

Taxes, Transfers, Inequality and the Poor in the Developing World

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(Year of Survey; C=consumption & I=income)(MWB Version)

1. **Armenia (2011; I):** Stephen Younger and Artsvi Khachatryan (March 12, 2014; paper)
2. **Bolivia (2009; I):** Veronica Paz Arauco, George Gray-Molina, Wilson Jimenez and Ernesto Yañez (CEQ Web Dec 2013) *Public Finance Review*, May 2014, Volume 42, Issue 3
3. **Brazil (2009; I):** Sean Higgins and Claudiney Pereira (CEQ Web Dec 2013) *Public Finance Review*, May 2014, Volume 42, Issue 3
4. **Costa Rica (2010; I):** Pablo Sauma and Juan Diego Trejos (February 2014; paper)
5. **El Salvador (2011; I):** Margarita Beneke, Nora Lustig and Jose Andres Oliva (March 11, 2014)
6. **Ethiopia (2010/11; C):** Ruth Hill, EyasuTsehay, Tassew Woldehanna (April 30, 2014)
7. **Guatemala (2011; I):** Maynor Cabrera, Nora Lustig and Hilcias E. Moran (April 13, 2014)
8. **Indonesia (2012; C) :** Jon Jellema and Matthew Wai-Poi (February 18, 2014)

(Year of Survey; C=consumption & I=income)(MWB Version)

9. **Jordan (2010; C)** : Morad Abdel-Halim, Shamma Adeeb Alam, Yusuf Mansur, Umar Serajuddin, Paolo Verme (April 18, 2014)
 10. **Mexico (2010; I)**: John Scott (CEQ Web Dec 2013) *Public Finance Review*, May 2014, Volume 42, Issue 3
 11. **Peru (2009; I)**: Miguel Jaramillo (CEQ Web Dec 2013) *Public Finance Review*, May 2014, Volume 42, Issue 3
 12. **South Africa (2010; I)**: Ingrid Woolard, Precious Zikhali, Mashekwa Maboshe, Jon Jellema (May 5, 2014)
 13. **Sri Lanka (2009/10; C)**: Nisha Arunatilake, Gabriela Inchauste and Nora Lustig (April 8, 2014; paper)
 14. **United States (2011; I)**: Sean Higgins, Nora Lustig, Whitney Ruble and Timothy Smeeding
 15. **Uruguay (2009; I)**: Marisa Bucheli, Nora Lustig, Maximo Rossi and Florencia Amabile (CEQ Web Dec 2013) *Public Finance Review*, May 2014, Volume 42, Issue 3
- **Research Assistant:** Yang Wang, Tulane University

Message to Viewers and Users

- Data is still under review except for Bolivia, Brazil, Costa Rica, Guatemala, Mexico, Peru and Uruguay
- Except for what is published in CEQ website or other places, information can be cited with permission only

If permission to cite is granted please use the following:

- Lustig, Nora. 2014. “Taxes, Transfers, Inequality and the Poor in the Developing World. Round 1” *CEQ Working Paper No. 23*, Tulane University and Inter-American Dialogue.
- AND, please cite the authors and date of submission for each country as noted in “CEQ Teams.”

Outline

- Governments come in all sizes
 - Primary Spending and GDP: outliers everywhere
 - Composition of Social Spending: hello diversity
 - Composition of Tax Revenues: again, hello diversity, but...
- Taxes, Transfers and Inequality: Robin Hood, or Robin Hood Paradox? (Lindert, 2006)
 - How do consumption taxes affect redistribution?
- Taxes, Transfers and Poverty Reduction: much less auspicious
- A glimpse at Ethiopia

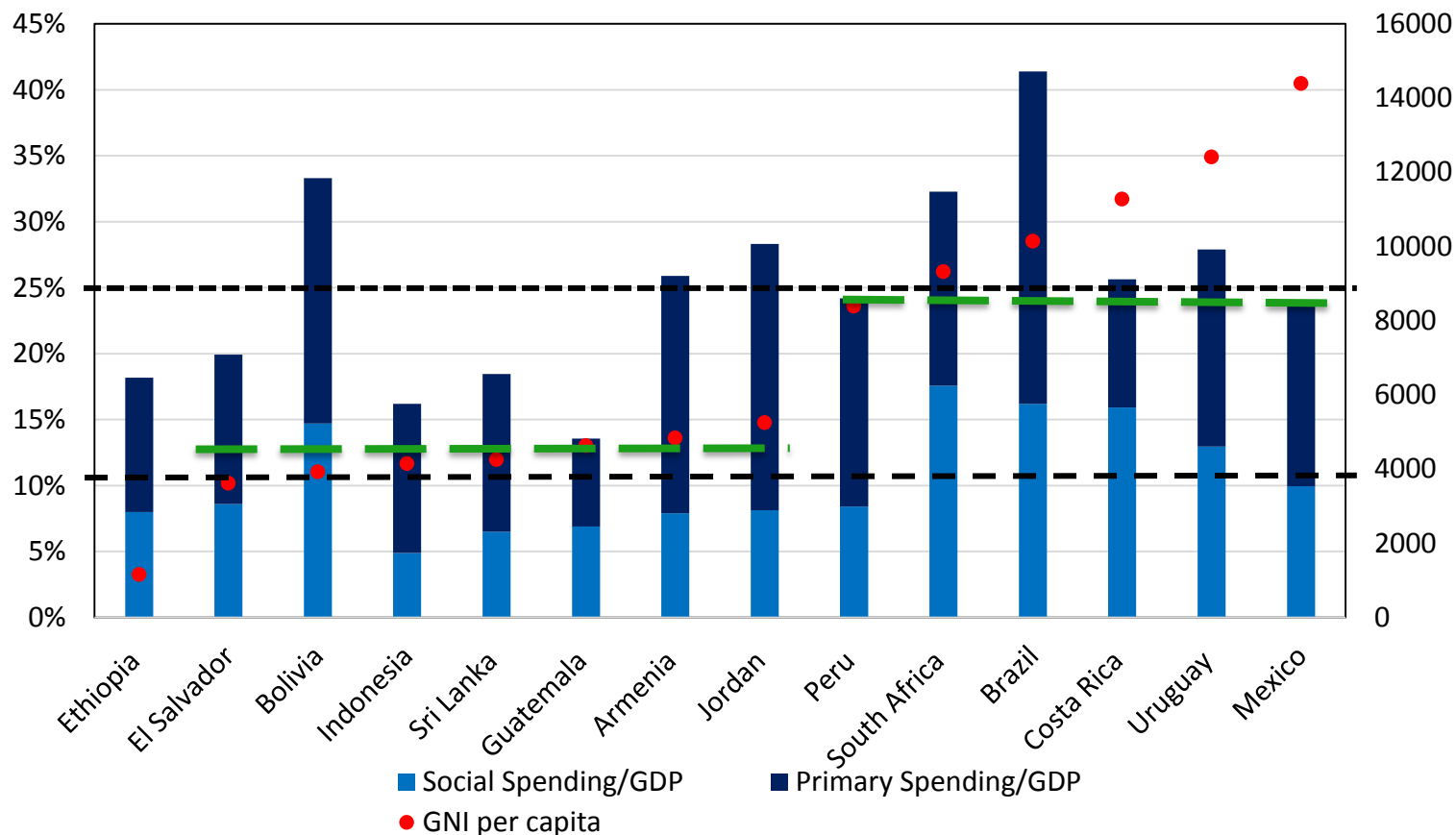
Countries are heterogeneous

=> same income/capita & different government sizes

=> same government size & different income/capita

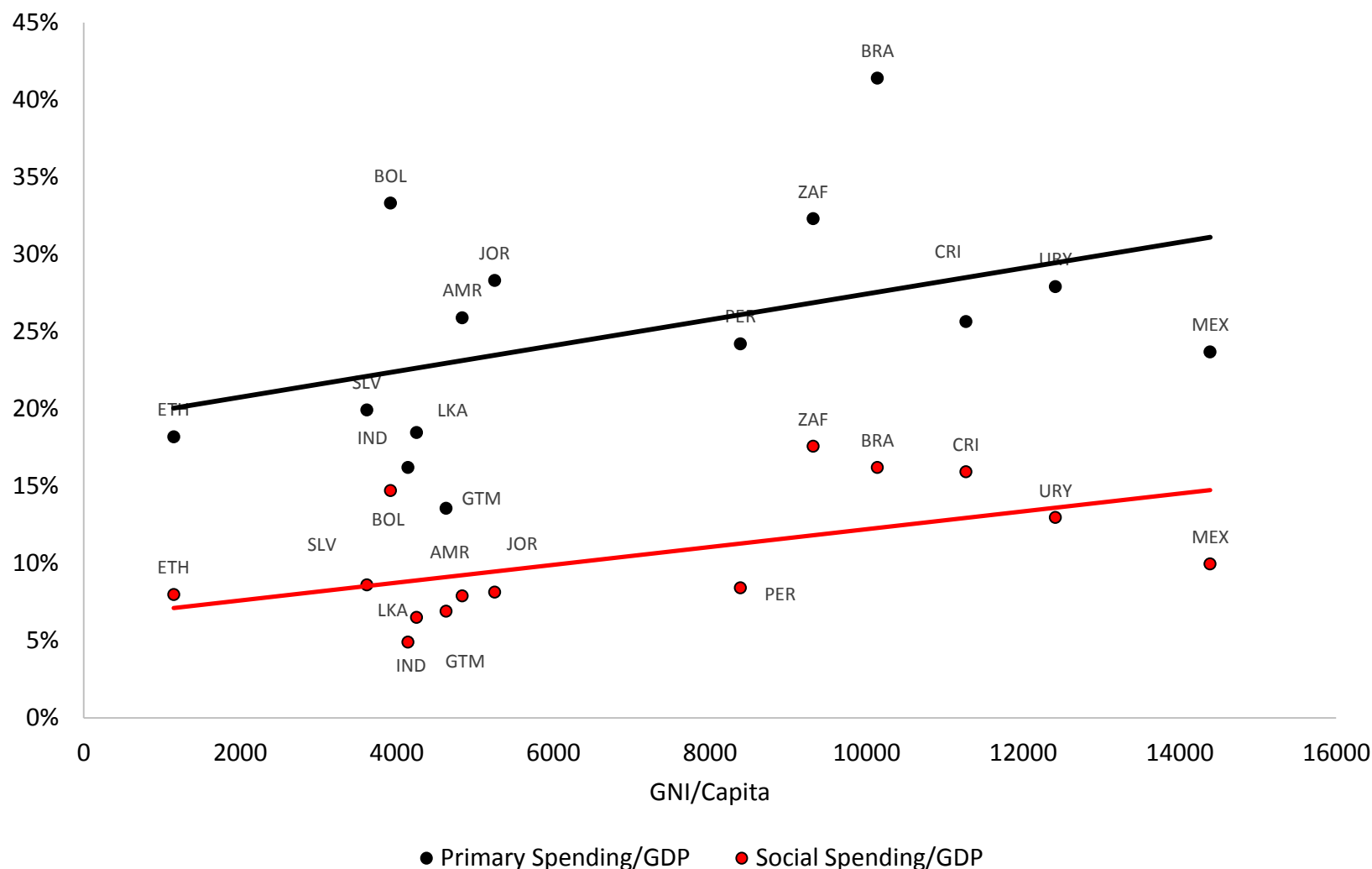
Primary and Social Spending to GDP

(ranked by GNI/capita in ppp 2005 US\$; right hand scale)



However, both the size of government and social spending rise with income/ capita...

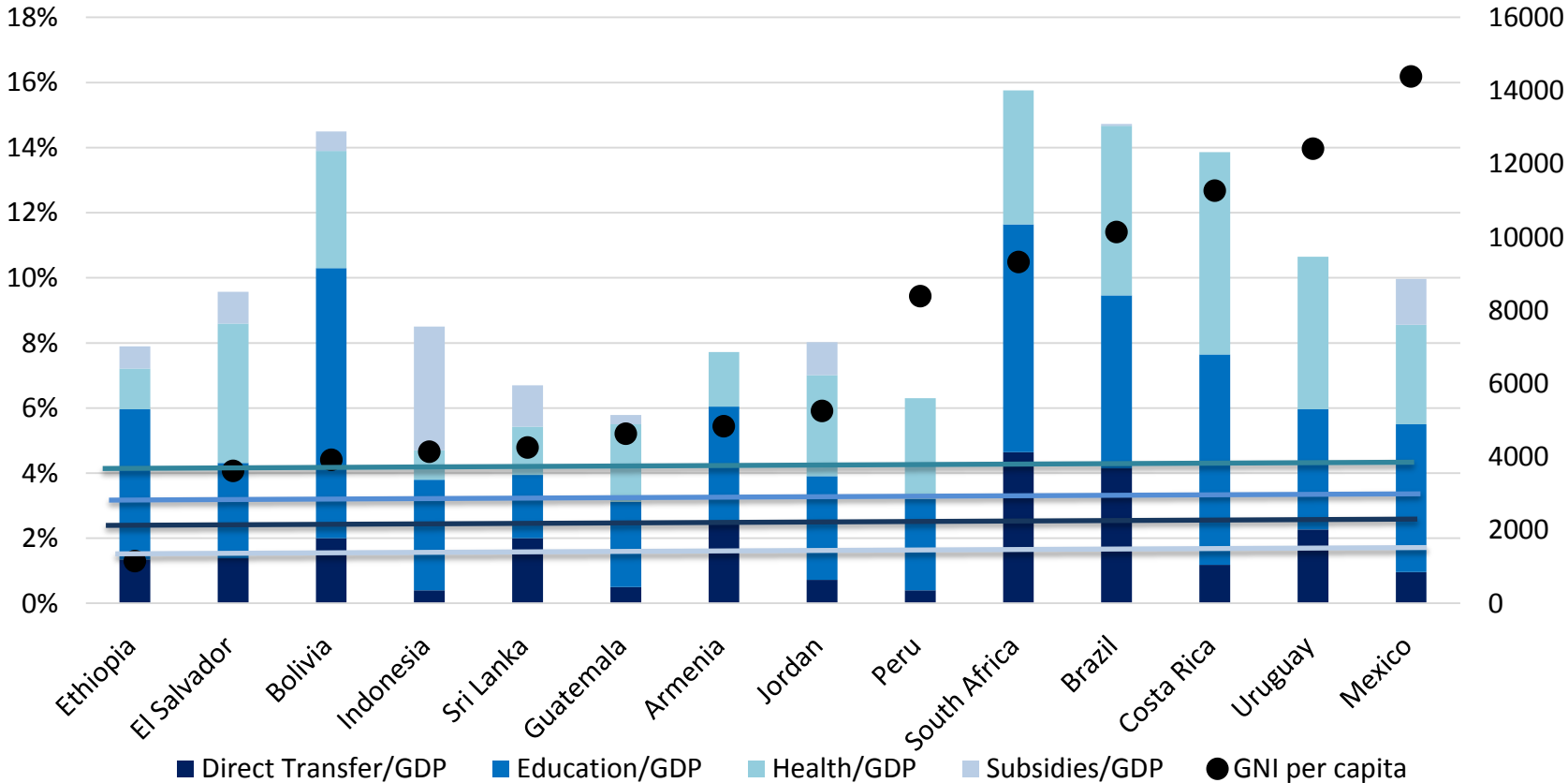
Primary and Social Spending vs GNI/capita



Size and composition of social spending is quite heterogeneous...

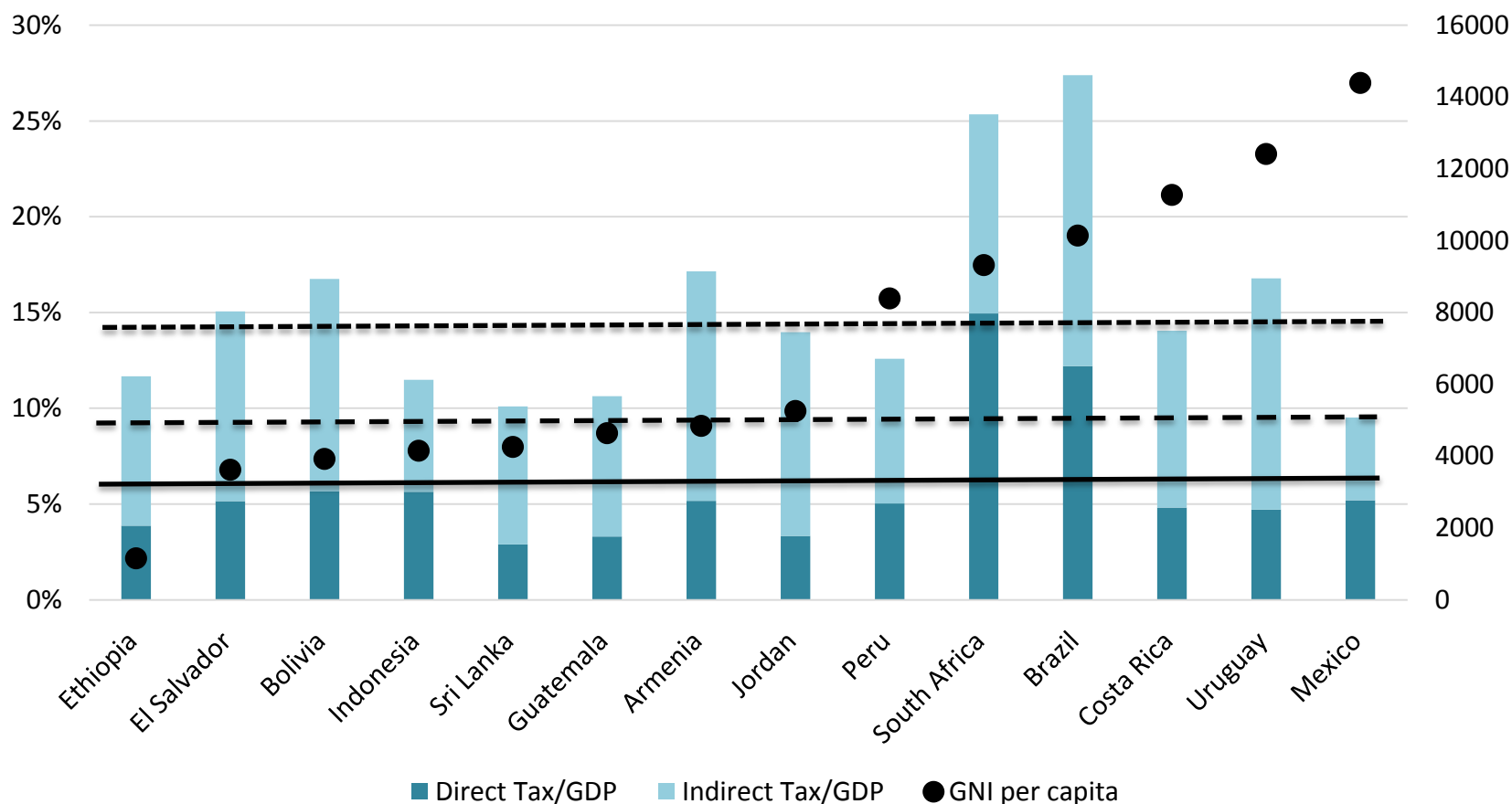
Composition of Social Spending (does not include contributory old-age pensions)

(ranked by GNI/capita; right hand scale)



As expected, size and composition of taxes is heterogeneous too

Composition of Taxes
(ranked by GNI/capita; right hand scale)



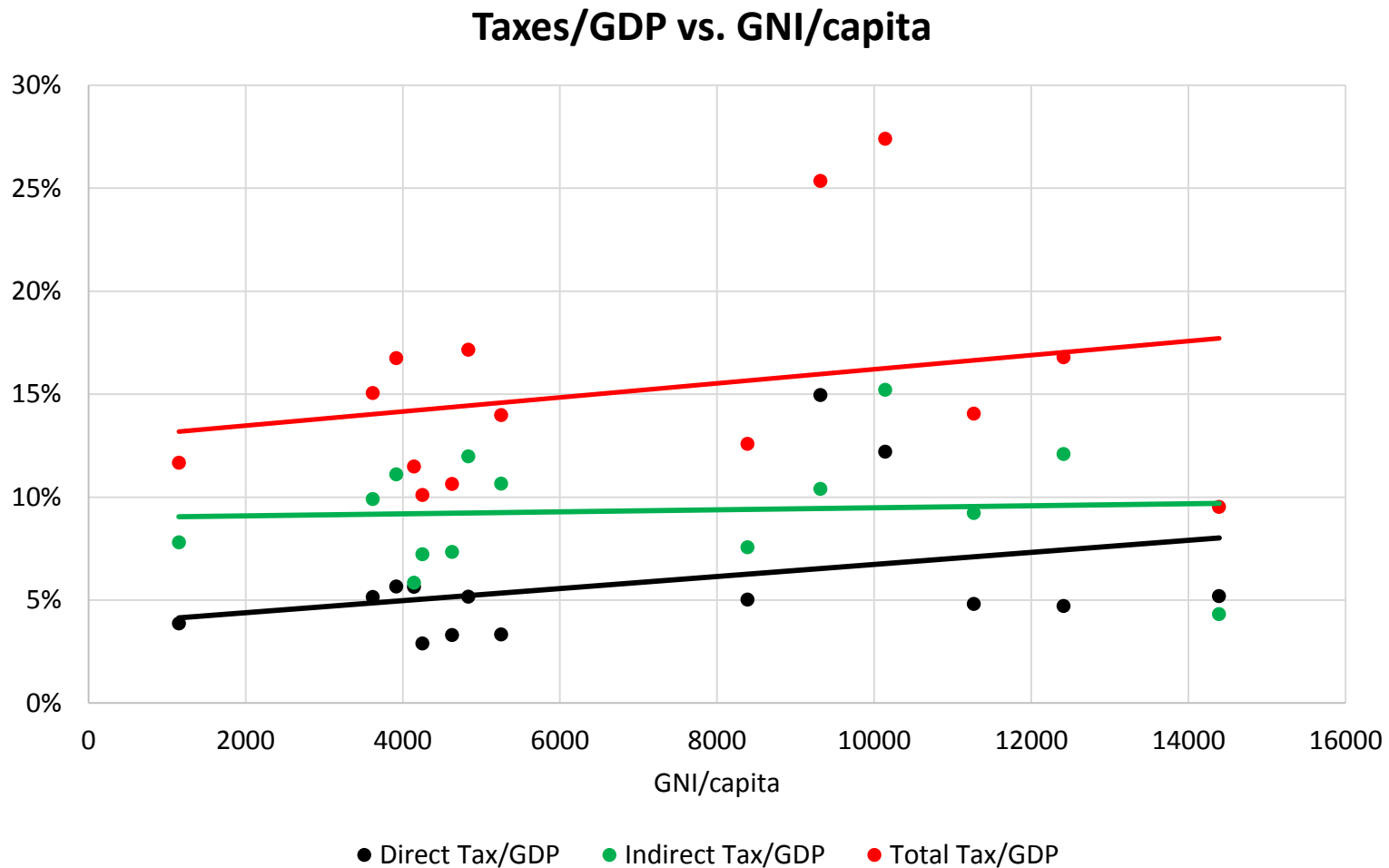
Note: Direct Taxes include PIT and contributions to social security; Indirect Taxes include VAT, excise and other consumption taxes depending on the country.

Dashed Line: Average Indirect Taxes 9 percent

Solid Line: Average Direct Taxes 6 percent

=> Share of Direct Taxes increases with the size of the economy

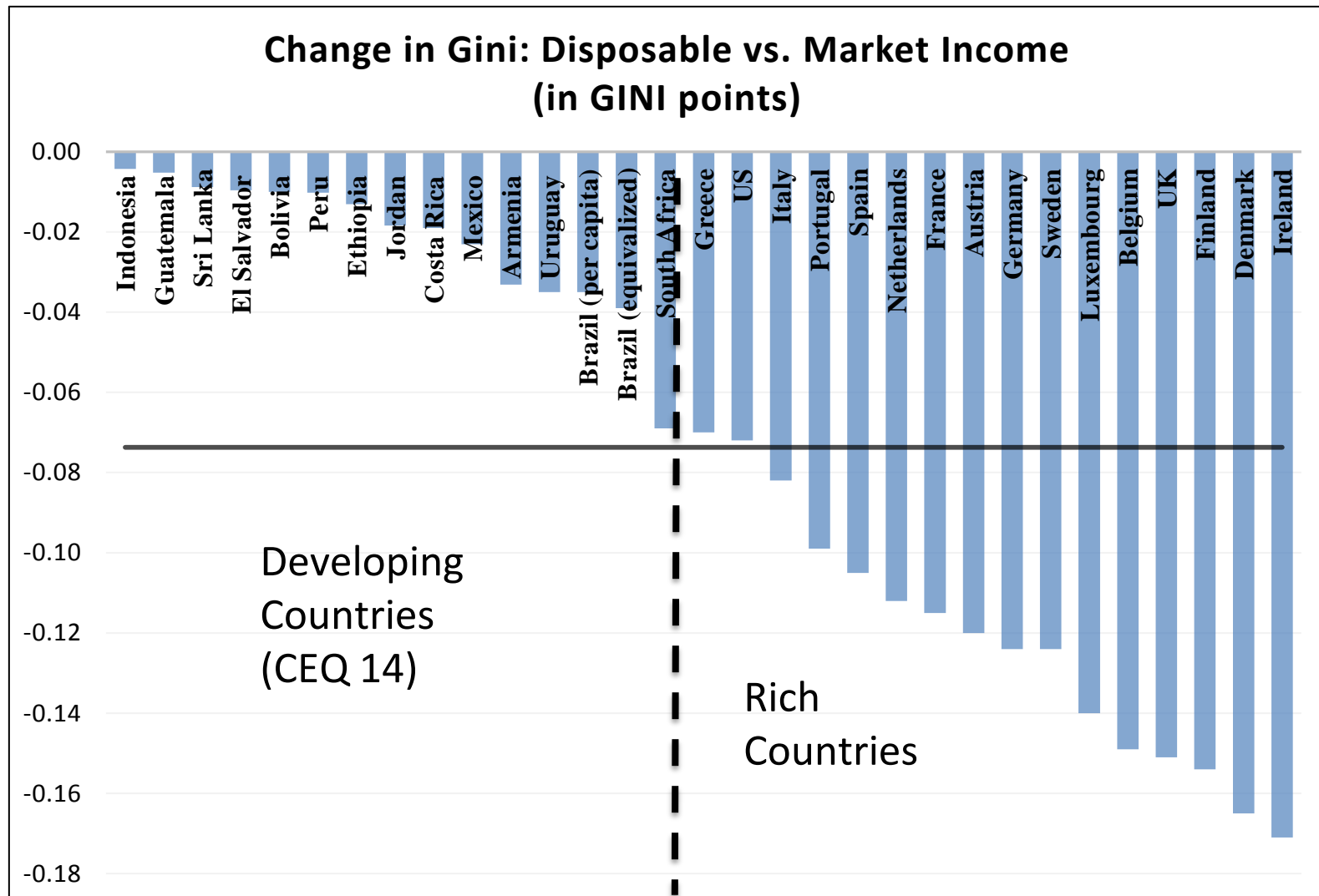
=> Share of Consumption Taxes does not



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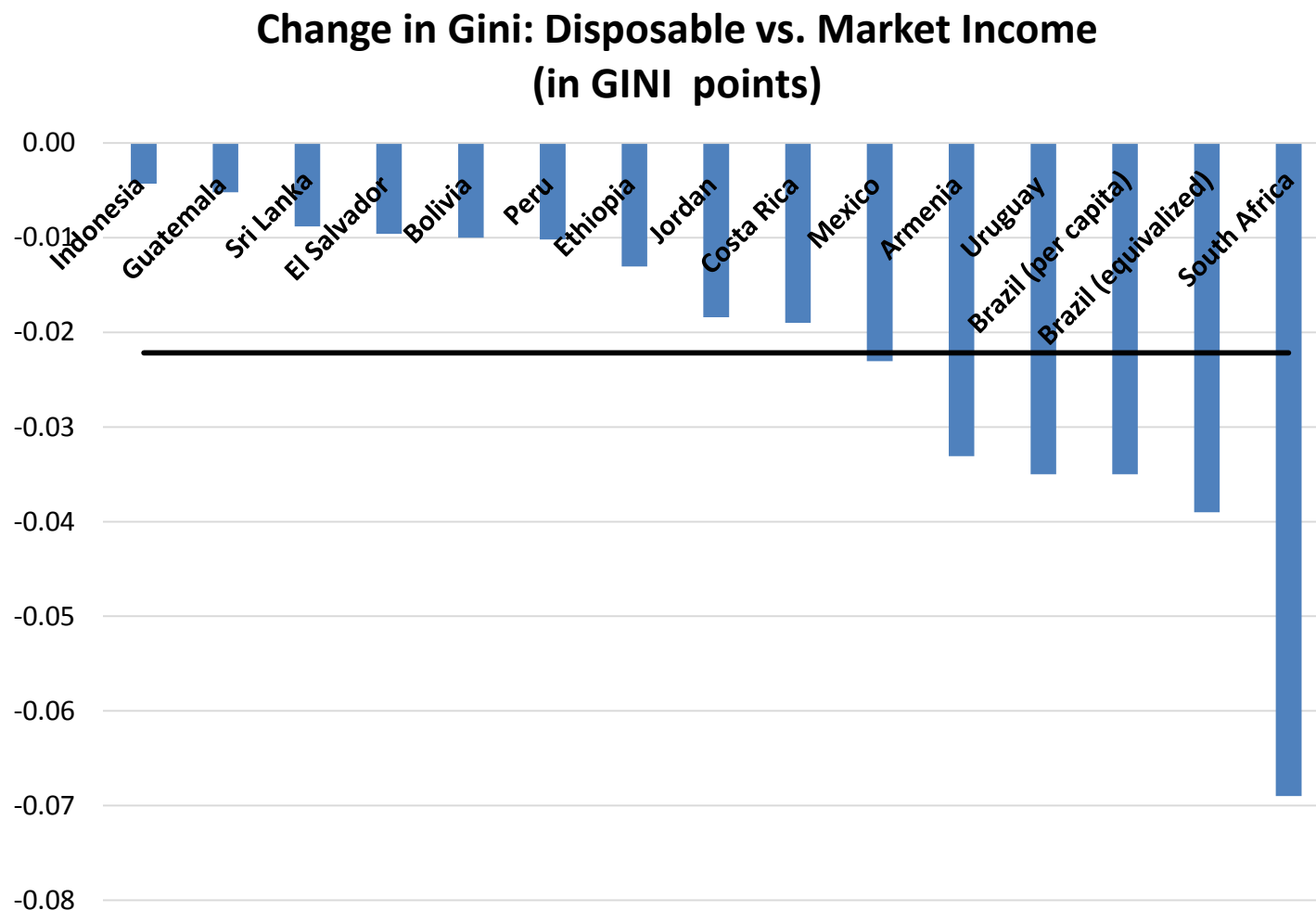
Redistribution in the rich and developing countries



Sources: Immervoll et al. (2009) for EU, Higgins et al. (2013) for USA, and for CEQ countries see slide 3.

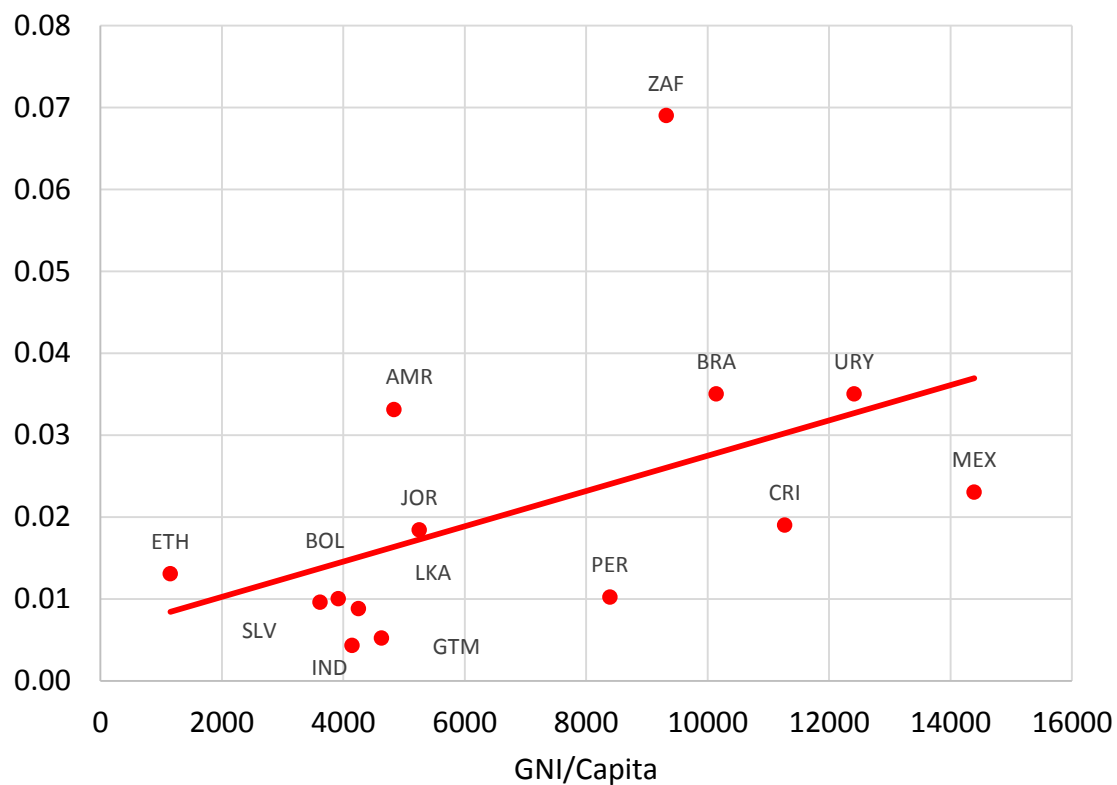
Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.

Zooming in (CEQ 14 countries)



Redistribution rises with income per capita

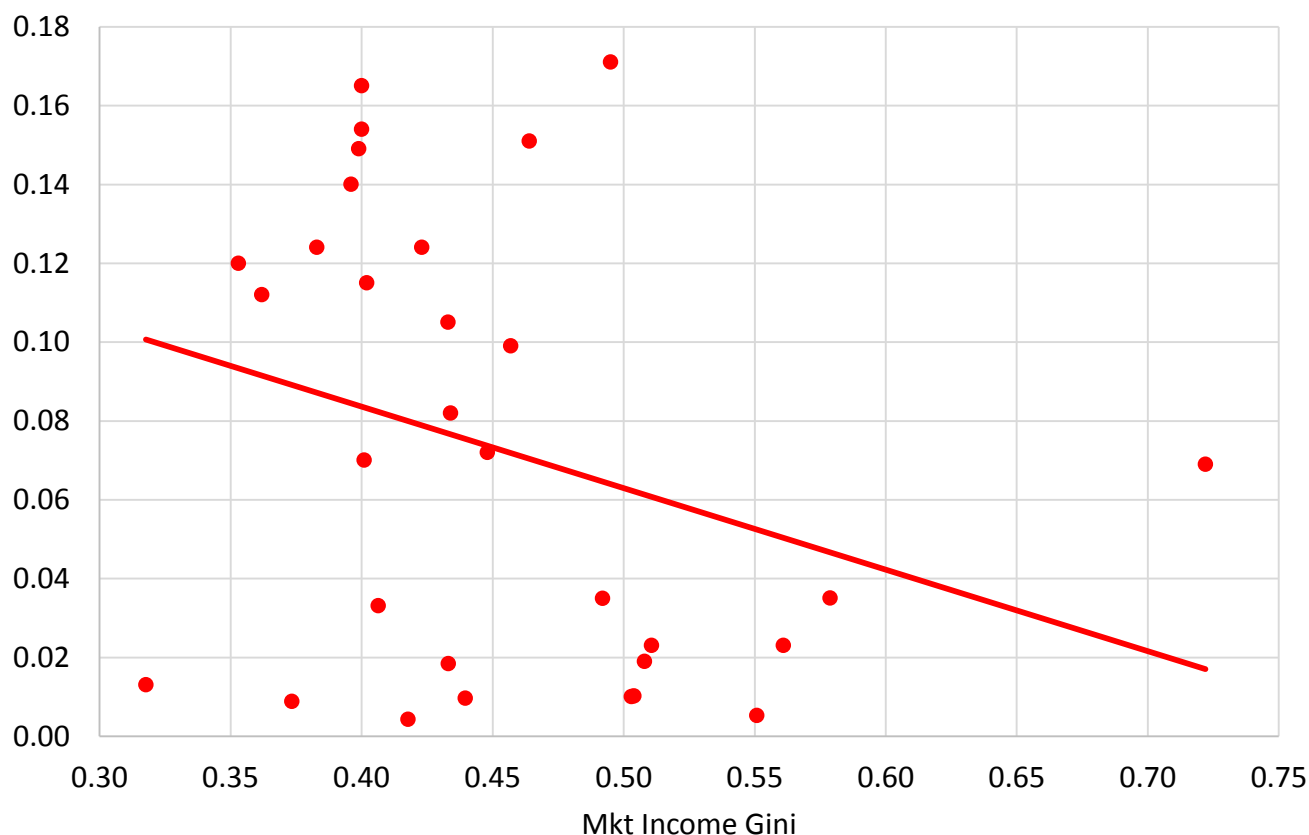
Change in Gini: Disposable vs Market
(decline in Gini points shown in positive quadrant)



Rich and developing countries together: Robin Hood paradox

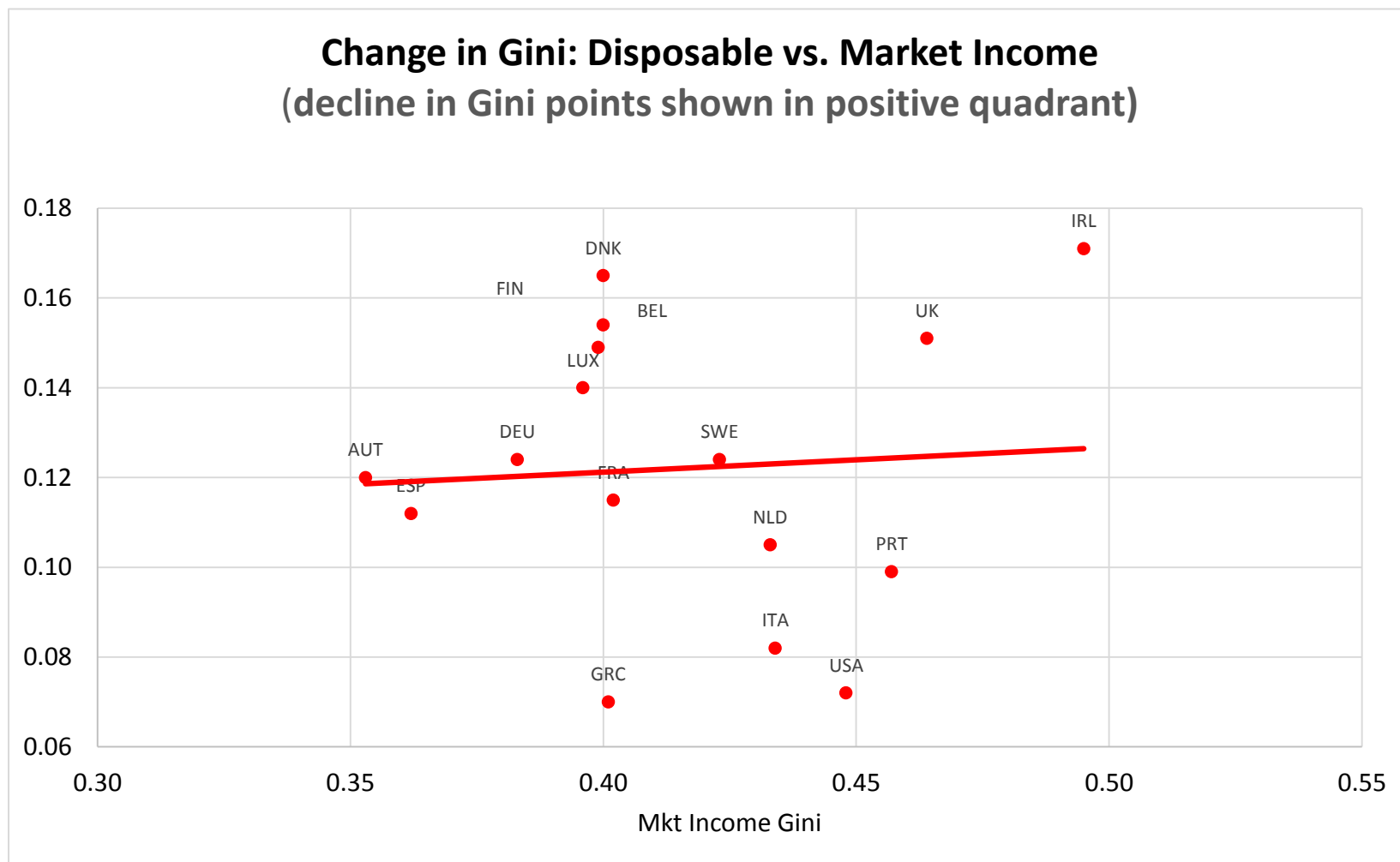
=> more inequality => less redistribution...

Change in Gini: Disposable vs. Market Income
(decline in Gini points shown in positive quadrant)



Note: CEQ 14 countries, EU countries, CEQ US are all included.

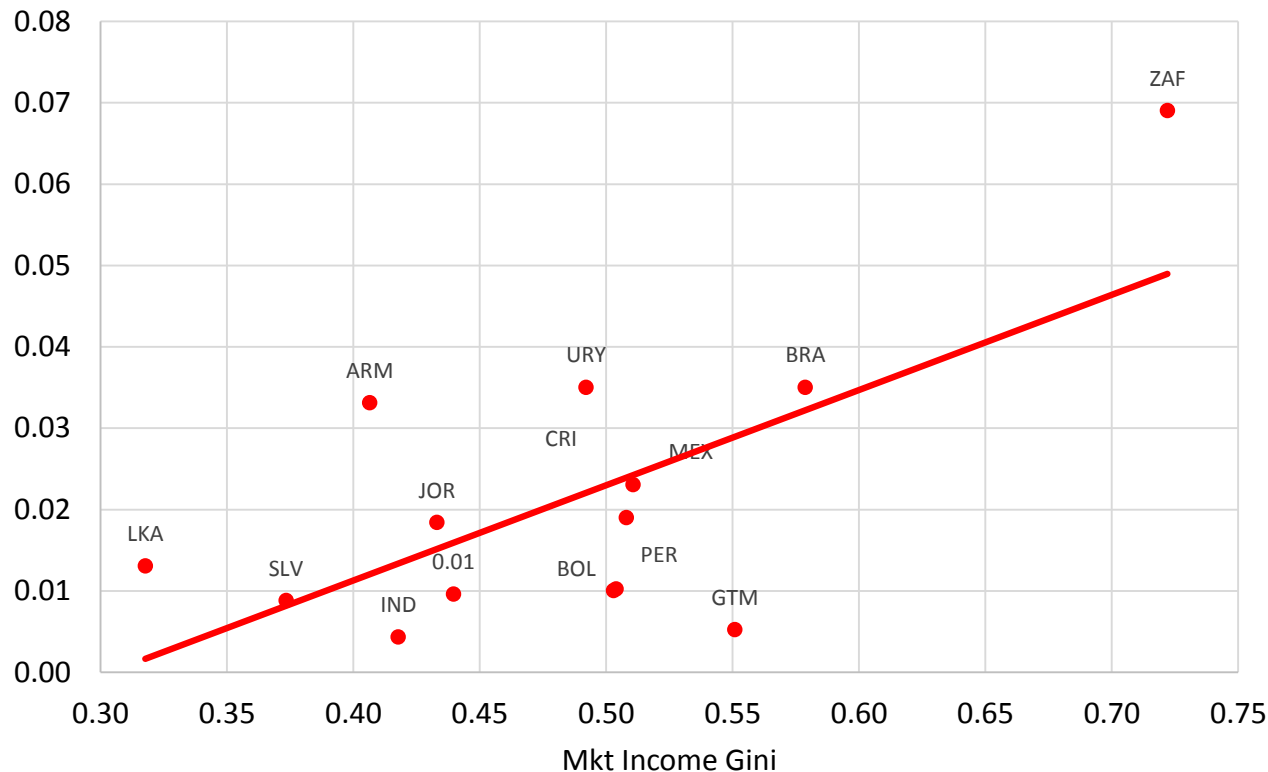
...but in rich countries a mild Robin Hood



Note: CEQ countries, EU countries, US are all included. Decline is in Gini points.

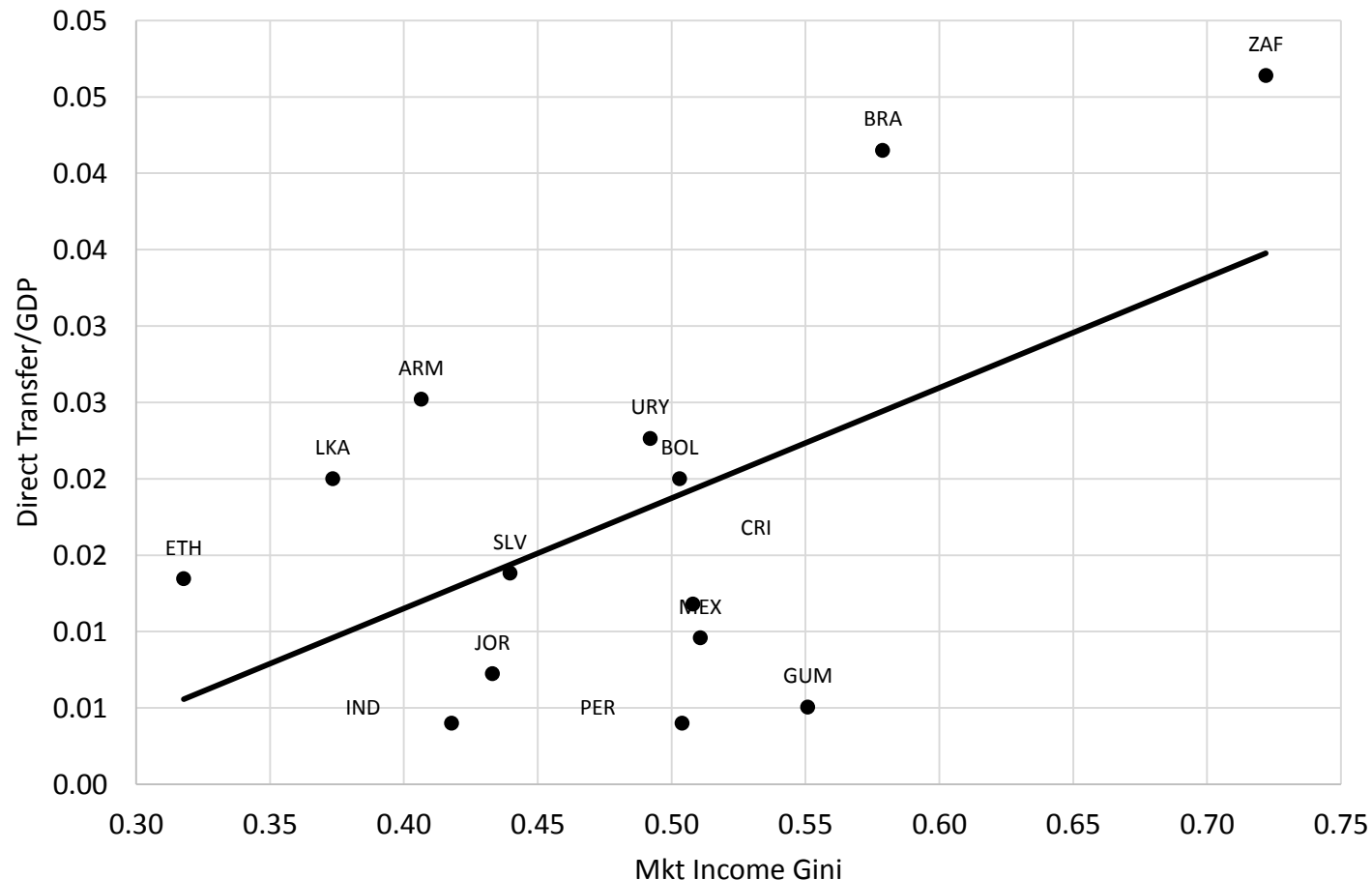
**...in developing countries:
the more unequal, the more redistribution
=>Robin Hood is around**

Change in Gini: Disposable vs. Market Income
(decline in Gini points shown in positive quadrant)

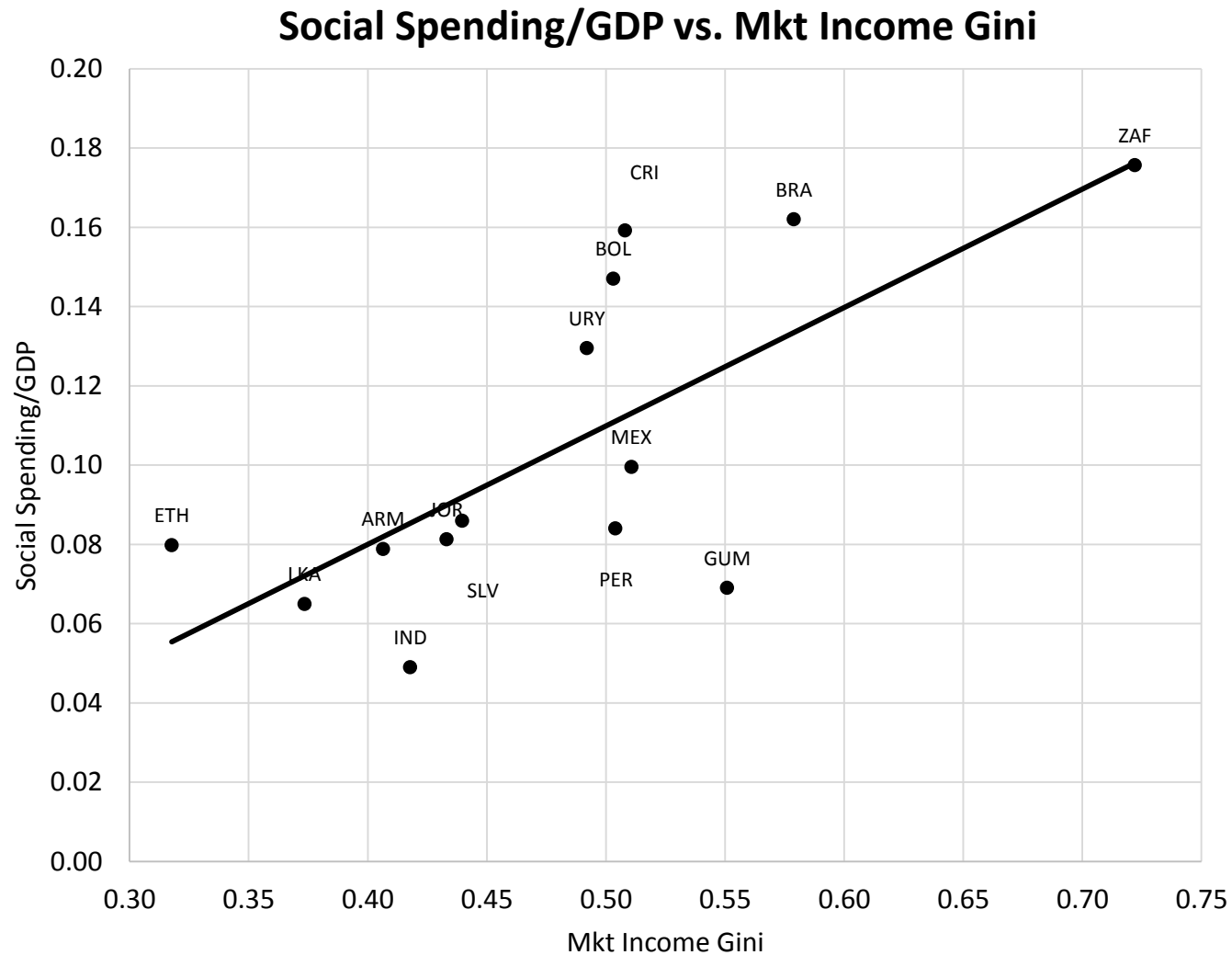


This is also true if we measure it by society's “effort:” spending on transfers/GDP rises with inequality

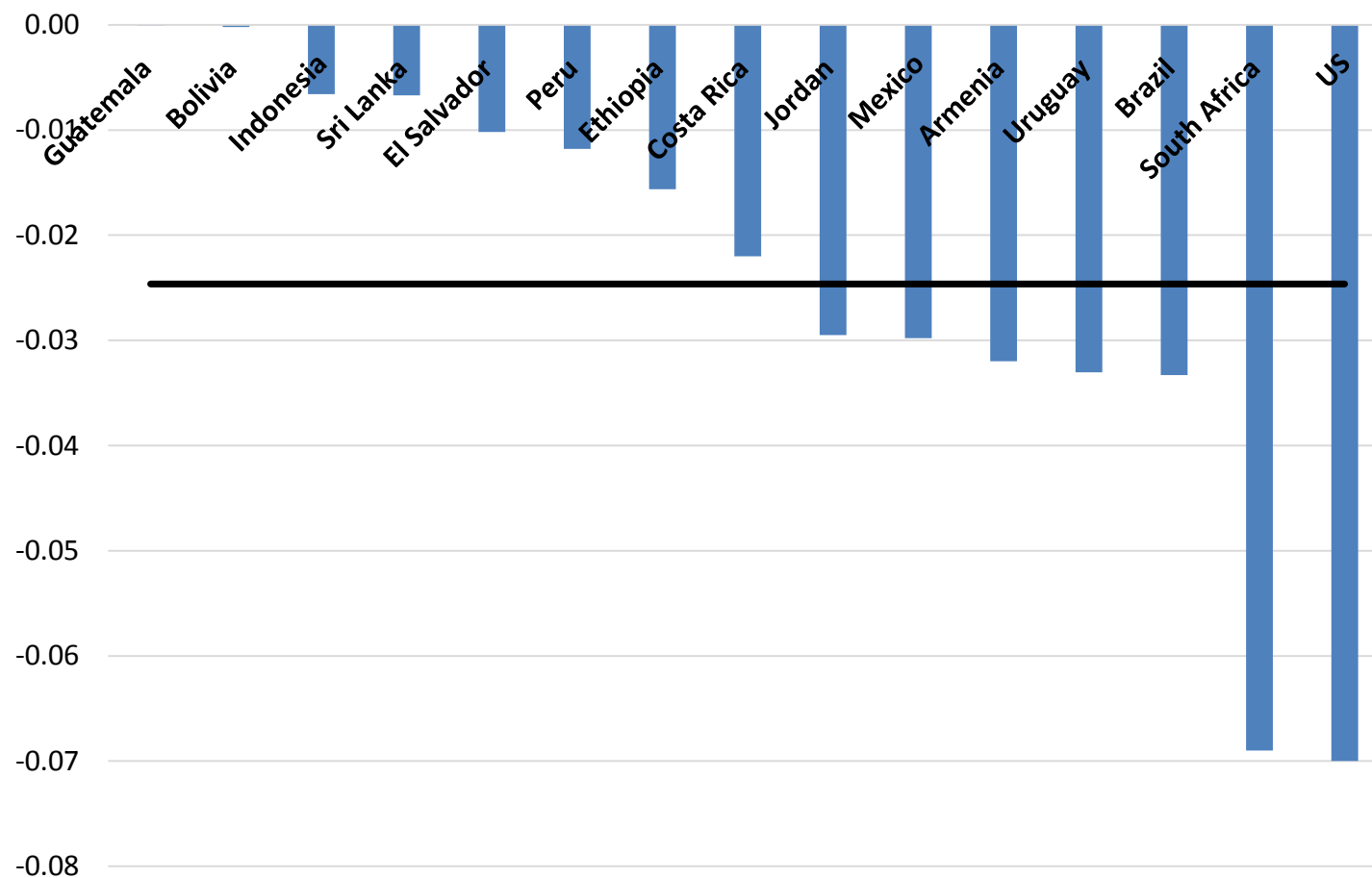
Direct Transfers/GDP vs. Mkt Income Gini



...and so does social spending/GDP



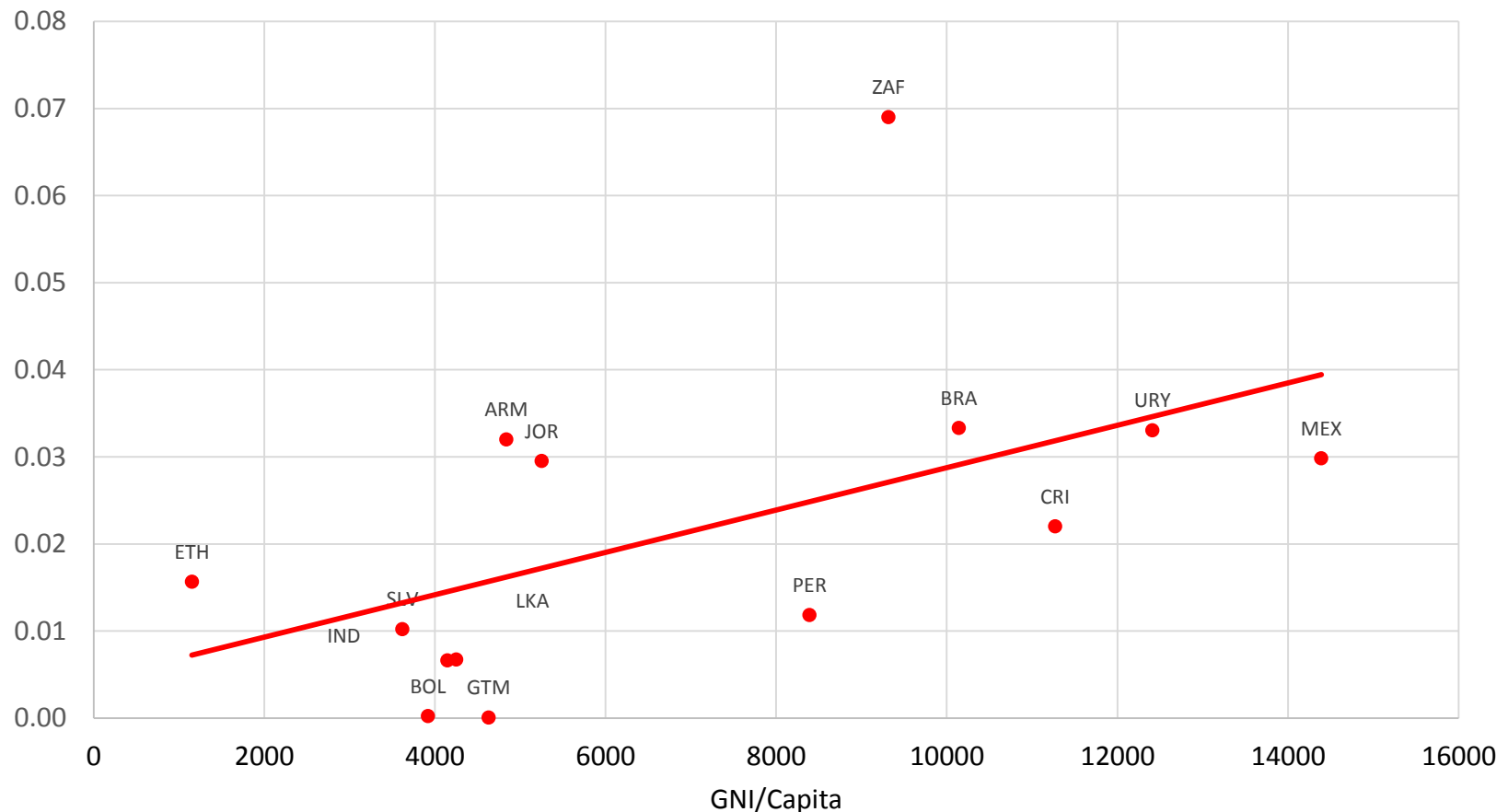
Change in Gini points: Post-fiscal vs. Market



Note:

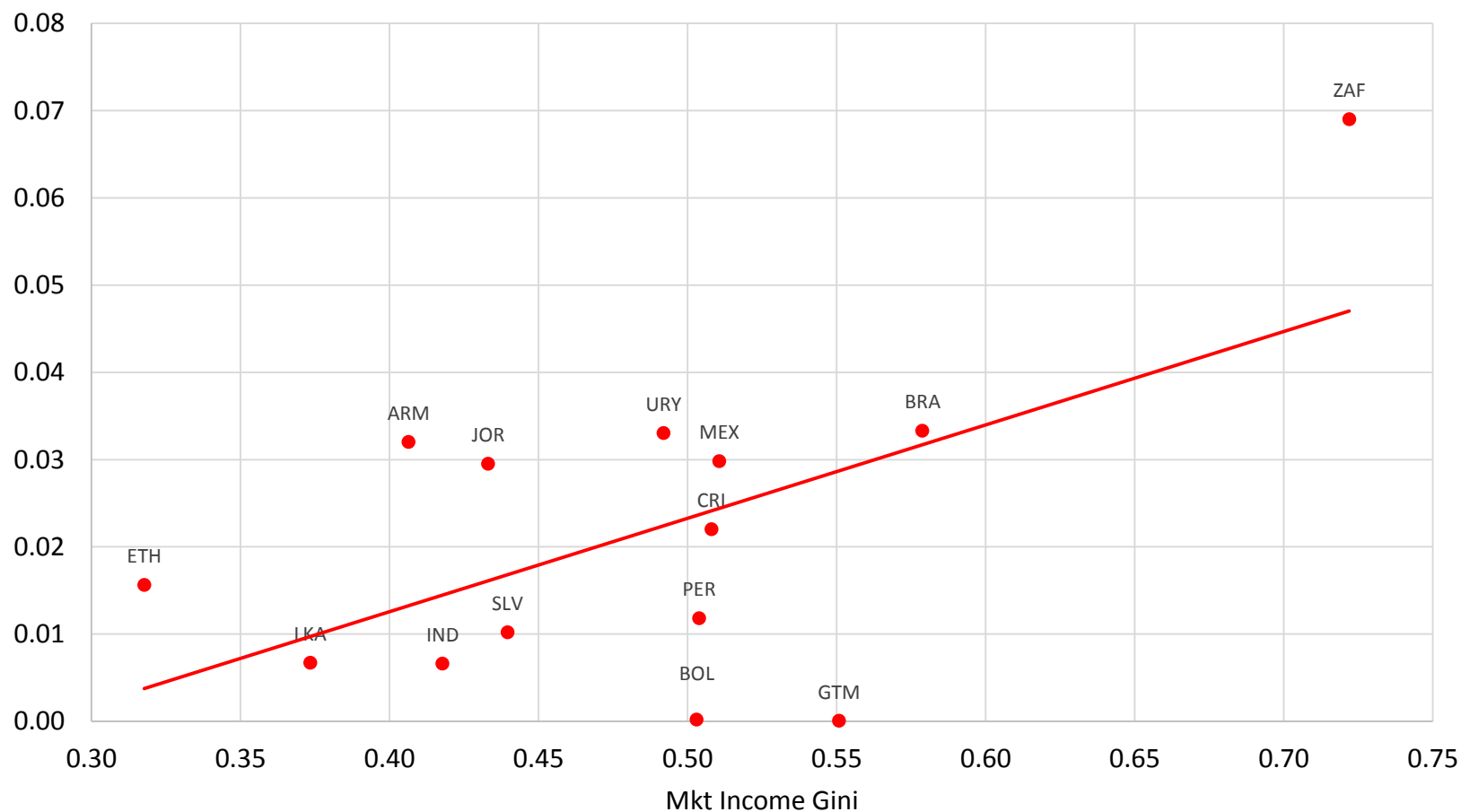
Basic story does not change when you add the effect of consumption subsidies and consumption taxes

Change in Gini: Post-fiscal vs. Market
(decline in Gini points shown in positive quadrant)



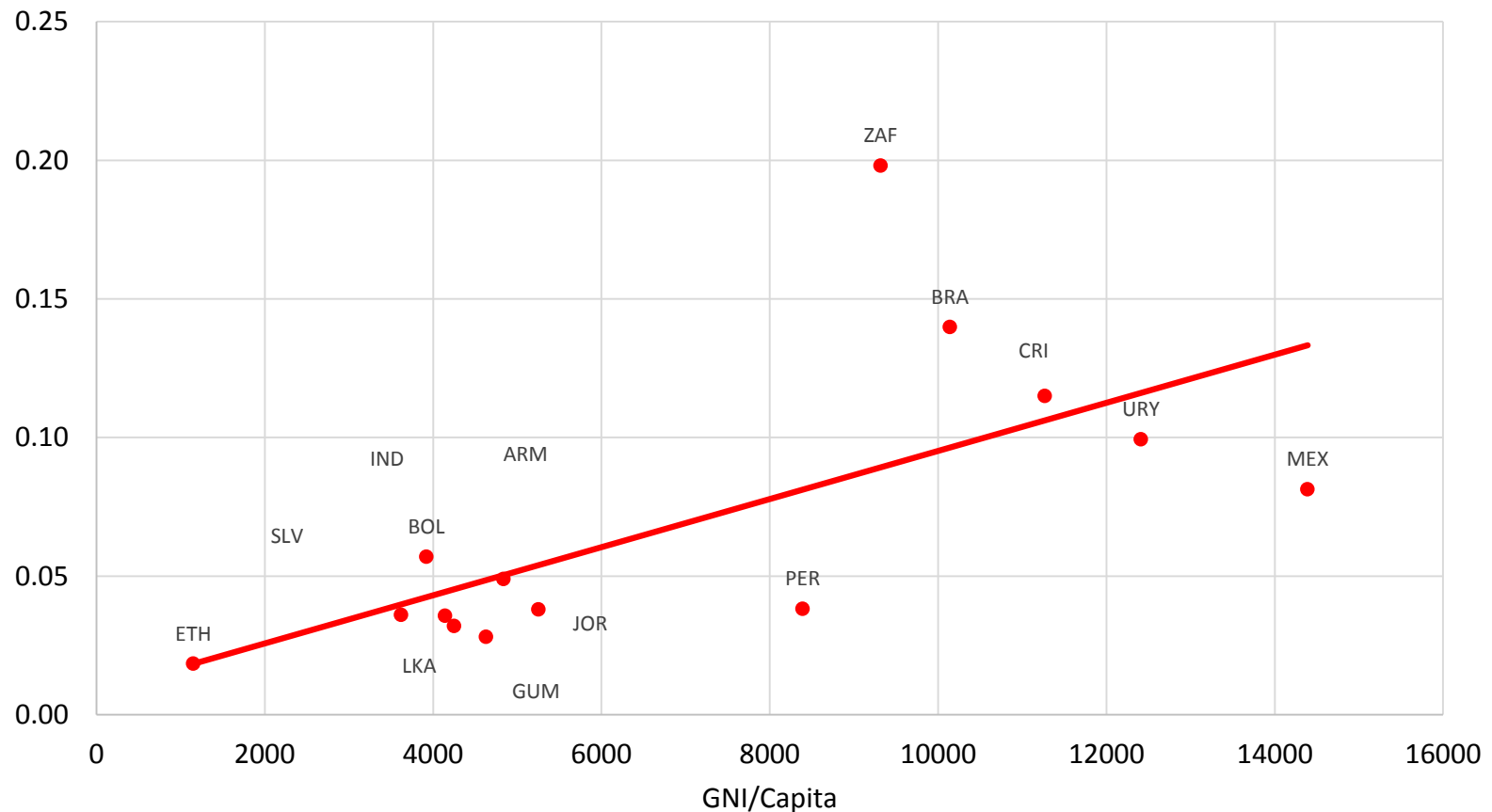
Robin Hood stays around...

Change in Gini: Post-fiscal vs. Market
(decline in Gini points shown in positive quadrant)



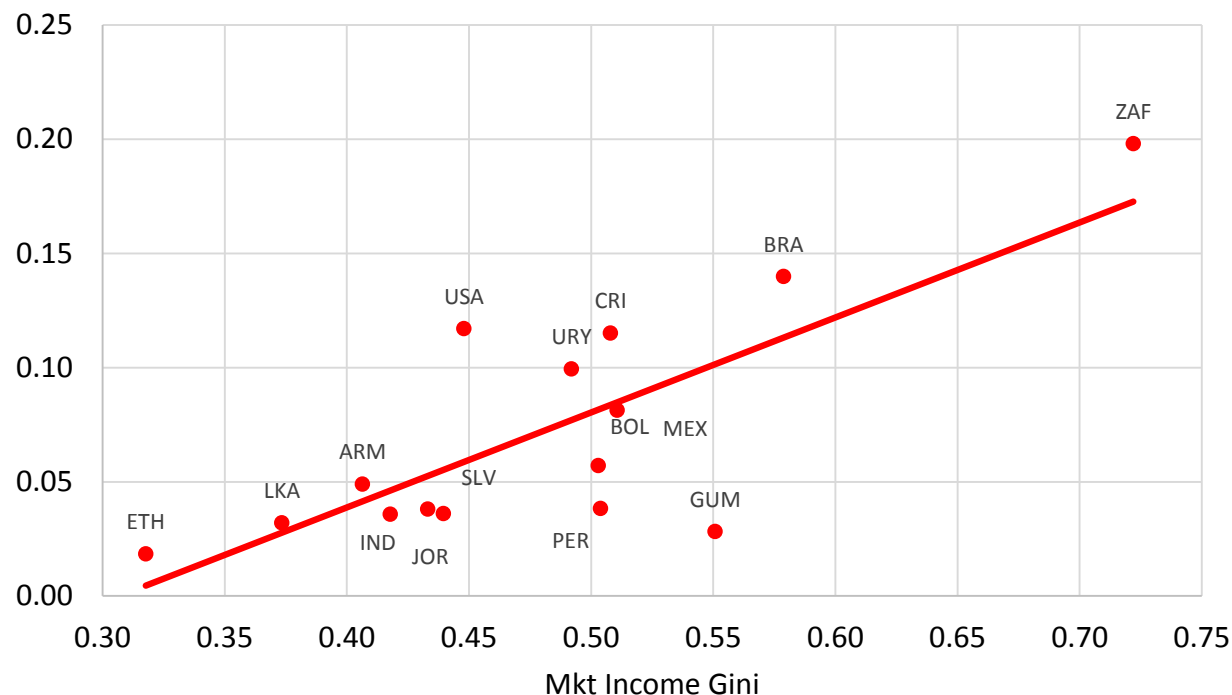
Or, when you add (monetized) Education & Health

Change in Gini: Final vs. Market Income
(decline in Gini points shown in positive quadrant)



Again, Robin Hood stays around

Change in Gini: Final vs. Market Income
(decline in Gini points shown in positive quadrant)



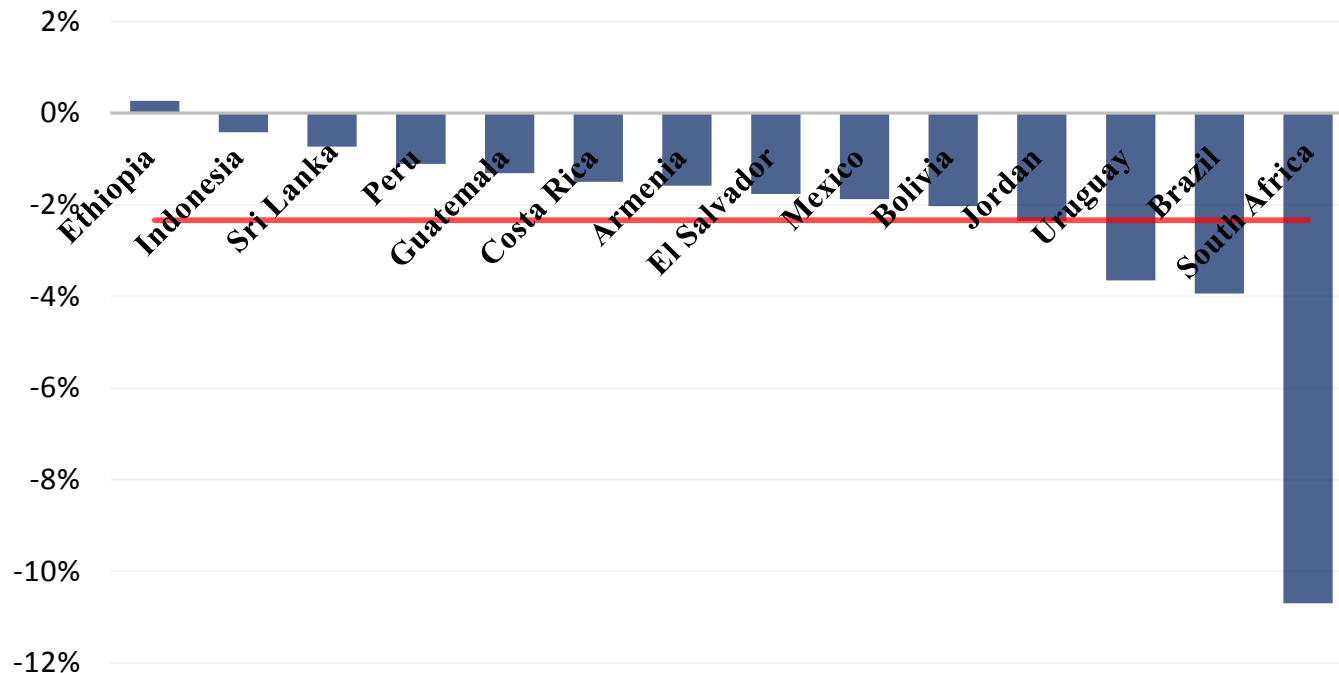
Outline

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The Poverty Reduction story is broadly similar, when we look at what people get in disposable income...

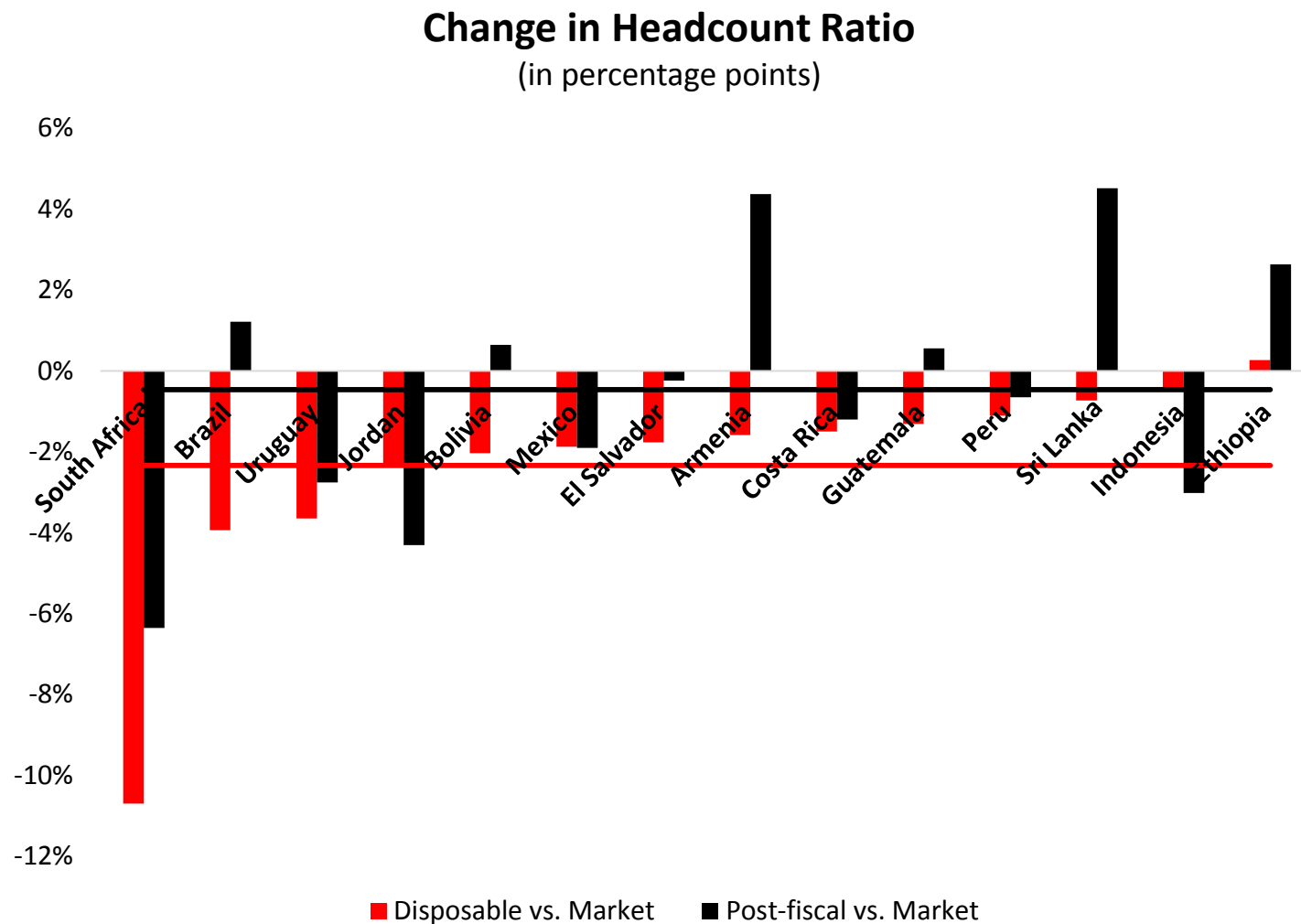
Change in Headcount Ratio: Disposable vs. Market Income

(in percentage points)

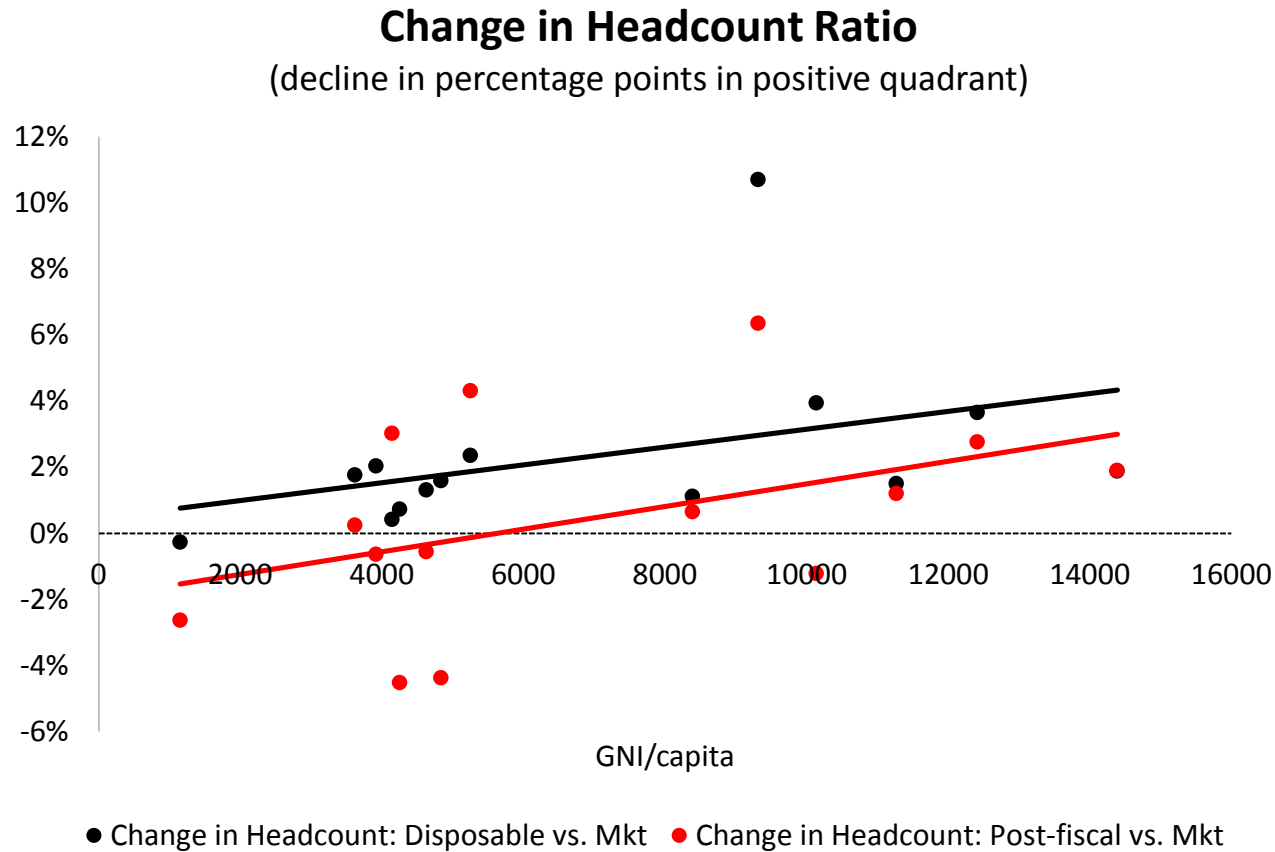


Poverty in this slide and all subsequent ones is measured with the international line of US\$2.50 ppp (2005) per day.

...however, story changes quite dramatically with Consumption Taxes ...

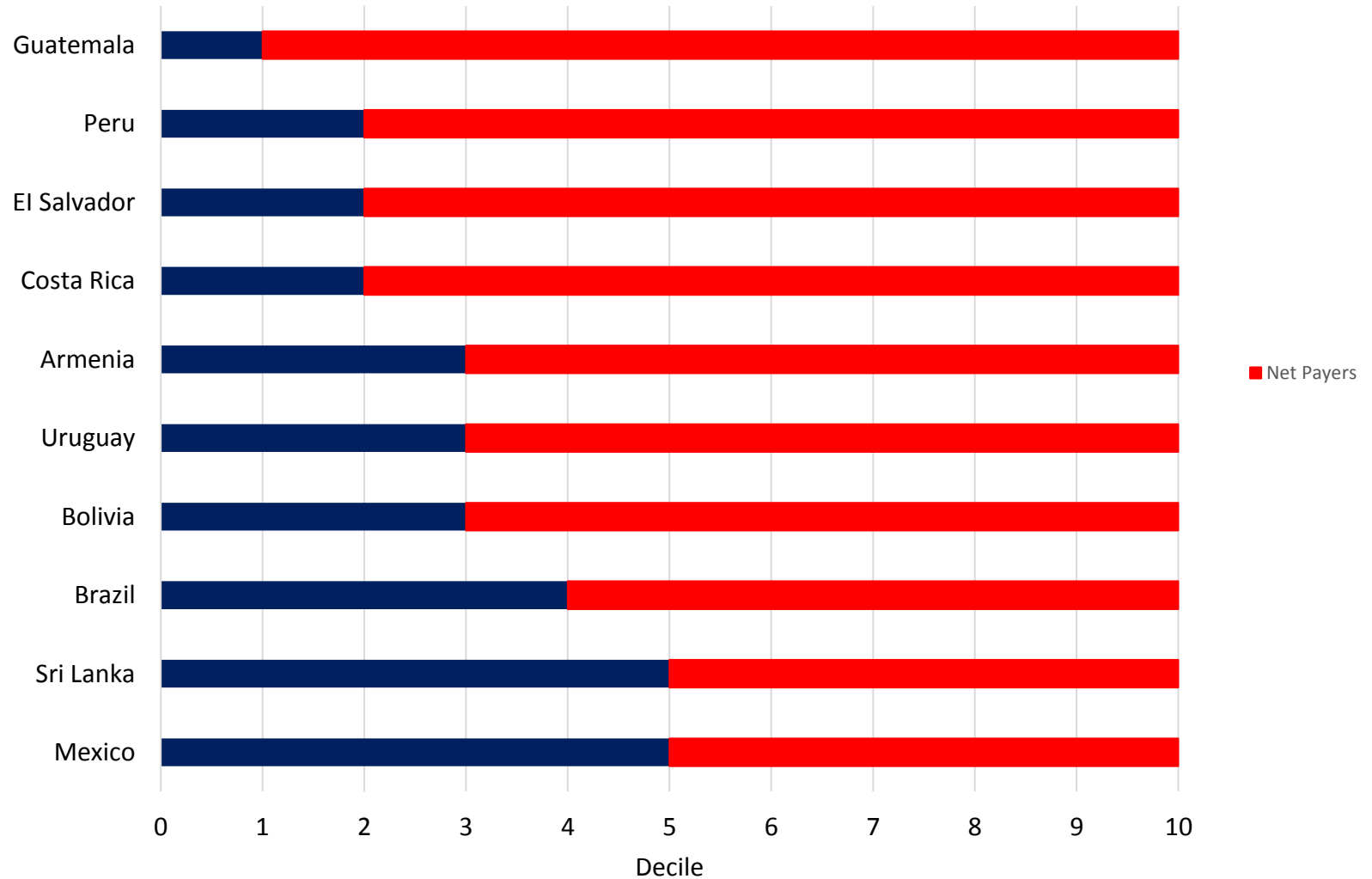


Note: Post-fiscal income equals disposable income plus consumption subsidies minus consumption taxes 27



Note: Positive number indicates a decline, all CEQ countries are included.

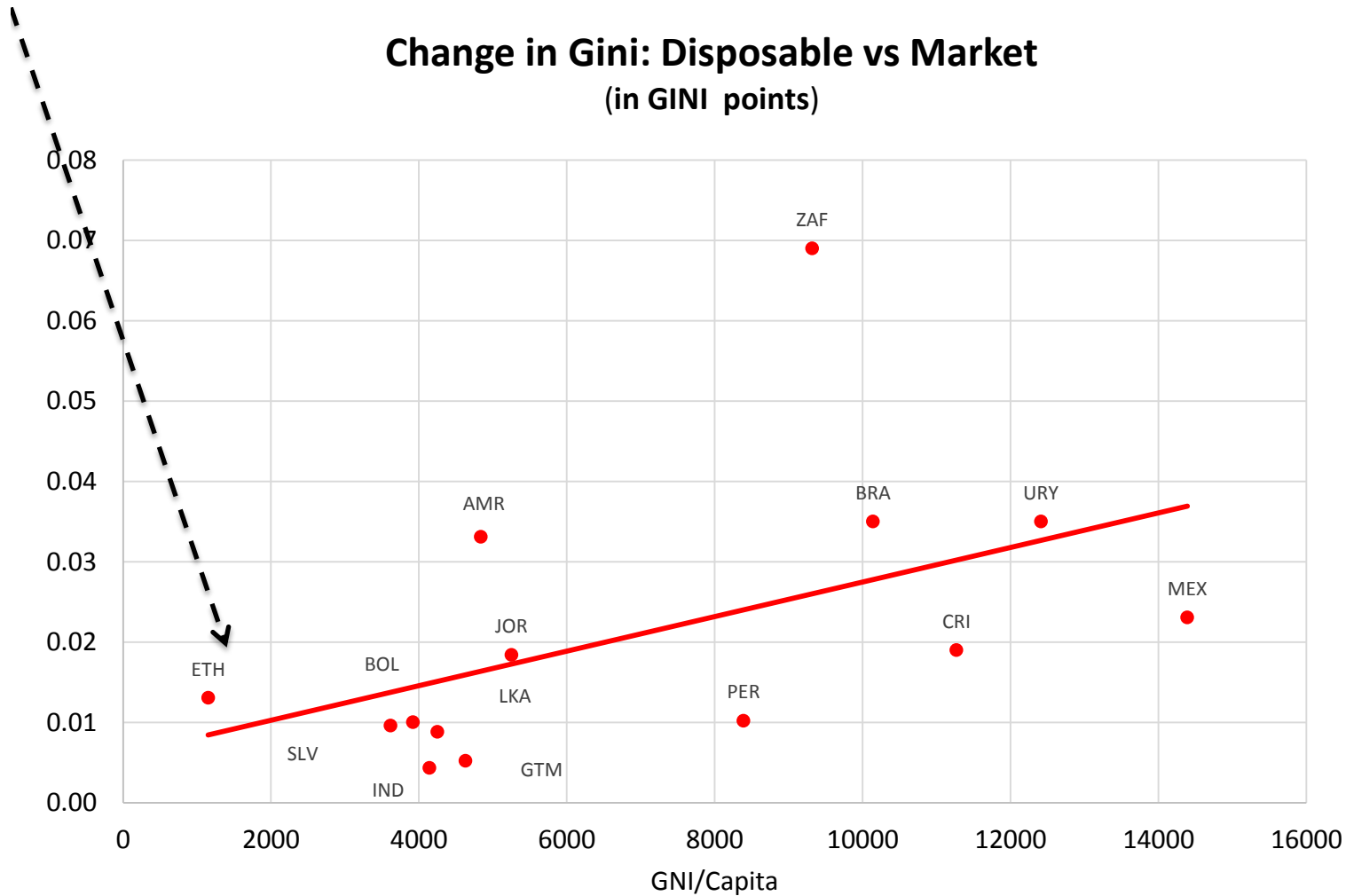
Net Payers to the Fiscal System Start at Decile...



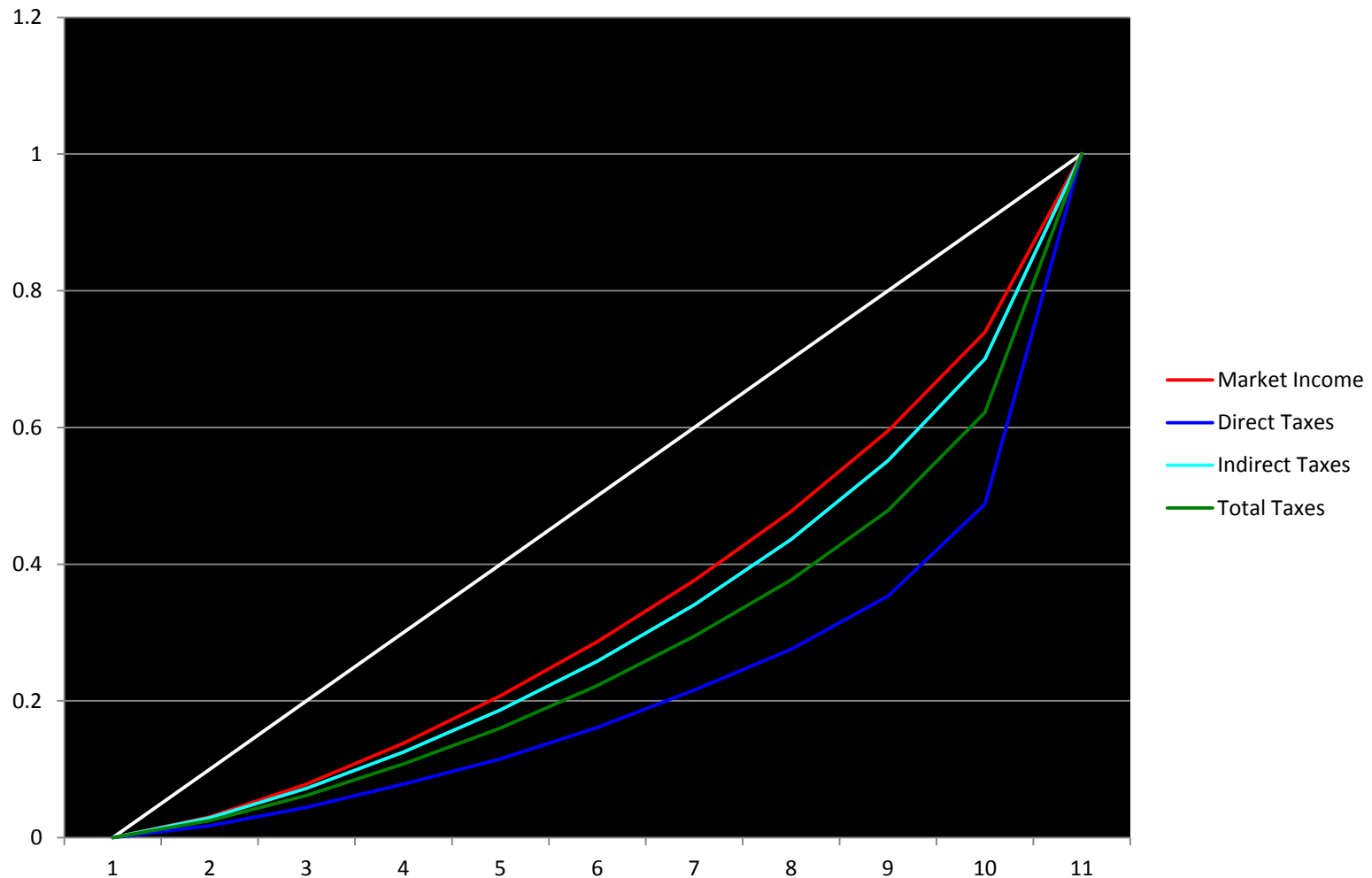
Outline

- Incidence Analysis: What is it?
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Redistribution in Ethiopia is above prediction..

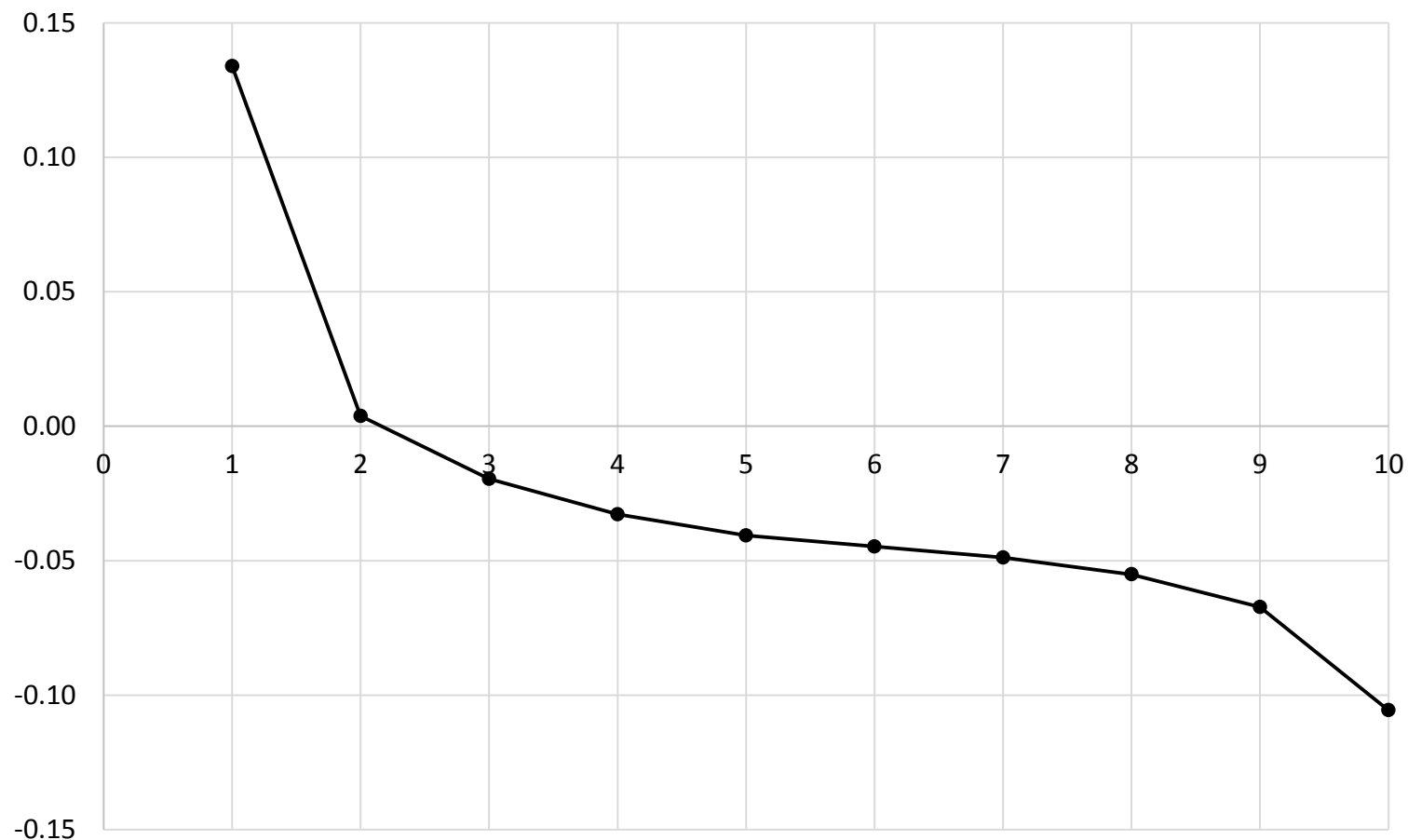


Direct taxes AND consumption taxes are PROGRESSIVE (equalizing)



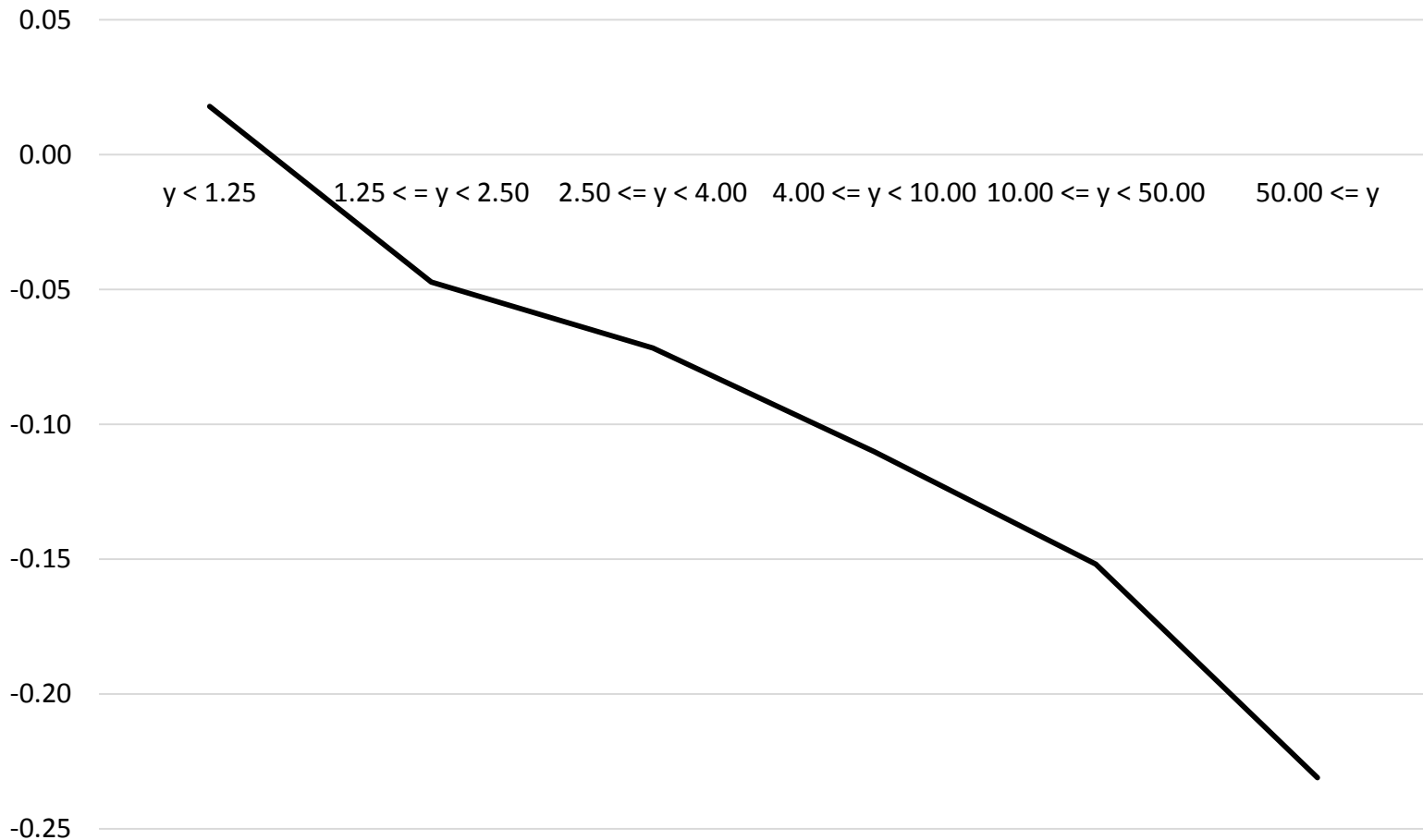
**However, except for the bottom 10 percent,
all deciles are net payers to the fisc...**

Ethiopia: Net Payers to the Fiscal System Start at Decile...



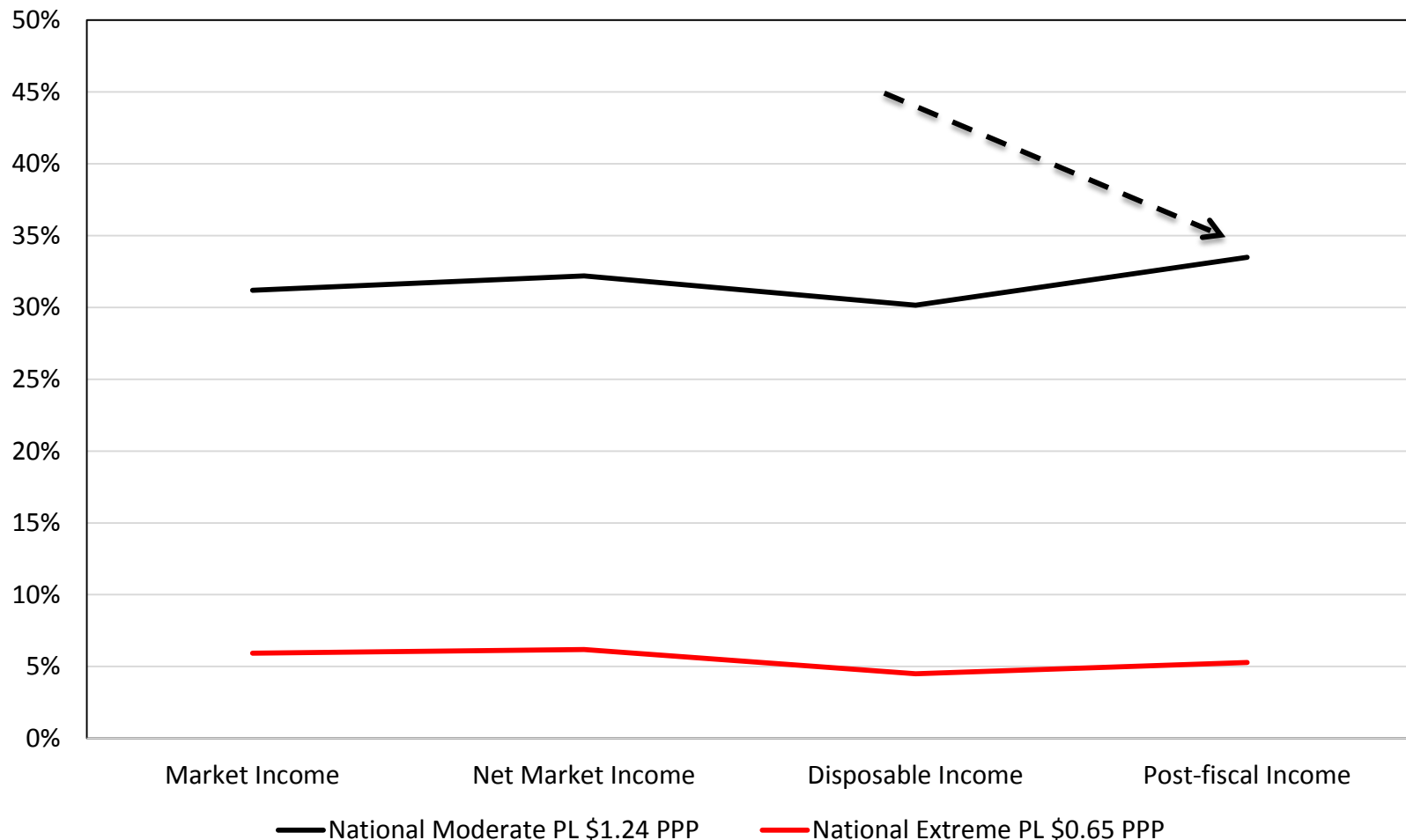
Except for the bottom income category (<US\$1.25/day), the rest are net payers to the fisc...

Ethiopia: Net Payers to the Fiscal System Start at Income Category...



In Ethiopia, post-fiscal poverty is higher than pre-fisc poverty even when using the official US\$1.24 (daily ppp) “moderate” poverty line

Ethiopia: Headcount Ratios



Main Take Aways

- Government size (primary spending as a share of GDP) is quite heterogeneous but—on average-- it increases with per capita income
- Ditto Social Spending
- Composition of Social Spending and Taxes is also heterogeneous but, as expected, Consumption Taxes are—on average- 50 percent higher (as a share of GDP) than Direct Taxes

Main Take Aways

INEQUALITY

- When rich and developing world are combined, the more unequal, the less redistributive (Robin Hood Paradox)
- However, when separated, Robin Hood is around, especially for the developing world
- This result is true for disposable and post-fiscal income

Main Take Aways

POVERTY

- The combination of direct taxes and cash transfers reduce poverty around 2 percentage points on average
- However, when the effect of consumption taxes (net of subsidies) is taken into account, poverty (with the US\$2.50/day line) IS HIGHER than pre-fisc poverty in 6 out of 14 countries
- Net payers to the fisc can begin as low as the second decile

Main Take Aways

ETHIOPIA

- Reduction in inequality is above that expected for its income per capita
- However, when the effect of consumption taxes (net of subsidies) is taken into account
 - ➔ Net payers to the fisc start in the SECOND decile and in the income group between US\$1.25 and US\$2.50/day
 - ➔ Poverty (with the US\$1.2439/day line) IS HIGHER than pre-fisc poverty

Thank you!