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A note on institutional trust and poverty: Evidence from Latin America

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Abstract

This short paper argues that institutional trust should be considered as an additional factor influencing poverty at the macroeconomic level. By examining a sample of Latin American countries and analyzing annual data from 1995 to 2019 using panel data techniques such as cointegration analysis and panel fully modified least squares, this study estimates the long-term relationships between poverty, economic growth, inequality, and institutional trust. As hypothesized, the empirical evidence suggests that institutional trust also reduces poverty. These findings hold particular significance for Latin America, where inequality levels are relatively high, institutional trust is low, and poverty rates have only recently begun to decline. Therefore, to alleviate poverty, it is crucial to implement public policies that restore and enhance institutional trust.

Keywords: poverty; institutional trust; economic growth; inequality; Latin America.

JEL Classification Codes: I32, O47, D63.

1. Introduction

The relationship between poverty, economic growth, and inequality has been the subject of extensive academic inquiry (Fosu, 2017; Kouadio & Gakpa, 2022; Peng et al., 2019). Economic growth is widely recognized as a crucial factor in poverty reduction. As an economy expands and generates higher levels of output and income, individuals and households have greater opportunities for employment, income generation, and improved living standards (Kouadio & Gakpa, 2022). Economic growth, therefore, serves as a means to uplift people from poverty by creating jobs, enhancing productivity, and fostering income growth. However, the relationship between economic growth and poverty reduction is influenced by the distribution of wealth and income within society, which is captured by measures of inequality (Cuartas Ricaurte, 2016; Fosu, 2017; Kouadio & Gakpa, 2022). In contexts where economic growth is accompanied by rising levels of inequality, the benefits of growth may be disproportionately concentrated among the wealthy, leaving the poor with limited or no improvements in their living conditions. Thus, while economic growth is essential for poverty reduction, addressing inequality becomes crucial to ensure that the gains from growth are shared more equitably and reach those in need (Fosu, 2017).

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Inequality, as a determinant of poverty, encompasses multiple dimensions, including income inequality, asset inequality, and access to basic services and opportunities (Cuartas Ricaurte, 2016; Fosu, 2017; Kouadio & Gakpa, 2022). When inequality is high, it can perpetuate and exacerbate poverty levels within a society. High levels of inequality restrict the ability of the poor to access resources, such as education, healthcare, and productive assets, which are crucial for social mobility and breaking the cycle of poverty. Unequal distribution of wealth and income can also limit the poor's participation in economic activities and their ability to accumulate savings or invest in productive ventures, further entrenching their disadvantaged position. Moreover, persistent inequality can undermine social cohesion and trust, leading to social and political unrest, which can hinder economic growth and exacerbate poverty (Churchill & Smyth, 2020; Cuartas Ricaurte, 2016; Keefer & Scartascini, 2022). Consequently, reducing inequality becomes a critical component of poverty reduction strategies, as it not only enables more equitable access to resources and opportunities but also contributes to a more inclusive and stable socio-economic environment that fosters sustainable development and poverty eradication.

Extensive studies have been done on the association between trust and economic growth and inequality (Barone & Mocetti, 2016; Beugelsdijk et al., 2004; Zak & Knack, 2001). In addition, at the individual level, social capital—which can be understood as trust *à la* Putnam—decreases the probability of falling into poverty (Cuartas Ricaurte, 2016; Farah & Hook, 2017; Terin, 2020). Nevertheless, little is known about the role of trust in poverty reduction. In this context, this brief research note examines the role of institutional trust in influencing the prevalence of poverty, claiming that higher levels of trust contribute to poverty reduction. Institutional trust refers to the trust and confidence individuals have in formal institutions such as government, judiciary, and public services. It pertains to the belief that these institutions will act in the best interest of the society and fulfill their responsibilities. On the other hand, social trust (outside the scope of this research note) refers to the level of trust and confidence that individuals have in one another within a society. It relates to the belief that people generally act in a trustworthy manner and can be relied upon.

Trust in institutions is crucial for creating an enabling environment for poverty alleviation efforts. When the public has confidence in institutions, they are more likely to engage in participatory processes, provide feedback, and hold institutions accountable for their actions (Churchill & Smyth, 2020; Chutima et al., 2021; Farah & Hook, 2017; Keefer & Scartascini, 2022; Terin, 2020; Zuo et al., 2021). Moreover, institutional trust promotes transparency and reduces corruption, which can divert resources away from poverty reduction programs (Appiah-Otoo et al., 2022; Kouadio & Gakpa, 2022). As a result, poverty reduction strategies that are backed by institutional trust are more likely to achieve their intended outcomes and have a positive impact on the lives of the poor.

Institutional trust also plays a crucial role in fostering social cohesion and cooperation, which are vital for poverty reduction (Farah & Hook, 2017; Keefer & Scartascini, 2022). Trust in institutions facilitates collaboration and collective action among individuals and communities, enabling them to address shared challenges and work towards common goals. In the context of poverty reduction, this can lead to the formation of social networks, community organizations, and cooperatives that promote resource-sharing, knowledge exchange, and mutual support. These initiatives can enhance the resilience of vulnerable populations, improve access to livelihood opportunities, and provide social safety nets for those in need (Farah & Hook, 2017; Terin, 2020). Moreover, institutional trust can promote inclusivity and reduce social divisions, as individuals from different socio-economic backgrounds are more likely to cooperate and support each other when they trust the institutions that govern their interactions (Keefer & Scartascini, 2022; Zuo et al., 2021).

However, at the macroeconomic level, there is a lack of empirical evidence supporting the relevance of institutional trust for poverty reduction. Accordingly, this article contributes to this literature by providing this evidence using a sample of Latin American countries, cointegration analysis, and panel fully modified least squares.

2. Methods

Eq. 1 provides a baseline poverty equation.

$$Poverty_{it} = \beta_0 + \beta_1 \ln GDP_per_capita_{it} + \beta_2 Gini_{it} + \beta_3 Institutional_trust_{it} + u_{it} \quad (1)$$

Where the dependent variable is approached by the \$1.90, \$3.20, or \$5.50-level poverty headcount ratios. Note the use of logarithms in the case of GDP per capita. It is expected that $\beta_1 < 0$; $\beta_2 > 0$; and $\beta_3 < 0$.

Given the small sample of countries, cross-sectional heterogeneity, and the possibility of endogeneity concerns, the use of panel fully modified least squares (FMOLS) is recommended by the econometric literature (Pedroni, 2001) and by prior studies (Appiah-Otoo et al., 2022). Accordingly, unit root tests are the first step, because FMOLS requires cointegration in levels, and the variables should be stationary in first differences.

3. Data

Data on poverty, economic growth, and inequality are taken from World Bank World Development Indicators (WDI). Given prior empirical studies (Fosu, 2017), data are analyzed for the \$1.90, \$3.20 and \$5.50-level poverty headcount ratios (note that their use facilitates robustness checks). Inequality is measured using the Gini coefficient (broadly used in the empirical literature) and income level is approached with real GDP per capita.

To measure institutional trust the main factor being considered is the level of trust individuals have in public institutions. This is known as the institutional performance approach (Kaasa & Andriani, 2022), which is evaluated by assessing various aspects such as effectiveness, efficiency, competence, capability, certainty, openness, transparency, impartiality, sincerity, and honesty. Given data limitations at the country level and because of the correlation between the quality of institutions and people's trust in them (Mangeloja et al., 2022), institutional quality is used as a proxy for institutional trust. Note that institutions with higher quality are likely to have objectives aligned with promoting trust, as they prioritize transparency, accountability, and good governance practices. In other words, high-quality institutions inspire confidence among stakeholders, creating an environment conducive to trust. Although they do not capture all dimensions of institutional trust, measures of institutional quality offer valuable information for understanding institutional trust. Accordingly, the World Bank Worldwide Governance Indicators (WGI) encompass three key indices. Firstly, the "Control of corruption" index assesses public perception regarding the misuse of public authority for personal gain, encompassing both minor and major forms of corruption, as well as the influence of influential individuals and private interests on the state. Secondly, the "Government effectiveness" index gauges public perception regarding the quality of public services and administrative bodies, their ability to function independently from political pressures, the standard of policy development and implementation, and the government's credibility in upholding such policies. Lastly, the "Rule of law" index reflects public perception regarding the confidence in societal regulations, the effectiveness of contract enforcement, protection of property rights, the performance of law enforcement agencies, judicial institutions, instances of crime, and levels of violence. As such, these three indexes are summarized in a single factor "Index of institutional trust" using factor analysis (eigenvalue 2.61).

The final sample includes 15 Latin American countries over the years 1995-2019.¹ However, some observations of key variables are missing, affecting the number of countries included in the econometric analysis.² Figures 1 to 3 provide a practical way to visualize the poverty variables in the geography of Latin America.

Figure 1. Poverty \$1.90 in 2019



Source: WDI.

Figure 2. Poverty \$3.20 in 2019



Source: WDI.

Figure 3. Poverty \$5.50 in 2019



Source: WDI.

¹ The pandemic years are excluded to avoid outliers and the countries under analysis are Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, and Uruguay.

² Particularly, Chile and Mexico are removed from cointegration and regression analyses.

Table 1 shows basic descriptive statistics and correlation coefficients of the key variables under analysis. First, as expected, the poverty headcount ratios are highly correlated with GDP per capita and the Gini coefficient. This suggests that an increase in economic growth and a decrease of inequality reduce poverty, as has been noted in the literature (Cuartas Ricaurte, 2016; Fosu, 2017; Kouadio & Gakpa, 2022). More importantly, institutional trust shows a negative correlation with poverty. The next section will delve into the analysis using panel data techniques.

Table 1. Descriptive statistics

	Obs	Mean	Std. Dev.	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Poverty \$1.90 (1)	307	7.77	6.74	0.10	31.40	1									
Poverty \$3.20 (2)	307	16.41	10.93	0.40	51.60	0.98	1								
Poverty \$5.50 (3)	307	32.66	15.26	2.90	72.70	0.91	0.97	1							
GDP per capita (4)	375	6917.10	3664.59	1714.96	16037.93	-0.65	-0.71	-0.79	1						
GDP per capita growth rate (5)	375	2.11	3.06	-11.85	9.97	-0.19	-0.17	-0.15	0.05	1					
Gini (6)	307	49.92	5.03	38.00	61.60	0.71	0.70	0.66	-0.39	-0.09	1				
Control of corruption (7)	270	-0.23	0.70	-1.44	1.54	-0.41	-0.49	-0.55	0.64	0.07	-0.29	1			
Government effectiveness (8)	270	-0.15	0.51	-1.11	1.19	-0.50	-0.56	-0.61	0.75	0.02	-0.29	0.86	1		
Rule of law (9)	270	-0.34	0.63	-1.23	1.35	-0.47	-0.56	-0.63	0.71	0.05	-0.16	0.91	0.89	1	
Index of institutional trust (10)	270	0.21	0.93	-1.30	2.70	-0.49	-0.57	-0.63	0.73	0.05	-0.25	0.95	0.95	0.98	1

Source: Authors' calculations with data from WDI and Heritage Foundation.

4. Results

Table 2 shows the results of the Levin-Lin-Chu (LLC), the Im-Pesaran-Shin (IPS), Augmented Dickey-Fuller (ADF), and the PP-Fisher Chi-square (PPF) unit root tests to check the stationarity properties of the variables under study (Dickey & Fuller, 1979; Im et al., 2003; Levin et al., 2002). The null hypothesis is unit root, which is not rejected in the majority of tests in the case of the poverty variables, GDP per capita, the Gini coefficient, and the Index of institutional trust. By contrast, all variables are stationary in first differences.

Table 2. Unit root tests

	LLC(0)	IPS (0)	ADF (0)	PPF (0)	LLC(1)	IPS (1)	ADF (1)	PPF (1)
Poverty \$1.90	-2.00**	0.81	18.74	38.46*	-14.56***	-13.55***	182.81***	202.81***
Poverty \$3.20	-0.86	1.87	18.20	32.26	-10.72***	-10.29***	147.57***	206.11***
Poverty \$5.50	-0.53	2.62	20.12	30.92	-8.19***	-7.68***	117.30***	176.44***
GDP per capita	2.56	6.02	7.77	6.80	-8.44***	-6.86***	102.99***	110.75***
GDP per capita growth rate	-10.33***	-9.46***	139.99***	136.80***	-21.00***	-20.70***	320.79***	654.23***
Gini	-2.29**	1.08	17.49	19.09	-7.47***	-9.25***	137.71***	280.72***
Control of corruption	-2.51***	-2.06**	47.05**	42.68*	-16.76***	-13.57***	198.56***	208.75***
Government effectiveness	-2.67***	-1.85**	47.15**	39.00	-10.56***	-10.18***	147.18***	189.16***
Rule of law	-3.77***	-3.31***	60.55***	53.96***	-9.60***	-8.25***	122.80***	144.40***
Index of institutional trust	-0.07	-0.73	39.47	33.55	-9.58***	-8.93***	130.23***	152.15***

Note: Lag length selection based on the Schwarz Info Criterion (SIC). Presenting results with individual intercept (results with intercept and trend are qualitatively the same).

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Accordingly, the Pedroni's seven test statistics are computed for cointegration analysis (Pedroni, 1999, 2004), that is, to explore the long-run relationship between these variables. Table 3 presents the main results. Overall, in different models, the majority of tests rejects the null hypothesis of no cointegration, in favor of a long-term link between poverty, economic growth, inequality, and institutional trust.

As such, the coefficients of cointegration are examined by FMOLS. Table 4 shows the most important results. As expected, GDP per capita is negatively linked to poverty headcount ratios and, for its part, the Gini coefficient is positively related. For example, 1% increase in per capita GDP reduces Poverty \$1.90 in about 3.7%. For its part, 1-point increase of the Gini coefficient

increases Poverty \$1.90 in about 0.8%. More importantly, the Index of institutional trust presents negative and statistically significant coefficients in all models—institutional trust reduces poverty—and the results suggests that this relationship is driven by Government effectiveness and Rule of law (in Table 4, see models 3, 7, 8, 11 and 12).

As additional robustness checks, the analysis was replicated using fixed and random effects models, using a one-year lag structure and GDP growth rate as the independent variable (not reported in tables, but available under request). Overall, the major results are qualitatively the same, particularly, the evidence suggests that institutional trust is also a relevant variable in reducing poverty.

Table 4. Panel Fully Modified Least Squares (FMOLS)

	Poverty \$1.90				Poverty \$3.20				Poverty \$5.50			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
GDP per capita (logarithm)	-3.74***	-3.81***	-3.74***	-3.71***	-6.40***	-6.70***	-6.56***	-6.26***	-8.41***	-9.34***	-8.91***	-8.48***
Gini	0.78***	0.79***	0.77***	0.76***	1.42***	1.47***	1.42***	1.37***	2.15***	2.26***	2.17***	2.09***
Index of institutional trust	-2.71***				-4.66***				-7.96***			
Control of corruption		-0.62				-0.37				-1.23		
Government effectiveness			-2.03***				-4.14***				-7.30***	
Rule of law				-1.28				-3.02**				-7.24***
R-squared	0.53	0.65	0.64	0.65	0.62	0.68	0.67	0.72	0.59	0.61	0.63	0.68
N × T	13 × 17	13 × 17	13 × 17	13 × 17	13 × 17	13 × 17	13 × 17	13 × 17	13 × 17	13 × 17	13 × 17	13 × 17
Observations	205	205	205	205	205	205	205	205	205	205	205	205

Note: Panel method: Grouped estimation

Long-run covariance estimates (Bartlett kernel, Newey-West fixed bandwidth)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

5. Concluding remarks

At the macroeconomic level, this brief research note shows evidence of the long-term relationship between institutional trust and poverty. Overall, it can be said that institutional trust plays a crucial role in poverty reduction by enabling effective governance and the rule of law. However, corruption did not show statistically significant links with poverty. This is an unexpected result demanding further analysis in future research. Furthermore, it is crucial for future studies to explore the impact of institutional trust on investment attraction, thereby affecting economic growth, and its role as a moderator in poverty reduction. Likewise, institutional trust may serve as a moderating factor in mitigating the adverse effects of inequality on poverty. This research should be useful for the development of these tasks.

Finally, in addition to economic growth and the fight against inequality, it should be stressed that by strengthening institutional trust, societies can create an enabling environment for sustainable poverty reduction efforts.

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