



Income Inequality, Political Stability, and Investor Perceptions

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Motivation for the Research

- Renewed interest in income inequality with recurrent economic crises and globalization
- Significance of income distribution in developing countries' poverty reduction, economic growth, and development
- Significance of sovereign creditworthiness in governments' abilities to finance debt and attract private capital
- Ultimately, to understand the mechanism by which income inequality affects growth via perceived creditworthiness

Research Questions

- What is the impact of income inequality on the perceived creditworthiness of developing countries?
 - Is it the **level** or the **volatility** (or both?) of income distribution that matters to market sentiment?
- Recent studies find political instability as an important channel through which income inequality affects economic outcomes
 - Does income inequality influence investor perceptions mainly through political instability?
 - Or does income inequality have impact on investor perceptions above and beyond political instability?

Earlier Work on Income Inequality and Economic Outcomes

- Income inequality operates through other factors

Two major such factors

- Political instability and institutions (Alesina and Rodrik 1994; Benabou 1996; Persson and Tabellini 1994; Acemoglu, Johnson and Robinson 2000; Alesina and Perotti 1996; Barro 2000; Chang 1998; Collier and Hoeffler 1998; Easterly 2001; Easterly et al. 2006; Keefer and Knack 2002)
- Taxes and wealth transfers (Fields 1989; Persson and Tabellini 1994)

Hypotheses

H1a. A greater *level* of income inequality is likely to generate negative perceptions among investors in developing countries.

H1b. Greater *volatility* in income distribution will lead to a lower perceived creditworthiness.

H2a. The *level* of income inequality will have a significant and negative impact on creditworthiness after political instability is controlled for.

H2b. The *level* of income inequality is likely to be insignificant after political instability is controlled for.

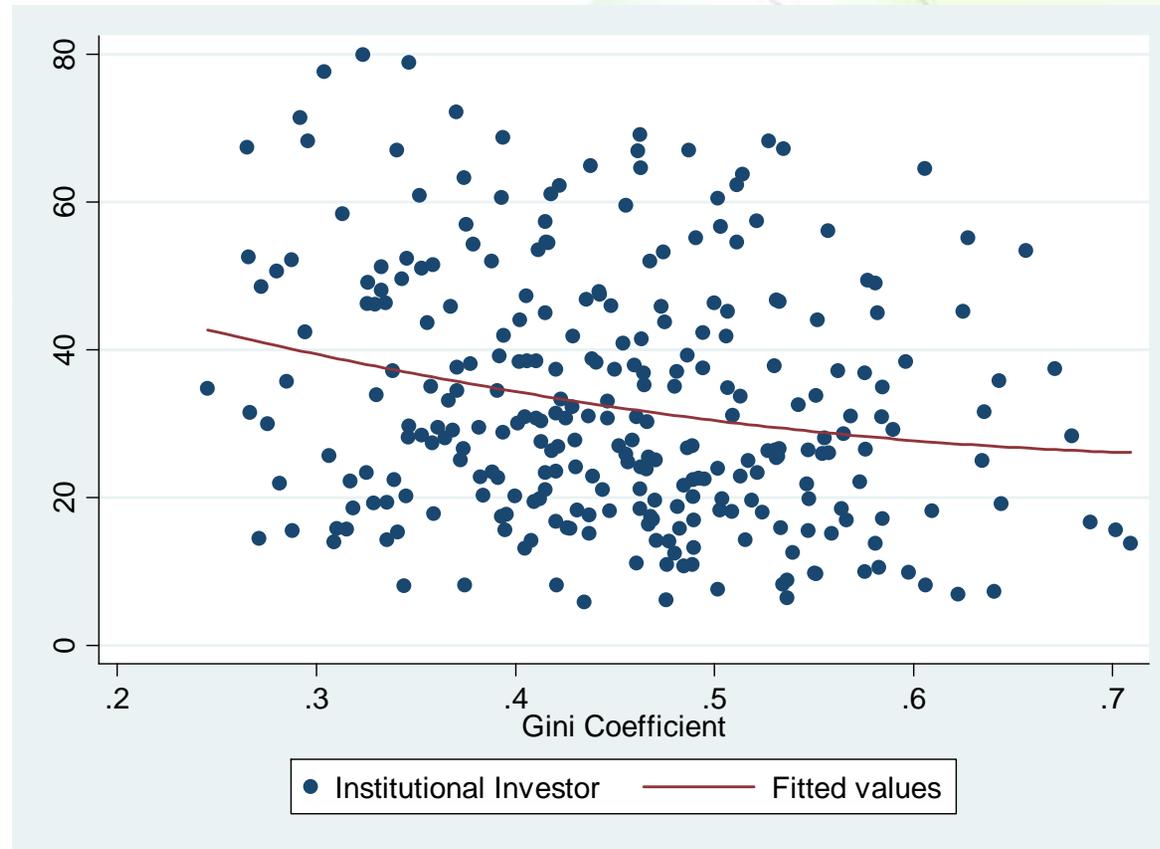
H3a. The *volatility* of income inequality will have a significant impact on perceived creditworthiness after political instability is controlled for.

H3b. The *volatility* of income inequality will be insignificant after political instability is controlled for.

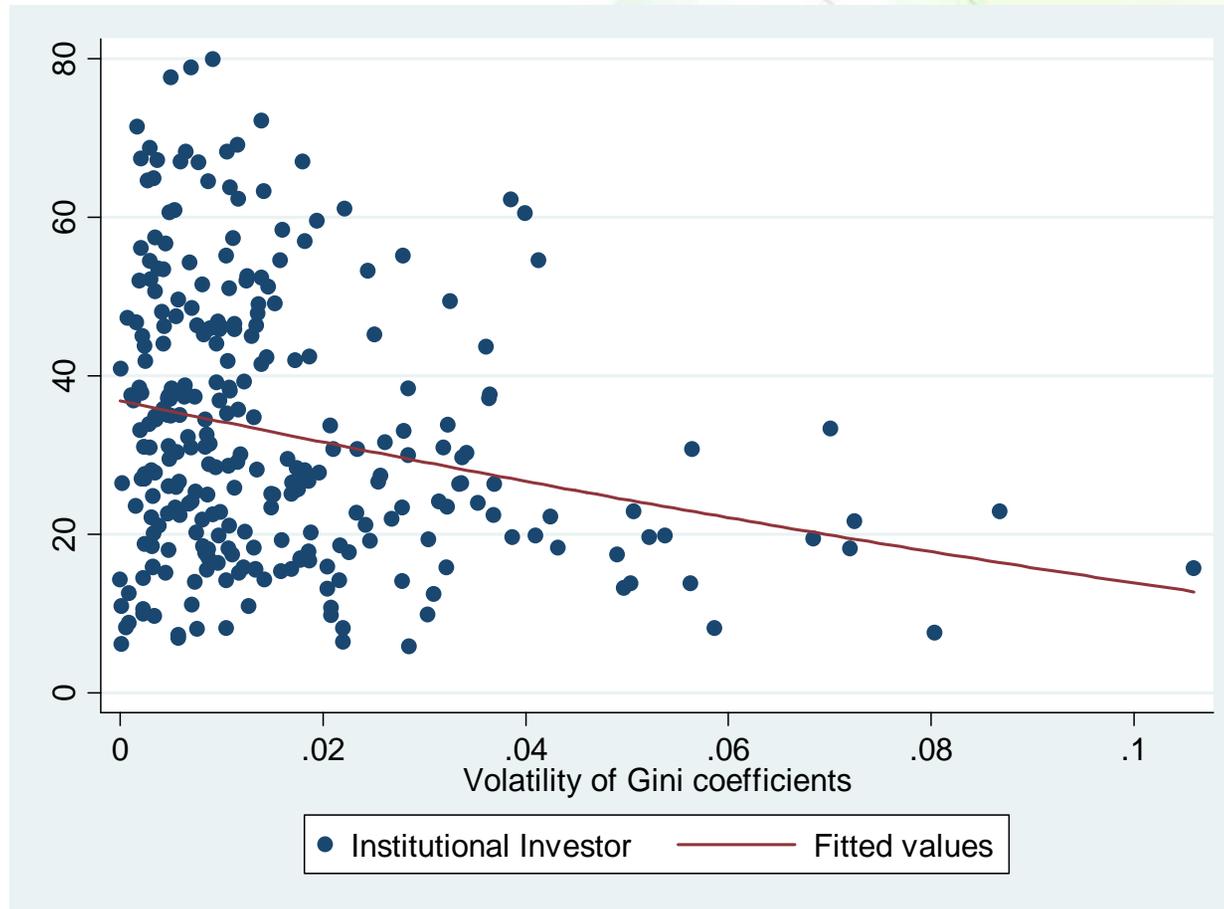
Data

- DV: credit ratings (*Institutional Investor*)
 - Evaluation of bankers in financial institutions (0 – 100, 100 = least likely to default), 69 developing countries from 1980 to 2004
- Income inequality: Gini index (Solt 2009)
- Political stability: the first principal component of seven different indicators of political instability and risk (ICRG): Corruption, democratic accountability, external conflict, internal conflict, government stability, law and order, socioeconomic conditions. Higher values = greater stability

Income Inequality (Level) and Investor Perceptions



Income Inequality (Volatility) and Investor Perceptions



Model

OLS with regional fixed effects

DV: every five year (t)

IVs: five-year ($t-1, t-2, t-3, t-4, t-5$) averages

$$\text{Credit Ratings} = \alpha + \beta_0 \text{Initial level of ratings} + \beta_1 \text{Income Inequality} \\ + \beta_2 \text{Political Stability} + \beta_3 \text{Controls} + \varepsilon$$

Results

VARIABLES	(1)	(2)	(3)	(4)
Income inequality	-0.601** (0.277)	-0.725*** (0.244)	0.567 (0.531)	0.446 (0.545)
Income inequality squared	1.245*** (0.147)	1.248*** (0.148)	0.121 (0.423)	0.128 (0.384)
Volatility of income inequality	-2.667** (1.211)	-2.543** (1.245)	-2.598*** (0.955)	-2.482** (0.946)
Political stability			0.062*** (0.018)	0.062*** (0.019)
Redistribution		0.264 (0.314)		0.246 (0.311)
GDP per capita	0.166*** (0.024)	0.160*** (0.018)	0.120*** (0.045)	0.115*** (0.035)
GDP growth	0.052*** (0.010)	0.052*** (0.010)	0.046*** (0.006)	0.046*** (0.006)
Budget balance	0.019*** (0.002)	0.019*** (0.002)	0.016*** (0.002)	0.015*** (0.002)
Inflation	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Foreign reserves	0.066*** (0.002)	0.070*** (0.005)	0.056*** (0.003)	0.060*** (0.007)
Current account openness	0.000 (0.002)	0.000 (0.003)	0.003 (0.002)	0.003 (0.002)
History of default	-0.116*** (0.010)	-0.122*** (0.005)	-0.114*** (0.016)	-0.120*** (0.010)
Capital market openness	0.028*** (0.007)	0.029*** (0.006)	0.023*** (0.003)	0.024*** (0.002)
Foreign direct investment	0.017*** (0.004)	0.017*** (0.005)	0.009* (0.004)	0.009* (0.005)
Democracy	0.011*** (0.001)	0.011*** (0.001)	0.007*** (0.002)	0.006*** (0.002)
Initial level of ratings	0.426*** (0.025)	0.416*** (0.030)	0.389*** (0.021)	0.380*** (0.025)
Constant	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Observations	201	201	201	201
R-squared	0.874	0.875	0.883	0.884

Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Robustness Check

DV: *Euromoney*

Same control variables as in the previous table

VARIABLES	(1)	(2)	(3)	(4)
Income inequality	-2.008** (0.966)	-2.051** (0.970)	-0.754 (0.859)	-0.797 (0.851)
Income inequality squared	2.120** (0.885)	2.246*** (0.843)	0.959 (1.033)	1.104 (0.936)
Volatility of income inequality	-3.723*** (0.978)	-3.765*** (1.035)	-3.634*** (0.662)	-3.684*** (0.713)
Political stability			0.071* (0.039)	0.071* (0.040)
Observations	213	213	213	213
R-squared	0.621	0.622	0.639	0.640

Discussion

- The level of income inequality:
no significant impact on perceived creditworthiness when political stability is controlled for
- The volatility of income inequality:
negative impact on perceived creditworthiness;
still significant after controlling for political stability
- Income distribution volatility perceived as a source of potential risk