

Metodologías para medir la desigualdad: Cuentas Nacionales Distributivas

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Dos mundos desconectados

- Desigualdad: microdatos (encuestas, registros tributarios)
- Crecimiento: datos macro (cuentas nacionales)

Los problemas

- ¿Cómo se distribuye el crecimiento económico? ¿Cuál es el ingreso promedio de los hogares?
- Crecimiento y desigualdad se miden de forma inconsistente
- Dudas sobre los niveles y tendencias de la desigualdad

Lo que queremos

- Consistencia micro-macro

Lo que usamos (principalmente)

- Encuestas de hogares armonizadas por CEPAL
- Registros administrativos de impuestos y Seguridad Social
- Cuentas Nacionales
- Otros (CIAT, CEQ, WB)

Lo que encontramos

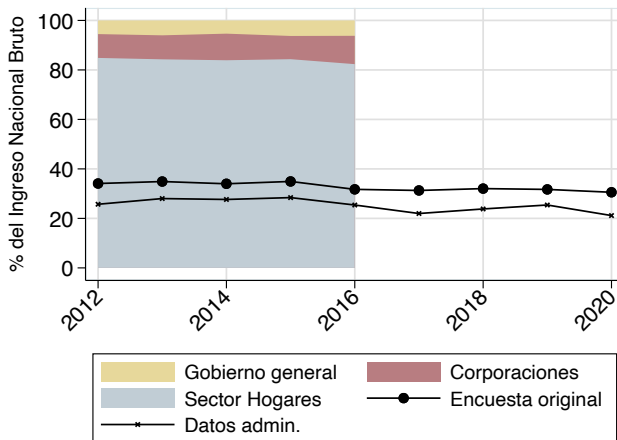
- Brechas micro-macro relevantes: brecha de medición es clave
- Más desiguales o menos ricos? Niveles \neq Tendencias
- Emerge un escenario mucho más heterogéneo en la región del que creíamos originalmente
- Encuestas miden mal los ingresos de la cola derecha
- Heterogeneidad en las definiciones de ingreso

- Una excepción global (desigualdad ↘ en los 2000s)
 - López-Calva and Lustig [2010], Cornia [2014], Rodríguez-Castelán et al. [2016], Messina and Silva [2017], Gasparini et al. [2018]...
- Dudas sobre confiabilidad de las encuestas de hogares
 - Alvaredo [2010], Alvaredo and Londoño-Vélez [2013], Burdín et al. [2022], Morgan and Souza [2019], Flores et al. [2020]
- Tradición de ajustes micro-macro [Altimir, 1987]
 - Mucho menos datos + confianza irrenunciable en Cuentas Nacionales
- Necesitamos adaptar metodologías
 - Informalidad, Registros tributarios insuficientes, falta de detalle en Cuentas Nacionales...

Anatomía de las discrepancias

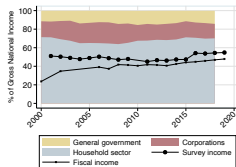
Las encuestas captan menos de la mitad del ingreso nacional

República Dominicana

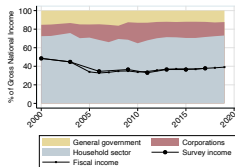


Source: Alvaredo, De Rosa, Flores & Morgan (2021).

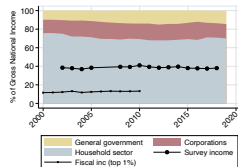
Comparación con otros países



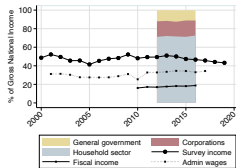
Brasil



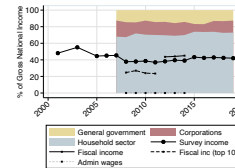
Chile



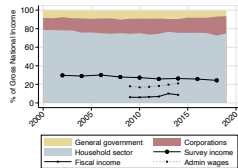
Colombia



Costa Rica

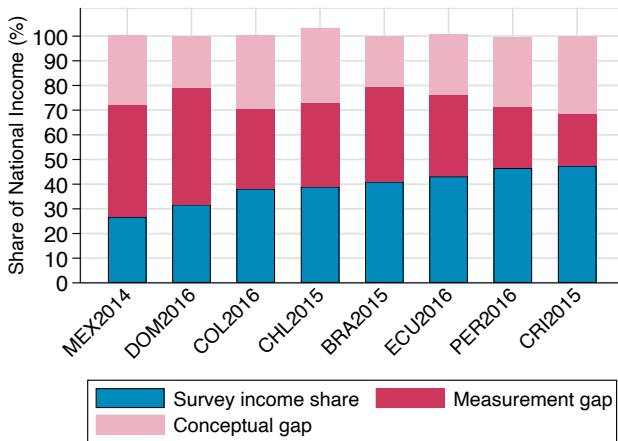


Ecuador



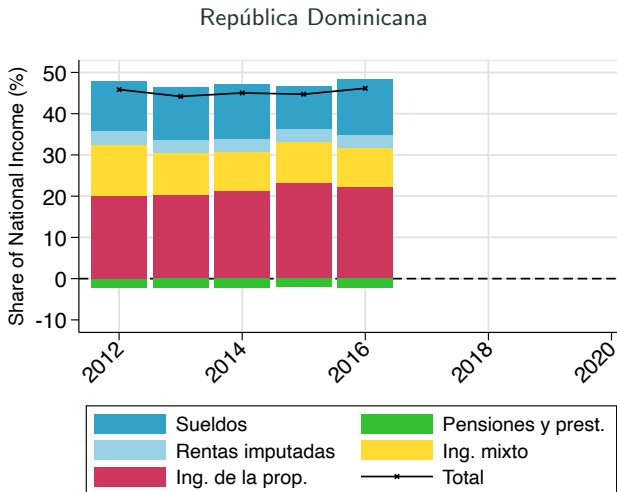
México

... principalmente debido a diferencias de medición (no conceptuales)



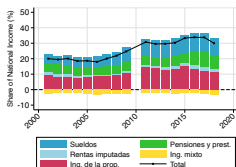
Source: Alvaredo, De Rosa, Flores & Morgan (2021).

Los ingresos de los hogares “que faltan”

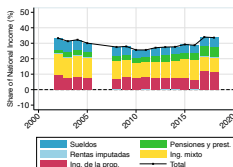


Source: Alvaredo, De Rosa, Flores & Morgan (2021).

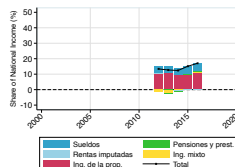
Comparación con otros países



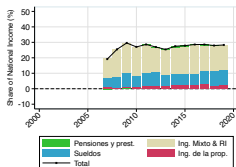
Brasil



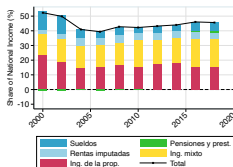
Colombia



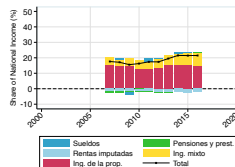
Costa Rica



Ecuador



México



Perú

Métodos de ajuste

Etapla 1: Combinar encuestas & registros administrativos

- BFM

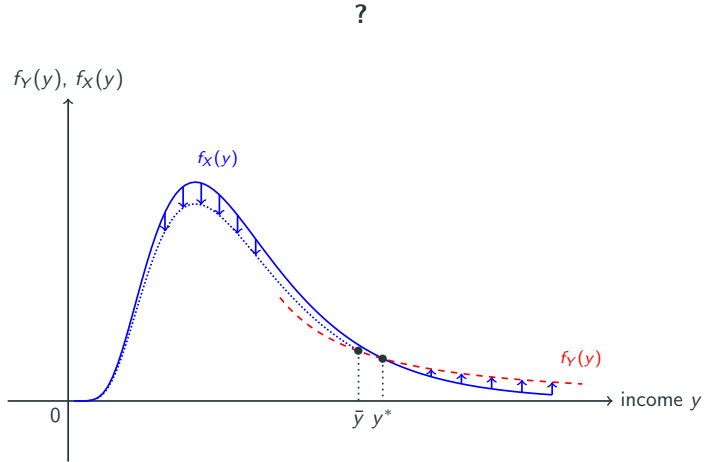
Etapla 2: Escalado a cuenta de los hogares por componente

- Cierra la brecha de medición

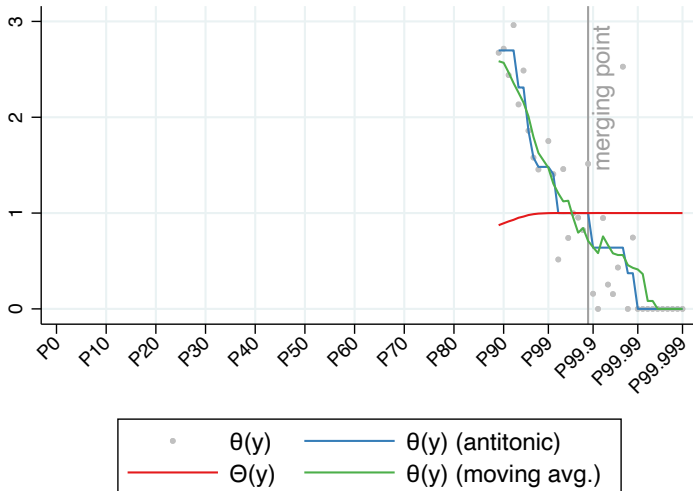
Etapla 3: Imputar ingresos restantes

- Cierra brecha conceptual
- Utilidades no distribuidas: proxy de propiedad de empresas?

Etapa 1: Combinar encuestas & registros administrativos (1/2)

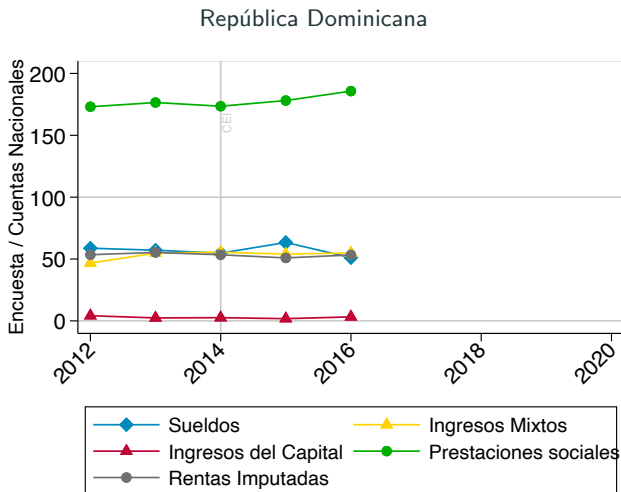


Etapas 1: Combinar encuestas & registros administrativos (2/2)



Source: Alvaredo, De Rosa, Flores & Morgan (2021).

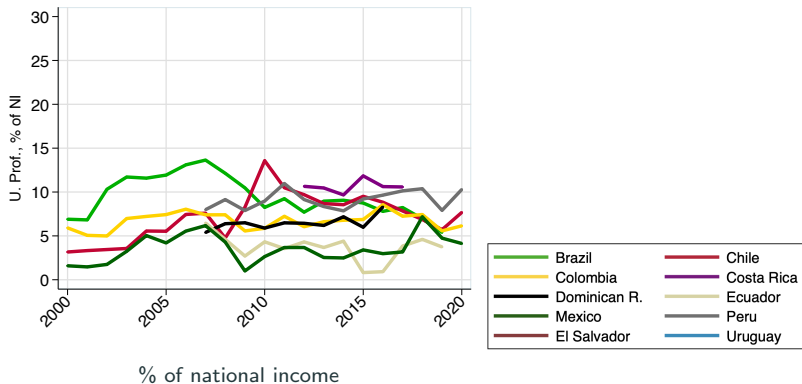
Etapa 2: escalado proporcional a cuenta de hogares (1/2)



Source: Alvaredo, De Rosa, Flores & Morgan (2021).

Etapla 3: imputar ingresos restantes

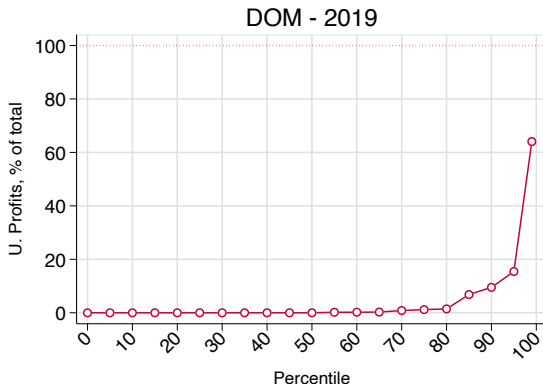
- Importancia de ir más allá del sector hogares
- Fuerte heterogeneidad de Utilidades no distribuidas



Etapa 3: imputar ingresos restantes

Utilidades no distribuidas: ¿Qué proxy usar de propiedad empresarial?

- En la práctica, muy pocos individuos declaran dividendos en las encuestas
- Usamos por tanto tanto el ingreso por capital como el ingreso total de los patrones



- El ejercicio no entrega evidencia suficiente para cambiar la narrativa con respecto a la tendencia de la desigualdad
- Sin embargo, se muestra un nivel de discrepancias elevado con respecto a la región, que se concentra en los ingresos del capital
- El nivel de la desigualdad parece ser muy superior a lo estimado por las encuestas
- Existe espacio para mejorar la calidad del dato tributario, lo cual puede resultar en un cambio de tendencias

Appendix

Brecha de medición: el mapeo de los conceptos de ingreso

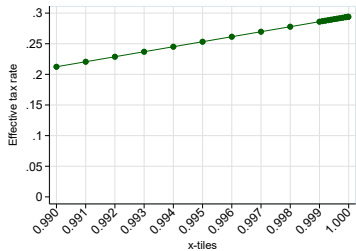
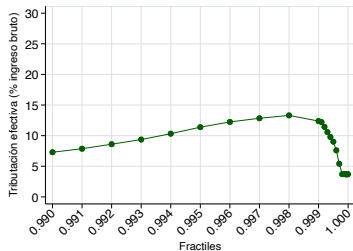
Income in Survey [1]	National Accounts (SNA08) [2] = [3] + [4]	Matching definitions in SNA and Survey [3]	Non-matching definitions in SNA and Survey [4]
Dependent work	Compensation of employees (D1)	Wages, salaries (D11)	Social security contributions (D61)
Housing rent	Operating surplus (B2)	Rent of owner occupiers	Rental income from dwellings
Investment income	Property income (D4)	Interests received (D41r), Dividends and withdrawals (D42)	Interests paid (D41u) Rent of natural resources (D45) Investment income of insurance policy holders (D441) Investment income of pension funds (D442) Investment income of investment funds (D443)
Independent work	Mixed income (B3)	Self-employed income	Rent of non-dwelling buildings
Benefits	Social transfers (D62)	Pension benefits, Other cash benefits	Sick-leave Unemployment insurance

(*) Sick-leave is part of social insurance benefits in SNA, while it is part of Salaries in surveys.

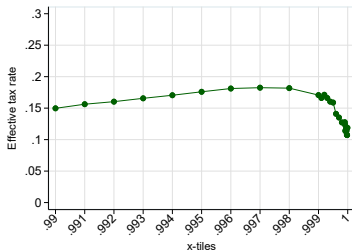
(**) SNA does not deduct costs when deriving property income.

Notes: Summary table, based on [United Nations, 2008] and [OECD, 2013].

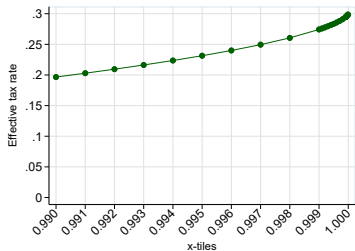
2nd Step: From post- to pre-tax (latest year)



República Dominicana



Chile

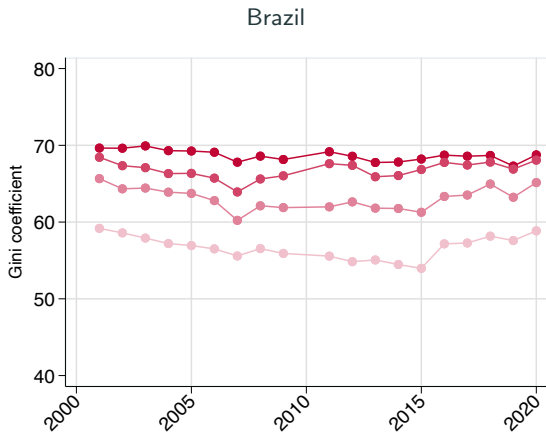


México

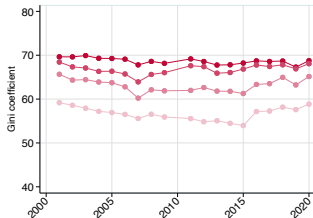
Perú

Resultados para otros países

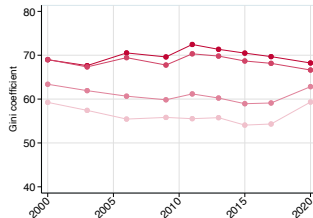
A range of inequality estimates



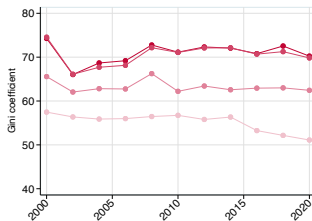
Change in inequality levels and trends across 3 steps



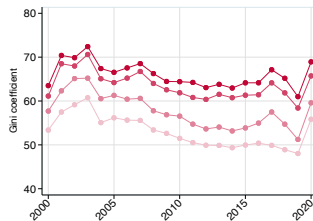
Brazil



Chile

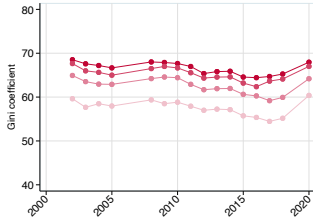


Mexico

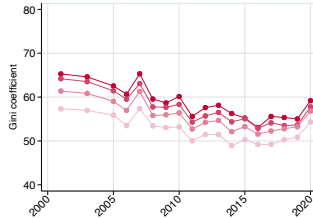


Perú

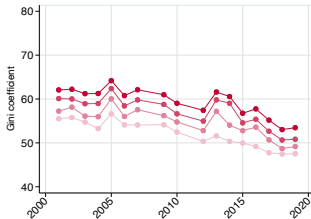
Change in inequality levels but not trends



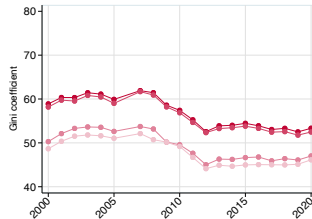
Colombia



Ecuador

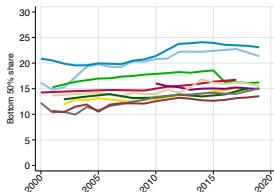


El Salvador



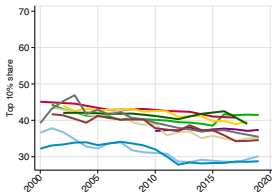
Uruguay

Income shares before and after



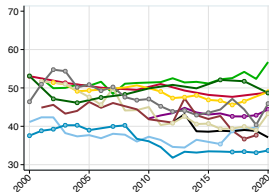
Figures/ineqstats/b50_sh_esn.pdf

Bottom 50%: survey income



Top 10%: survey income

Bottom 50%: national income



Top 10%: national income

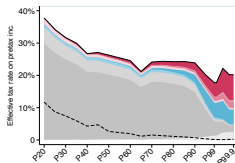


Effective tax rates

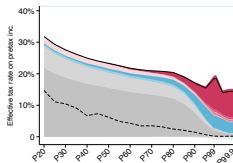
Accounting for all taxes



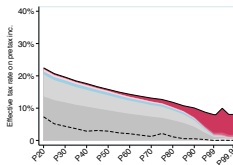
Effective tax rates (1/3)



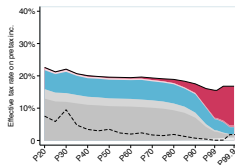
Brazil 2019



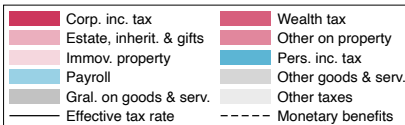
Chile 2017



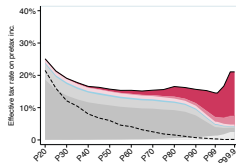
Mexico 2018



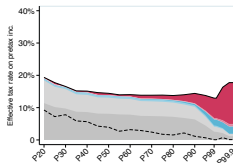
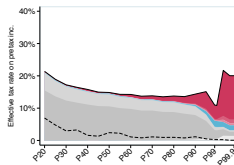
Peru 2019



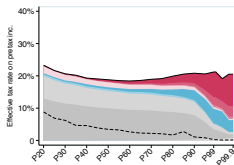
Effective tax rates (2/3)



Colombia 2020

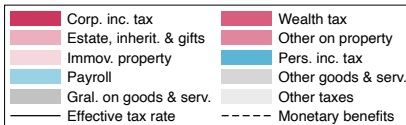


Ecuador 2019

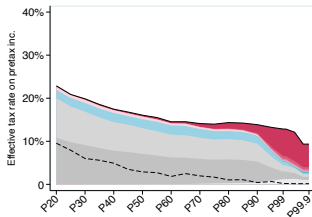


El Salvador 2019

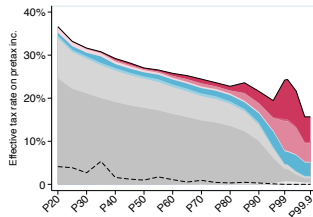
Uruguay 2019



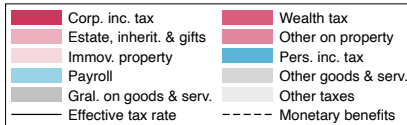
Effective tax rates (3/3)



Costa Rica 2019

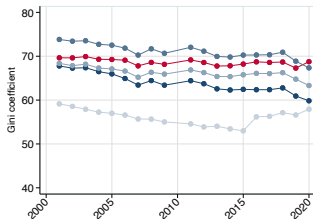


Argentina 2019

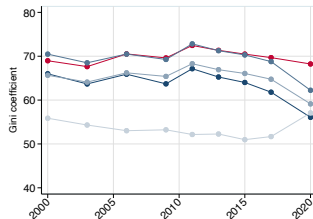


Pre-tax vs. post-tax inequality

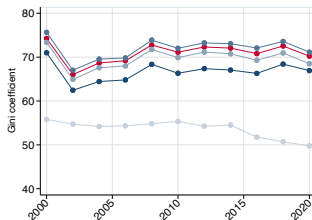
Pre-post tax inequality (1/3)



Brasil



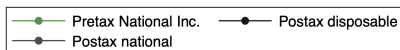
Chile



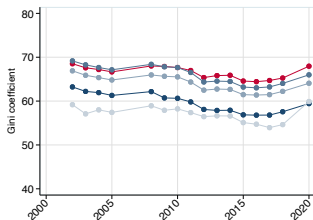
Mexico



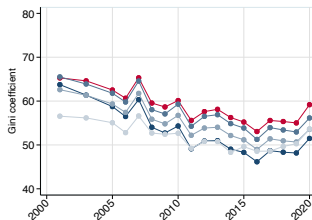
Peru



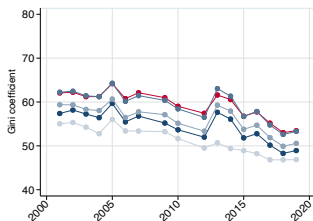
Pre-post tax inequality (2/3)



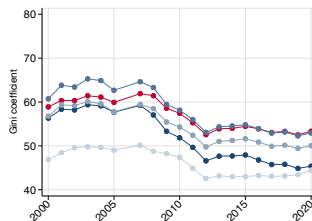
Colombia



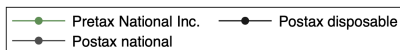
Ecuador



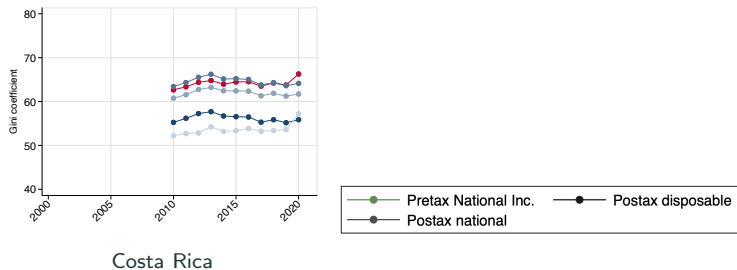
El Salvador



Uruguay



Pre-post tax inequality (3/3)



Concluding remarks

- The region is not that homogeneous
 - Decline still found in some countries (ARG, COL, ECU, URY)
 - Stability or reversion found in others (BRA, CHL, MEX, PER)
- Counter-intuitively, Monetary re-distribution increases inequality, due to regressive indirect taxes, which account up to 1/2 of all taxes
- Income taxes (Personal and Corporate) along with other taxes and monetary transfers soften the effect, but only slightly
- On aggregate, effective tax rates are either regressive or flat
- Health and Education spending, however, lower inequality levels below pre-tax inequality
- *We are doubling total income by the end [!]*

Is Latin America more unequal or not as rich?

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