

Financial Inclusion and Income Inequality: Evidence from Italy

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Introduction

Income inequality has emerged as one of the most pressing socio-economic challenges across both advanced and developing economies. While traditional literature has largely focused on labour market dynamics, education, technological change, and redistributive policies, increasing attention has been devoted to the role of financial systems in shaping income distribution. In particular, financial inclusion – the availability and accessibility of financial services to all segments of society – has been identified as a potential mechanism capable of mitigating economic disparities.

Access to financial services affects households' and firms' ability to smooth consumption, manage risks, invest in human capital, and undertake entrepreneurial activities. Consequently, unequal access to banking services may reinforce existing inequalities, whereas broader financial inclusion may contribute to more equitable economic outcomes. Empirical evidence on this relationship, however, remains mixed and context-dependent.

A growing body of research suggests that financial inclusion, frequently proxied by the density of bank branches or access to formal financial institutions, is associated with reductions in income inequality. For instance, Aisyah and Pratika (2024) show that the expansion of financial inclusion programs contributes to improved income distribution in middle-income countries. Similarly, Verma and Giri (2022) find that financial inclusion indicators significantly affect inequality dynamics in Asian economies. Prastowo (2019) highlights how limited access to financial resources constitutes a structural driver of inequality, while Liang (2008) documents the distributive implications of financial development in rural China.

The theoretical foundations of this relationship have also been explored. Kling et al. (2020) propose a framework linking financial inclusion to income inequality through its effects on education and human capital accumulation, suggesting that broader access to financial services expands opportunities for disadvantaged groups. Empirical support for this perspective is provided by Lê et al. (2019), who estimate a negative association between financial inclusion and income inequality in transition economies. At the same time, other studies underline that the magnitude and direction of the effects may vary depending on institutional quality, regulatory frameworks, and financial structures (Khan et al., 2021; Pham et al., 2022; Oyekola, 2021).

Within this debate, recent contributions emphasize that not all banks are equal. The type of financial intermediaries operating within local economies may influence distributive outcomes. Cooperative and mutual banks, characterized by stakeholder-oriented governance and strong territorial embeddedness, may affect income distribution differently from commercial banks. Manetti and Bagnoli (2013) argue that cooperative banks have historically contributed to reducing socio-economic disparities by facilitating credit access for SMEs and low-income households. Arestis (2023) highlights the role of local cooperative institutions in promoting inclusive growth, while D'Onofrio et al. (2019) and Minetti et al. (2020) document how banking development interacts with socio-

economic structures in shaping inequality patterns. Coccoresse and Dell'Anno (2022) provide within-country evidence for Italy, showing that cooperative banking can play a significant role in mitigating income disparities. Furthermore, Chiaramonte et al. (2013) suggest that cooperative banks contribute to financial stability, indirectly supporting more balanced economic conditions. The broader macro-institutional environment also matters, as central bank policies and financial regulations may influence income distribution dynamics (Aysan et al., 2023; Beck et al., 2010).

Despite this growing literature, limited evidence exists on the territorial mechanisms linking financial inclusion and income inequality within Italy, particularly at a highly disaggregated local level. Italy provides an especially relevant setting due to its persistent regional disparities, heterogeneous economic structures, and significant variation in the availability of banking services. Structural transformations in the banking sector, including branch closures and consolidation processes, may have altered local financial accessibility, potentially influencing inequality dynamics.

This paper contributes to the literature by analysing the relationship between financial inclusion and income inequality in Italy from a territorial perspective. The study provides new empirical evidence on how differences in access to banking services are associated with local patterns of income distribution. By focusing on within-country heterogeneity, the analysis avoids cross-country comparability issues and highlights spatial dimensions often overlooked in macro-level studies.

Methods and Data

The empirical analysis relies on a territorial panel dataset covering Italian municipalities over the period 2010–2022. The dataset integrates multiple official sources.

Income distribution indicators are derived from fiscal data provided by the Italian Ministry of Economy and Finance (MEF), which publishes detailed information on declared incomes at the municipal level. These data allow the computation of standard inequality measures, including the Gini coefficient, capturing variations in income dispersion across local areas.

Financial inclusion is proxied through indicators measuring the availability of banking services, obtained from the Bank of Italy's registry of supervised financial institutions. In particular, the analysis considers the density of bank branches and other indicators reflecting local access to formal financial intermediaries.

Additional socio-economic and demographic controls are drawn from ISTAT, including population characteristics, labour market conditions, and structural economic variables.

Given that the dependent variable – the Gini index – is bounded between zero and one, the econometric strategy employs Beta regression models, which are specifically designed for fractional response variables. To account for the hierarchical and spatial structure of the data, the analysis adopts a multilevel modelling framework, enabling the separation of within- and between-territory effects and controlling for unobserved heterogeneity across local contexts. Beta regression models are increasingly employed in the analysis of inequality measures defined on bounded support. Their suitability has been confirmed by several recent applications in the Italian context (Errico et al., 2024, 2025; Bonanno et al., 2025). These studies further support the robustness of Beta and multilevel regression approaches for modelling inequality indicators.

Robustness checks include alternative inequality measures, lagged financial inclusion variables, and different model specifications.

Preliminary Results

Preliminary findings indicate a statistically significant relationship between financial inclusion and income inequality. Municipalities characterized by greater availability of banking services tend to exhibit lower levels of income dispersion. The results suggest that improved access to financial services is associated with more equitable income distributions.

The analysis also reveals territorial heterogeneity. The magnitude of the association appears stronger in economically weaker or more peripheral areas, where access to services may represent a more binding constraint. These patterns are consistent with theoretical arguments emphasizing the role of financial access in reducing structural barriers and enhancing economic participation. The results remain robust across alternative model specifications and control sets.

Conclusions and Policy Implications

This paper provides new evidence on the relationship between financial inclusion and income inequality within Italy. The findings support the view that access to banking services constitutes a relevant dimension of local welfare conditions and socio-economic cohesion.

From a policy perspective, the results highlight the importance of considering the territorial distribution of financial services. Policies aimed at promoting financial inclusion – particularly in underserved or vulnerable areas – may complement traditional redistributive and social policies. The restructuring of banking networks should therefore be evaluated not only in terms of efficiency but also with respect to its potential distributive consequences.

Overall, the study contributes to the broader debate on inequality, welfare, and regional development by emphasizing the role of financial accessibility as a factor shaping local socio-economic outcomes.

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