GBM) is highly effective in capturing complex interactions between socio-political and fiscal variables compared to traditional linear models. Vertical bailouts run the risk of inducing moral hazard.
Indonesia (3 articles)	<ul style="list-style-type: none"> <li>•Conceptual Definition</li> <li>•Fiscal Factors</li> <li>•Policy Interventions</li> </ul>	<ul style="list-style-type: none"> <li>•Intergovernmental transfers vs. Own-Source Revenue (PAD)</li> <li>•Road Program to Total Asset (RPCTA) ratio</li> <li>•BPK Audit Action Plans</li> </ul>	Emerging regions heavily grapple with transfer dependency and low budget efficiency. Nominal budget surpluses can obscure underlying operational inefficiencies. The effectiveness of indirect policies (such as audit action plans) relies strictly on local institutional commitment and implementation capacity.
Israel (3 articles)	<ul style="list-style-type: none"> <li>•Conceptual Definition</li> <li>•Governance &amp; Control</li> <li>•Policy Interventions</li> </ul>	<ul style="list-style-type: none"> <li>•Legal minimum financial standards</li> <li>•Convened Committees</li> <li>•Technocratic intervention model</li> </ul>	Fiscal distress is legally defined as a condition that triggers a mandatory fiscal takeover by the central government. Inadequate internal controls accelerate subnational crises. The technocratic model involving Convened Committees enhances fiscal efficiency but frequently faces resistance from local political actors.
Australia (1 article)	<ul style="list-style-type: none"> <li>•Fiscal Factors</li> </ul>	<ul style="list-style-type: none"> <li>•Infrastructure expenditure-to-revenue ratio</li> <li>•Per capita revenue ratio</li> <li>•Population growth rates</li> </ul>	A high infrastructure expenditure-to-total revenue ratio acts as a primary driver of distress. Counterintuitively, rapid population growth can negatively affect local revenue units and lower per capita revenue ratios if not accompanied by structural reforms in local revenue instruments.
Spain (1 article)	<ul style="list-style-type: none"> <li>•Predictive Models</li> <li>•Fiscal Factors</li> </ul>	<ul style="list-style-type: none"> <li>•Debt ratio, personnel &amp; operational expenditure efficiency</li> </ul>	Traditional linear financial ratios (such as debt and personnel spending) can construct highly accurate early warning systems, but the predictive models remain strictly contextual and must be calibrated to the country's specific budgeting system.
Uganda / East Africa (1 article)	<ul style="list-style-type: none"> <li>•Governance &amp; Control</li> <li>•Research Development</li> </ul>	<ul style="list-style-type: none"> <li>•Political clientelism &amp; local politics</li> <li>•Public engagement &amp; bureaucratic incentives</li> </ul>	Non-financial and institutional barriers, such as local political clientelism, low levels of civic engagement, and weak bureaucratic incentive structures, severely hinder the implementation of financial control programs and consistent fiscal oversight.
Poland (1 article)	<ul style="list-style-type: none"> <li>•Socio-Political Factors</li> <li>•Research Development</li> </ul>	<ul style="list-style-type: none"> <li>•Bureaucratic culture</li> <li>•Budget transparency &amp; political systems</li> </ul>	Subnational political systems, local bureaucratic culture, and budget transparency heavily dictate how effectively and transparently a region responds and adapts to sudden external fiscal pressures.

Country Context (No. of Articles)	Analysed Themes	Key Variables & Indicators	Core Findings & Mechanisms
Cross-Country / Historical Case (1 article)	<ul style="list-style-type: none"> <li>•Conceptual Definition</li> <li>•Socio-Political Factors</li> <li>•Predictive Models</li> </ul>	<ul style="list-style-type: none"> <li>•Weak structural frameworks</li> <li>•Territorial/boundary expansion</li> <li>•multi-dimensional solvency framework</li> </ul>	Fiscal vulnerabilities are cross-nationally driven by a combination of weak structural conditions and inadequate frameworks. Historically (e.g., Dublin 1901), using territorial annexation to artificially widen the tax base triggered social resistance (exodus of wealthy residents) and exacerbated long-term fiscal stress. Predictive accuracy significantly improves when frameworks account for multiple solvency dimensions (cash, budget, service-level, and long-term solvency).

## E. CONCLUSION AND SUGGESTION

This study presents a systematic synthesis of 15 scholarly articles on financial distress at the local government level, with a primary focus on the role of governance and policy interventions. The findings indicate that fiscal distress is not solely a result of poor financial ratios, but is also significantly influenced by weak institutional governance, local political structures, and the capacity of regions to respond to fiscal pressures. Each study illustrates that building local fiscal resilience requires not only quantitative approaches but also institutional and contextual ones. Theoretically, this review expands the understanding that deterministic fiscal approaches (such as ratios of own-source revenue, debt, and deficit) need to be complemented by institutional dimensions to provide a more comprehensive picture of the causes and dynamics of distress. These findings support emerging literature that emphasizes the importance of fiscal governance reform and the use of data-driven predictive frameworks. From a practical standpoint, this synthesis provides more adaptive policy guidance to address potential fiscal failures, particularly in developing countries with heterogeneous institutional characteristics.

Economically, a better understanding of the causes of distress and appropriate policy responses can help prevent budget inefficiencies, increase public trust in government, and promote macro-fiscal stability. New insights from this study also highlight that central interventions using a dialogical approach and local capacity-building are more sustainable than top-down, sanction-based models. Findings from various countries also have strong relevance to Indonesia, where local governments continue to face challenges such as dependence on central transfers, weak local revenue (PAD), and institutional capacity constraints. Therefore, this review provides a basis for developing adaptive fiscal policies, including early warning systems, incentives for institutional reform, and stronger collaboration between central and local governments.

Nevertheless, this study should be interpreted within its limitations, including the relatively small number of reviewed articles, uneven country representation, methodological heterogeneity among studies, and reliance on a single database (Scopus), which may limit the generalizability of findings. Future research is encouraged to expand data sources, incorporate quantitative synthesis approaches, and develop more comprehensive predictive frameworks integrating fiscal, institutional, and socio-political dimensions. Future research is encouraged to integrate quantitative approaches with institutional frameworks to enhance the accuracy and contextual relevance of fiscal distress predictions, expand data sources by incorporating databases such as Web of Science, ProQuest, and official government documents to increase coverage and reduce publication bias, conduct longitudinal studies to assess the long-term effectiveness of fiscal intervention policies, and develop new measurement instruments based on machine learning and fiscal dashboards that integrate social and institutional indicators in a more comprehensive manner.

### Relevance and Implication to Indonesian Context

Findings from various countries have strong relevance to the fiscal conditions of local governments in Indonesia. Similar to Italy and Israel, Indonesia faces comparable challenges such as high dependency on central government transfers, weak local revenue (PAD), and low spending efficiency at the regional level. Furthermore, governance and institutional capacity issues highlighted in various studies align closely with Indonesia's situation, where weaknesses in internal supervision, rapid turnover of officials, and minimal audit follow-up are still prevalent. Presidential Instruction Number 1 of 2025 on expenditure efficiency also reflects central fiscal pressures demanding fiscal readiness from local governments. Thus, the results of this review provide a solid foundation for formulating adaptive fiscal policies in Indonesia, including the need for early warning systems, incentives for institutional reform, and more effective central-local government collaboration.

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