

Motivation

- ⇒ High inequality level and low rates of economic growth in Russia.
- ⇒ Various theoretical channels linking inequality and growth.

Plan of our research

- ⇒ Literature review.
- ⇒ Systematization of theoretical mechanisms of relationship between economic growth and income inequality.
- ⇒ Empirical testing of these mechanisms.
- ⇒ Discussion of results and policy recommendations.

Theoretical channels linking inequality and growth

- ⇒ Imperfect financial markets: credits are unavailable for those who are not wealthy enough.
- ⇒ High fertility in poor countries result in low per capita values of human and physical capital: poor households invest in quantity of children, not in their “quality” (education).
- ⇒ High income inequality induces higher redistribution (in favor of poor) and thus lowers incentives to invest.
- ⇒ High income inequality in poor countries increases political instability and generates social conflicts.

Methodology

⇒ We test the hypothesis of relationship between income inequality and economic growth using the econometric strategy described in Perotti (1996).

✓ First, we test the relationship between inequality and growth (baseline regression):

$$Growth = \beta_1 + \beta_2 Ineq + \beta X + \varepsilon (1)$$

✓ and then channels (see previous slide) (channel regressions):

$$Growth = \alpha_1 + \alpha_2 Channel + \alpha_3 X + \varepsilon_1 (2)$$

$$Channel = \delta_1 + \delta_2 Ineq + \delta_3 Y + \varepsilon_2, (3)$$

where X and Y represent control variables.

Empirical testing of baseline regression: data

- ⇒ World Bank data from 1990 to 2013 for 79 countries.
- ⇒ Dependent variable: average growth rates for per capita GDP in PPP (2005-year prices).
- ⇒ Independent variables: Gini coefficient or middle class share in economics in 1990 (share in GDP of the 2nd , 3rd and 4th population quintiles); control variables are education (average years of schooling, all levels) in 1990, initial per capita GDP level in 1990, share of investment in GDP in 1990.

Empirical testing of baseline regression: results

⇒ All coefficient estimates are statistically significant and have expected signs:

Variable	Sign
Gini coefficient	-
Middle class income share	+
Education	+
Initial GDP	-
Investment to GDP ratio	+

⇒ This result holds for both indicators of income inequality: Gini coefficient and middle class income share in GDP.

⇒ Still we have to perform robustness checks. ⁷

Robustness tests of baseline regression

- ⇒ Adding regional dummies (Latin America, Sub-Saharan Africa, Asia).
- ⇒ Adding poverty indicator (assuming that it is poverty which matters for growth, not inequality).
- ⇒ Adding share of aged people (65 and above years old) in total population (assuming that intergenerational inequality matters).
- ⇒ Adding urban population share (testing Kuznets hypothesis).

Robustness tests of baseline regression: results

- ⇒ Relationship between income inequality and economic growth is robust to all tests except regression with regional dummies where only dummy for Asia remains significant.
- ⇒ Inequality indicators become insignificant for samples excluding high inequality countries or countries with lowest per capita GDP (=> inequality influences growth only in poor countries?).

Empirical tests of theoretical channels

- ⇒ Strategy for tests of theoretical mechanisms linking income inequality and economic growth also follows Perotti (1996) (channel regressions (2) and (3) on slide 5).
- ⇒ Unfortunately none of these channels (slide 4) turned out to be statistically significant.

Main results

- ⇒ It appears that there is a relationship between income inequality and economic growth.
- ⇒ However it is possible that existing theoretical mechanisms are not relevant for its explanation or we can't test them correctly.
- ⇒ The main ways of increasing growth through inequality reduction in Russia could be investments in education and health.

Conclusions

- ⇒ One of the results of inequality in Russia is poverty and the state close to poverty line. Poverty increases the risk of social, criminal and/or political tension. Social tension may induce reduction/flight of investment and economic slowdown.
- ⇒ Inequality and poverty affects also pensioners, who risk to fall into deep poverty.
- ⇒ Income inequality results in financial, educational and health disparities.

Possible policy recommendations

- ⇒ To increase the retirement age and continue pension reform: intertemporal income redistribution should complement intergenerational income redistribution.
- ⇒ Integration into the world economy, emergence of technologically advanced industrial and service sectors is difficult without increasing the stock of human capital, access to finance, improving the protection of property rights. These measures not only stimulate economic growth, but also reduce inequality, poverty and the risk of social conflict.
- ⇒ Redistribution policy should be only a transition, not fundamental measure of reducing inequality.



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Thank you for your attention!