

INEQUALITY

EE461 Sem 2/2019

Progressive transfer

- Consider Bruno, the landlord, and Angela, the farmer.
- Suppose that Bruno's income is three times as large as Angela's, with Bruno receiving 3,000 pesos per year and Angela receiving 1,000.
- Suppose also that Angela has two children and Bruno three, all of whom go to publicly funded schools, and that the government spends 200 pesos per year per child.

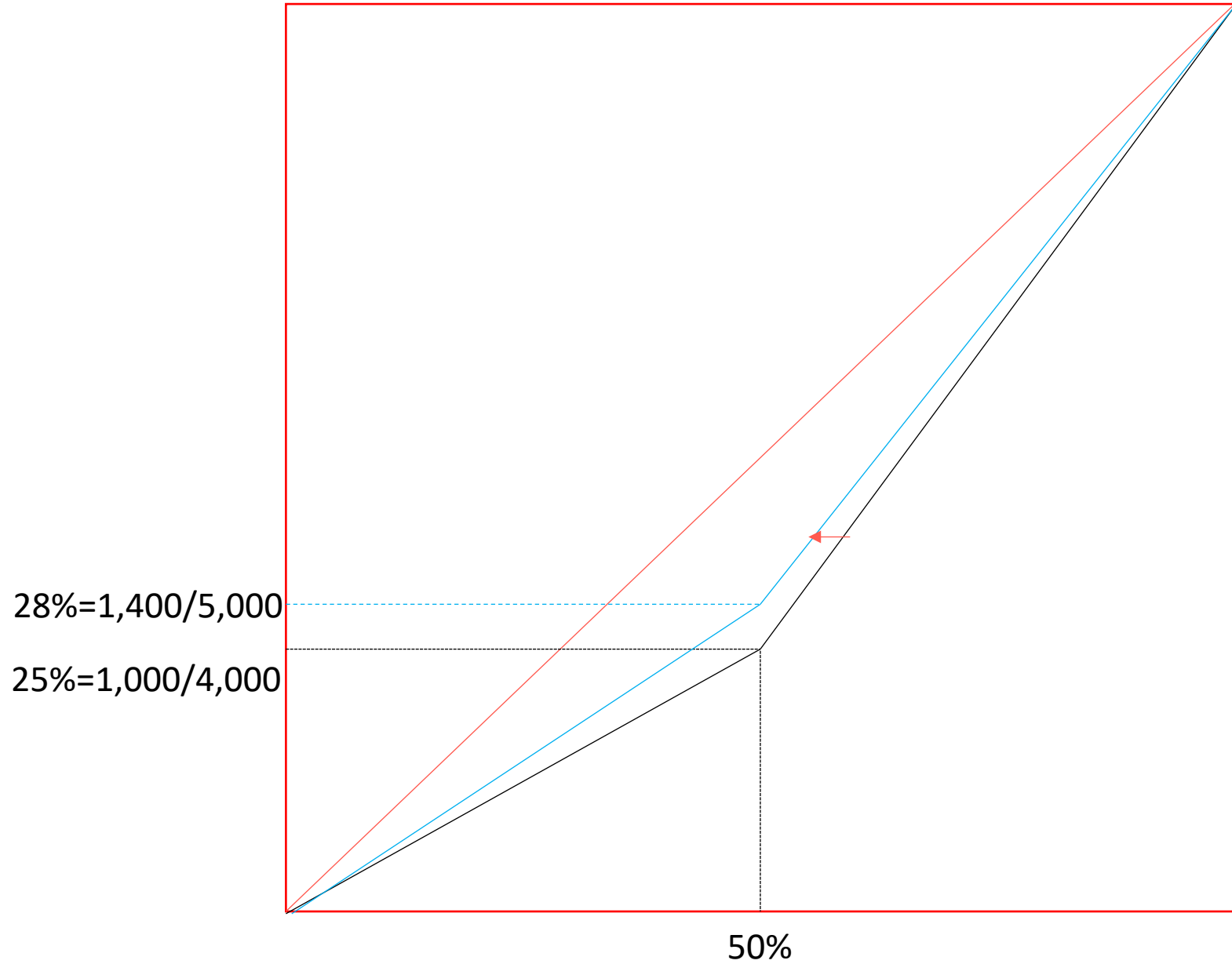
Progressive transfer

- This means that Angela receives in-kind transfers worth 400 pesos per year and Bruno 600.
- For Angela this implies an increase in her final income of 40%. For Bruno, it is an increase of only 20%.
- So the transfer is progressive, and the Gini coefficient for final income will decline.

Progressive transfer

- The Gini coefficient depends on *relative incomes*, or the ratios of incomes between households.
- Bruno's market income is three times Angela's market income. A policy that reduces that ratio will reduce the Gini coefficient.
- Bruno's final income was 3,600 pesos while Angela's was 1,400, which gives a ratio of 2.57 compared to 3 for market income.
- Even though Bruno received more in absolute terms, relative inequality between them declined, so the Gini coefficient declined.

Progressive transfer



The in-kind transfers were 40% of Angela's income, but 20% of Bruno income.

Regressive transfer

- Primary schooling is usually very progressive.
- A case of education expenditure that can be regressive is publicly funded university education. This is because children from richer families are much more likely to go to university.
- If the rich's children are attending university, while the poor's are not, then the rich's family is receiving in-kind transfer in the form of subsidy to public university. In the meantime, the poor's family doesn't receive this.

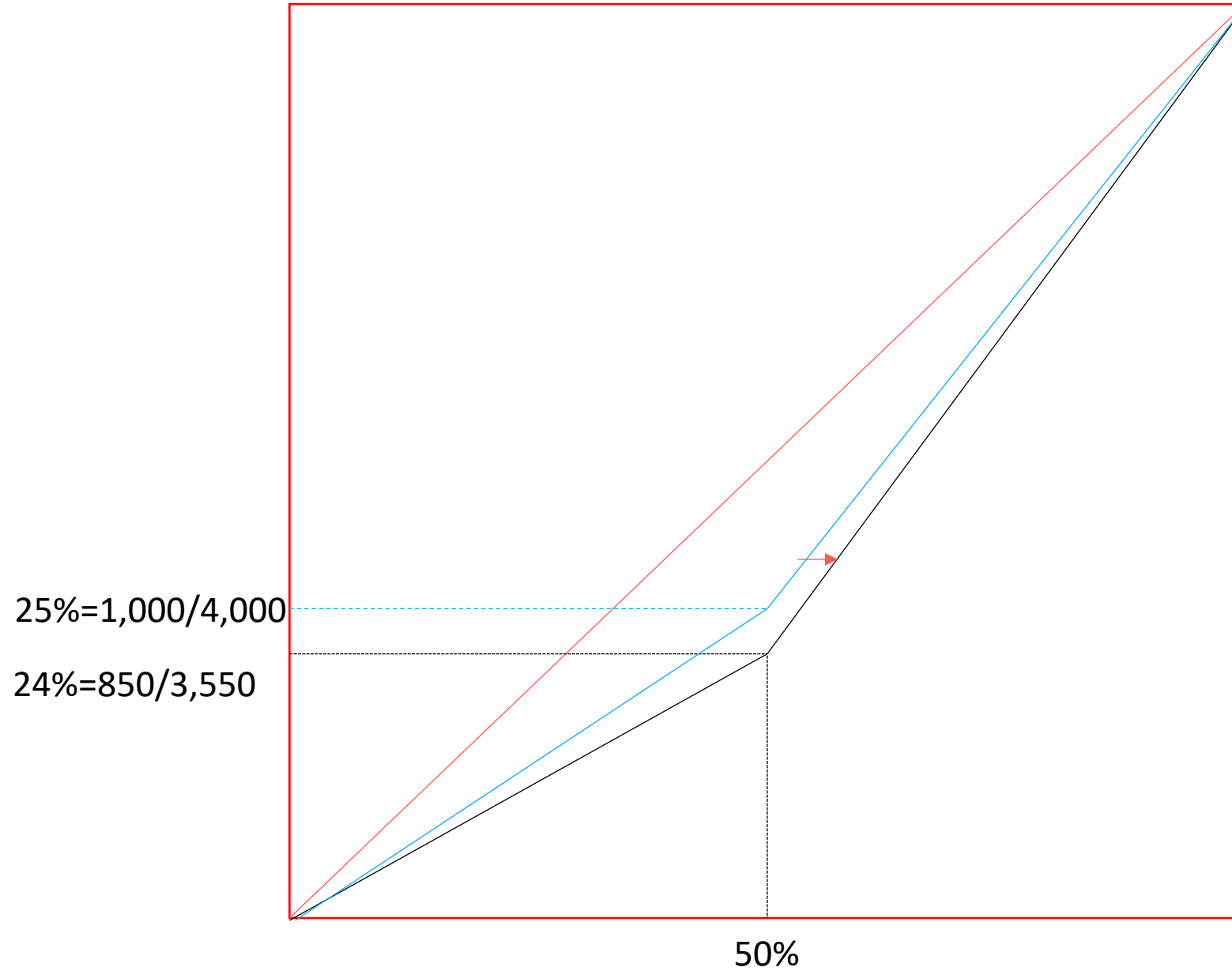
Progressive vs. Regressive, Transfer vs. Tax

- A progressive (regressive) expenditure or transfer increases the incomes of poorer (richer) households by more than richer (poorer) households, in percentage terms.
- A tax is progressive (regressive) if richer (poorer) households pay a larger share of their incomes than poorer (richer) households.

Regressive tax

- If Bruno paid 300 pesos in tax and Angela paid 150 pesos, then the tax would be regressive, even though Bruno is paying more in absolute terms.
- Bruno's tax is 10% of his income while Angela's is 15% of hers.
- Their after-tax incomes of 2,700 and 850 have a ratio of 3.18, which is higher (more unequal) than the ratio of their market incomes.

Regressive tax



Average and Marginal Rates of Redistribution

- Piketty offered the discussion of “instruments of redistribution” in the Economics of inequality.
- Fiscal redistribution depends on a variety of taxes (such as income tax, value-added tax, social charges), transfers (such as family allowances, unemployment insurance, guaranteed minimum income, and pensions), and expenses paid directly by the government (for health, education, and so on).

Average and Marginal Rates of Redistribution

- To measure fiscal redistribution correctly is to use the effective average and marginal rates of taxation and transfer.
- The effective average rate for a given level of income is defined as the sum of all taxes (and transfers) expressed as a percentage of gross income before taxes and transfers.
- The rate can be positive or negative, depending on whether the total tax paid is greater or smaller than the total transfers received.

Average and Marginal Rates of Redistribution

- The effective marginal rate of tax and transfer between two income levels is defined as the sum of all taxes and transfers that an individual pays or receives if she transitions from one income level to another, expressed as a percentage of the difference in gross income.
- Effective marginal rates are generally positive, since an increase in gross income generally leads to an increase in taxes paid, but in principle it could also be negative if a higher income entitled a person to a higher transfer (or lower net tax).

Redistribution policy: Welfare state

- The policies that turn market income into final income are often referred to as the **welfare state**. It is a set of government policies designed to provide improvements in the welfare of citizens by assisting with income smoothing throughout their lifetimes.
- These policies can be broken down into the taxation side and the expenditure side. The taxation side is any policy that collects revenue for the government, while the expenditure side is any policy that either gives money to households, or spends money on their behalf.

Redistribution policy: Welfare state

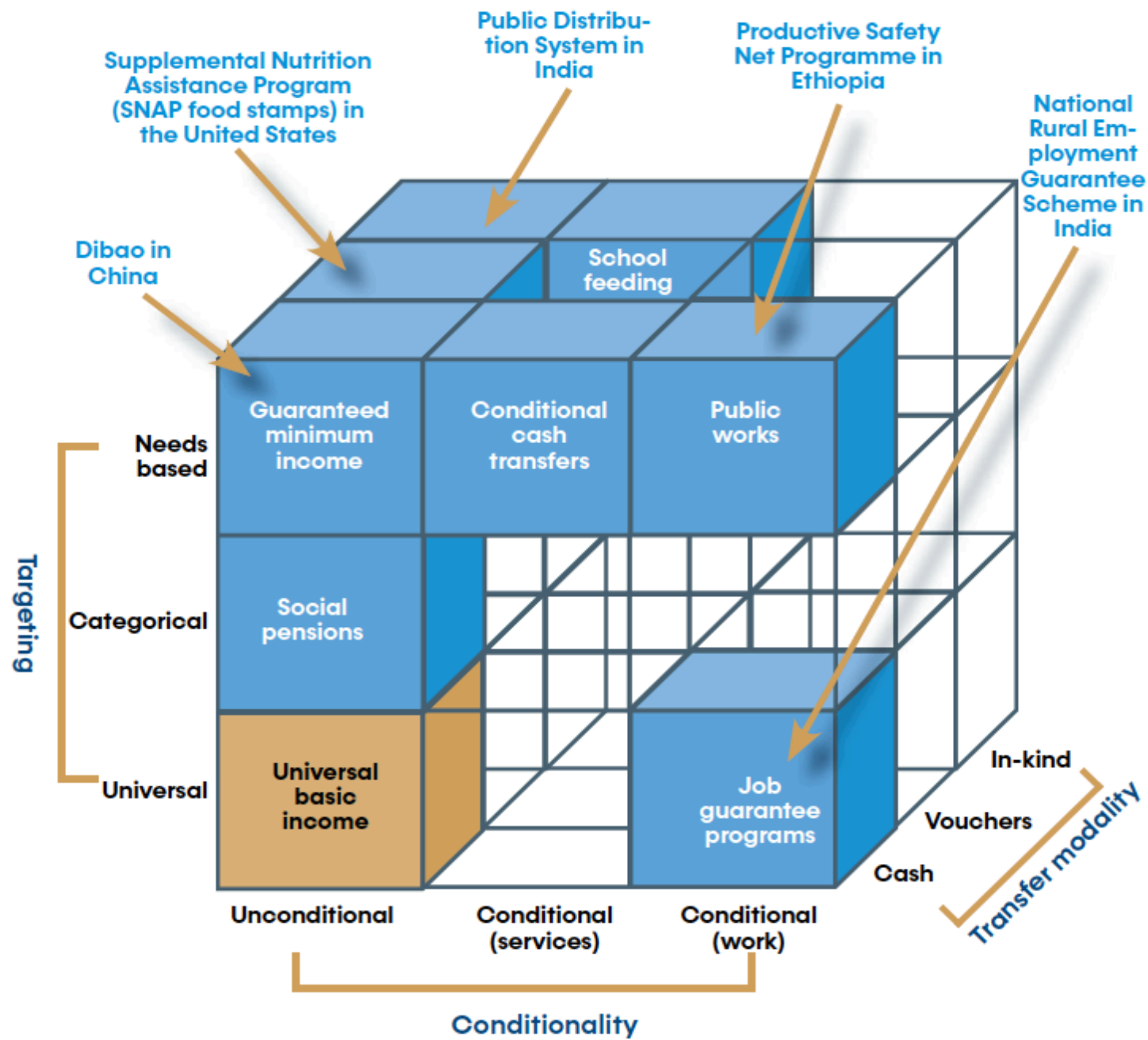
- Welfare state are such as unemployment benefits, public pensions, social housing, child benefits, public education, public health subsidies.
- In countries where redistribution reduces inequality by a lot, most of this work is done by expenditures, rather than taxation.
- Poorer households benefit proportionally much more from expenditures.

Redistribution policy: Welfare state

- **Social assistance** refers to the assistance rendered by the society to the poor and needy persons voluntarily without placing any obligation on them to make any contribution to be entitled to relief such as workmen's compensation, maternity benefit and old age pension etc.
- Social assistance schemes can be codified along three features or dimensions: what transfer modality they provide, whether and how they are conditional, and whether and how they are targeted.

Unconditional Basic Income Grants(UBI or BIG)

- Milton Friedman proposed that each adult citizen should receive a certain lump sum every month, regardless of income or labor market status. The original idea was to interfere as little as possible with the virtuous mechanism of the market and to replace other forms of “social protection” with a single modest allocation (Friedman, 1962).



Social insurance and redistribution

- Insurance market imperfection leads to social insurance such as unemployment insurance, public health insurance, public pension systems (which is a kind of survival insurance).
- Some social insurance expenditures are not neutral with respect to redistribution of labor income.
- In France, Health insurance is financed by a payroll tax proportional to income, whereas most reimbursements for care, hospital fees, and the like are the same for all.

Predistribution: Minimum wage and inequality

- The decline in the real value of the minimum wage explains 30 to 40 percent of the rise in lower tail wage inequality in the 1980s.

(Autor et al, 2016, "The contribution of the minimum wage to US wage inequality over three decades")

- Minimum wage might have spillover effect by raising the wages of workers earning above the minimum.

Panel B. Minimum wages and $\log(p90) - \log(p50)$

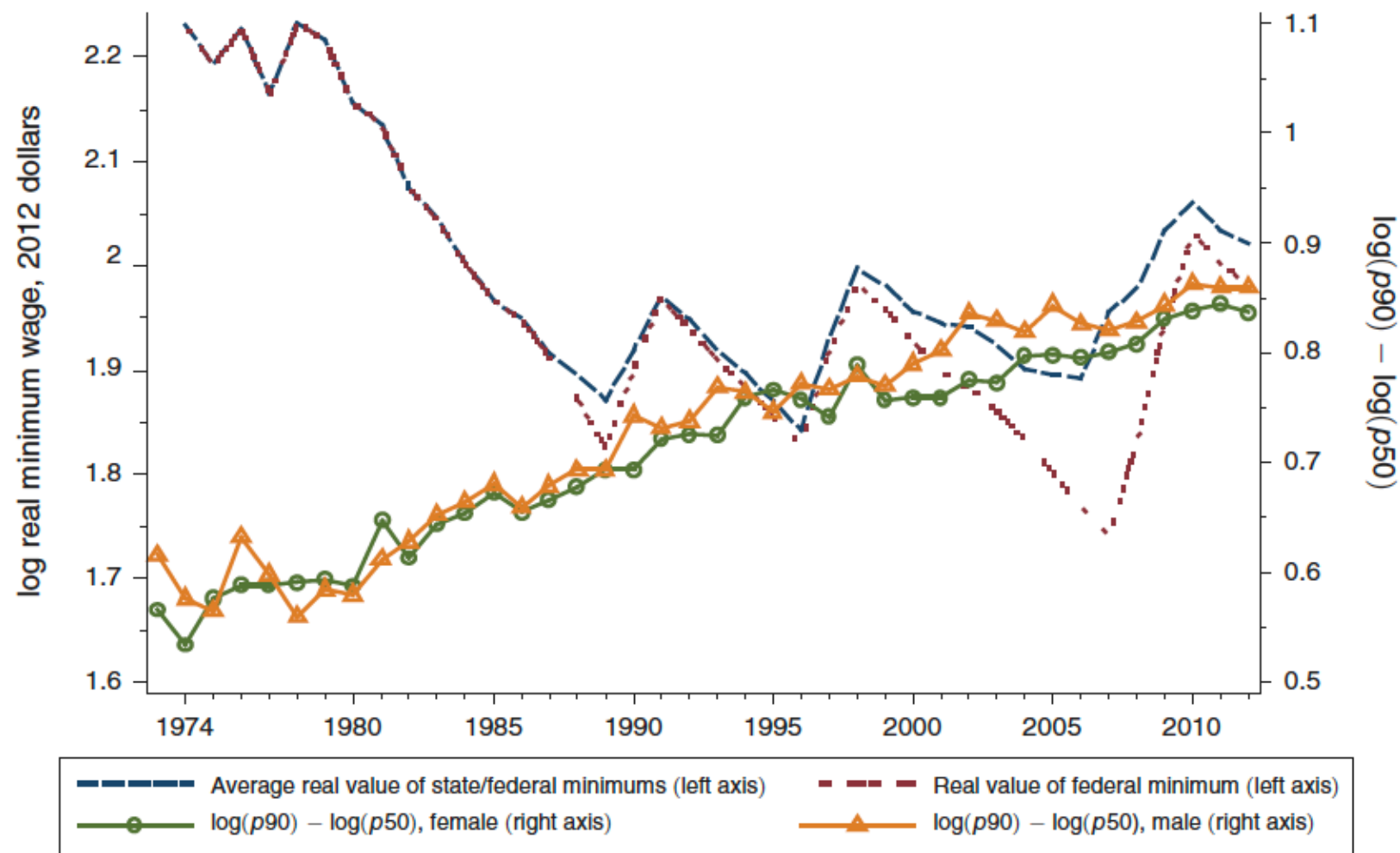


FIGURE 1. TRENDS IN STATE AND FEDERAL MINIMUM WAGES AND LOWER- AND UPPER-TAIL INEQUALITY

Notes: Data are annual averages. Minimum wages are in 2012 dollars.