

Expanded abstract

Banking structure and income inequality. Cooperative banking makes a difference

Context

Several studies have shown that financial development is closely correlated with economic growth and poverty reduction (Roubini and Bilodeau, 2008). In addition, a growing body of studies point to that cooperative banks have a greater and differential impact on regional economic growth than traditional banks (Ayadi et al., 2010). These differences are mainly due to the fact that cooperative banks operate at the regional level boosting financial inclusion and financing projects within each region, thus limiting capital flight from poorer to richer regions. Cornée et al. (2018) point out that cooperative banks maintain four differential principles with other financial institutions that promote regional development: (i) democratic composition and governance; (ii) proximity and local investment; (iii) prudent management; and (iv) long-term oriented objectives.

Objectives and original value

While there is a great bulk of empirical evidence on the positive impact of cooperative banking on regional economic growth, the differential effect of cooperative banks on income inequality compared to other banking structures has hardly been investigated empirically. The aim of this paper is to evaluate empirically whether cooperative banks have a differential impact on inequality in relation to other banking institutions such as commercial banks and savings banks in the euro area. We also analyze whether the effect of cooperative banking on income inequality is the same in all countries regardless of their economic development and the evolution of different macroeconomic variables or whether there is some kind of non-linear relationship between economic growth and inequality as suggested by the literature (D'Onofrio et al., 2019). To this end, the sample has been divided following Migliorelli and Brunelli (2017) into two groups of countries with different characteristics between them. Finally, we assess empirically the transmission channels through which cooperative banking could affect inequality. Specifically, we have assessed whether cooperative banking can reduce inequality through: (i) financing small and medium enterprises; (ii) fostering local employment and thus reducing migration flows; or (iii) promoting financial inclusion.

Methodology and data

We have conducted an empirical analysis for the 19 countries of the Eurozone from 2010 to 2019 building a panel data and using individual banking data and macroeconomic data ag-

gregated at the country level. For this purpose, the databases used were Orbis for the banking data and Eurostat for the aggregate data. We have employed different panel data methodologies to estimate the results: static models (fixed effects and random effects) and dynamic models (Difference GMM and System GMM). In order to carry out the analysis, we have analyzed those institutions whose main activity is lending: (i) commercial banks, (ii) cooperative banks, and (iii) savings banks. We used the Gini index of income inequality as the dependent variable in the empirical analysis, but we have conducted several robustness using other inequality indicators such as the S80/S20 and S50/S20 ratios as dependent variables. We followed Ayadi et al. (2010) with the aim of capturing the presence of different banking structures in the national economy. To this end, we have constructed three variables that measure the weight of the assets of each banking structure (commercial banks, cooperatives, and savings banks) divided by the GDP of the respective country. For example, to measure the presence of cooperative banks in Spain, a variable has been created that is calculated as the total number of assets of cooperative banks in Spain divided by Spanish GDP in a given year. Finally, a set of control variables has been included both at the bank structure and at the country level.

Results

The results show that cooperative banks reduce income inequality more than the rest of the banks for the Eurozone as a whole. Specifically, we find that the presence of cooperative banks is statistically associated with a reduction in income inequality. Conversely, we do not find a statistically significant relationship between the presence of commercial banks and inequality. Finally, we also find no clear and significant relationship between the presence of savings banks and the evolution of income inequality. In addition, we conducted a robustness check dividing the sample into two sets of countries with different levels of development. On the one hand, one group is composed by the countries in the northeast quadrant of the Eurozone (Austria, Finland, Germany, Malta, the Netherlands, Slovakia, and Slovenia). Overall, these countries maintain on average lower levels of public and unemployment and higher levels of GDP per capita and lower levels of income inequality. On the other hand, the second group of countries located in the southwest of the euro area is composed by Belgium, Cyprus, France, Ireland, Italy, Portugal, and Spain. This second group of countries has on average higher levels of public debt to GDP, lower levels of relative GDP per capita and higher levels of unemployment and income inequality. By conducting these analyses, the results suggest that, in Northern European countries with higher levels of economic development, the greater presence of cooperative banking is associated with lower levels of inequality. However, in southwestern countries, this negative relationship loses statistical significance in almost all the models. Finally, the possible transmission channels through which cooperative banking could reduce inequality have been examined. The results suggest that it is the promotion of financial inclusion by cooperative banks that could play a decisive role in reducing income inequality. No evidence has been found that the financing of SMEs or the promotion of local employment is the cause of the reduction in inequality.

Conclusion and implications

In a context of high inequality and increasing global financial development, concerns about the relationship between the two trends have increased in Western societies. In this regard, a growing body of recent research has shown how certain financial activities or specific monetary policies could explain part of the increase in economic inequality. The results found in this research and their implications reveal the importance of distinguishing between banking structures when analyzing the role of the banking system in economic development and the welfare of the population. The evidence points to that cooperative banks play a more important role in regional economic development, promoting financial inclusion, reducing poverty and now also reducing income inequality. The implications of these findings highlight the virtues of cooperative banks and should be taken into account for an efficient and inclusive design of economic policies in general and financial policies in particular.

Limitations and future research

Finally, it should be noted that the heterogeneity in the degree of specialization of cooperative banks across countries is an important limitation in drawing detailed conclusions. This paper provides a starting point for future lines of research to study the specific activities of cooperative banks that have the greatest impact on inequality and how they could be enhanced to develop a more efficient and inclusive financial system.

Keywords: Cooperative banking, income inequality, panel data, financial inclusion.