Global Inequality

Lecture slides 1

Agenda

- Inequality across countries swamps inequality within countries.
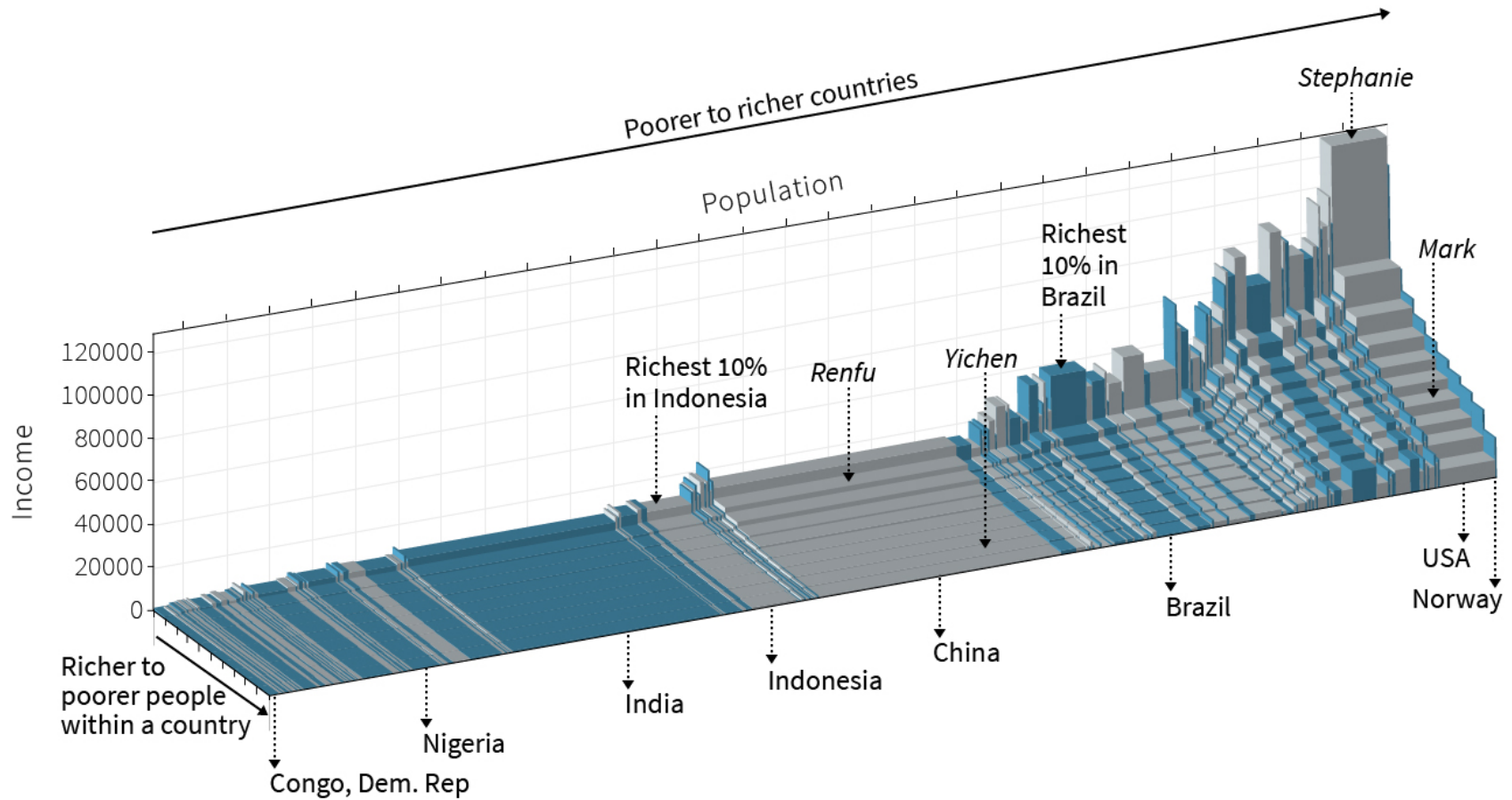
- Inequality of what: price indices
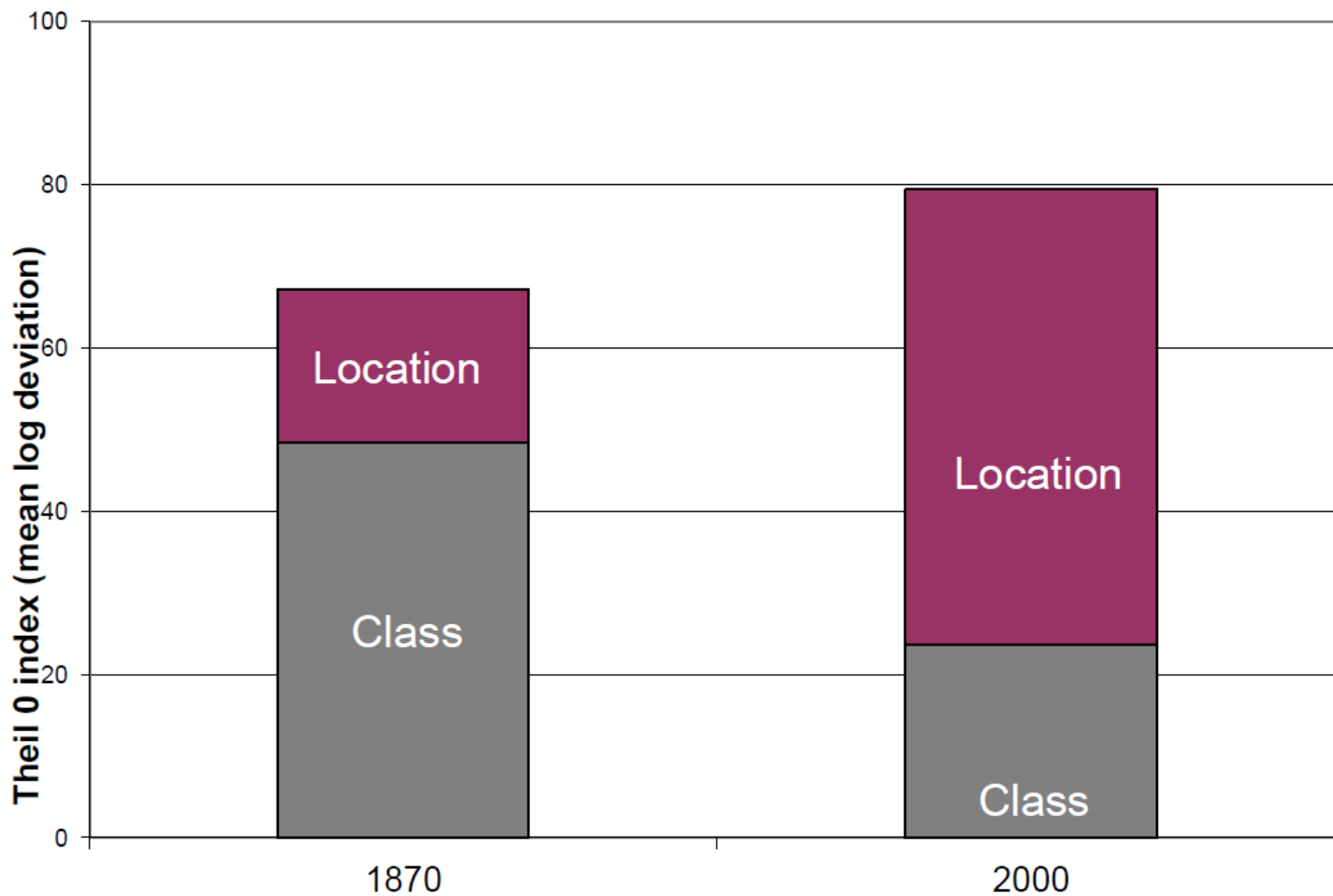
- Inequality of what: the Rawls lottery.

- The relationship between within-country inequality and economic development.

- Migration and migrant labor markets.

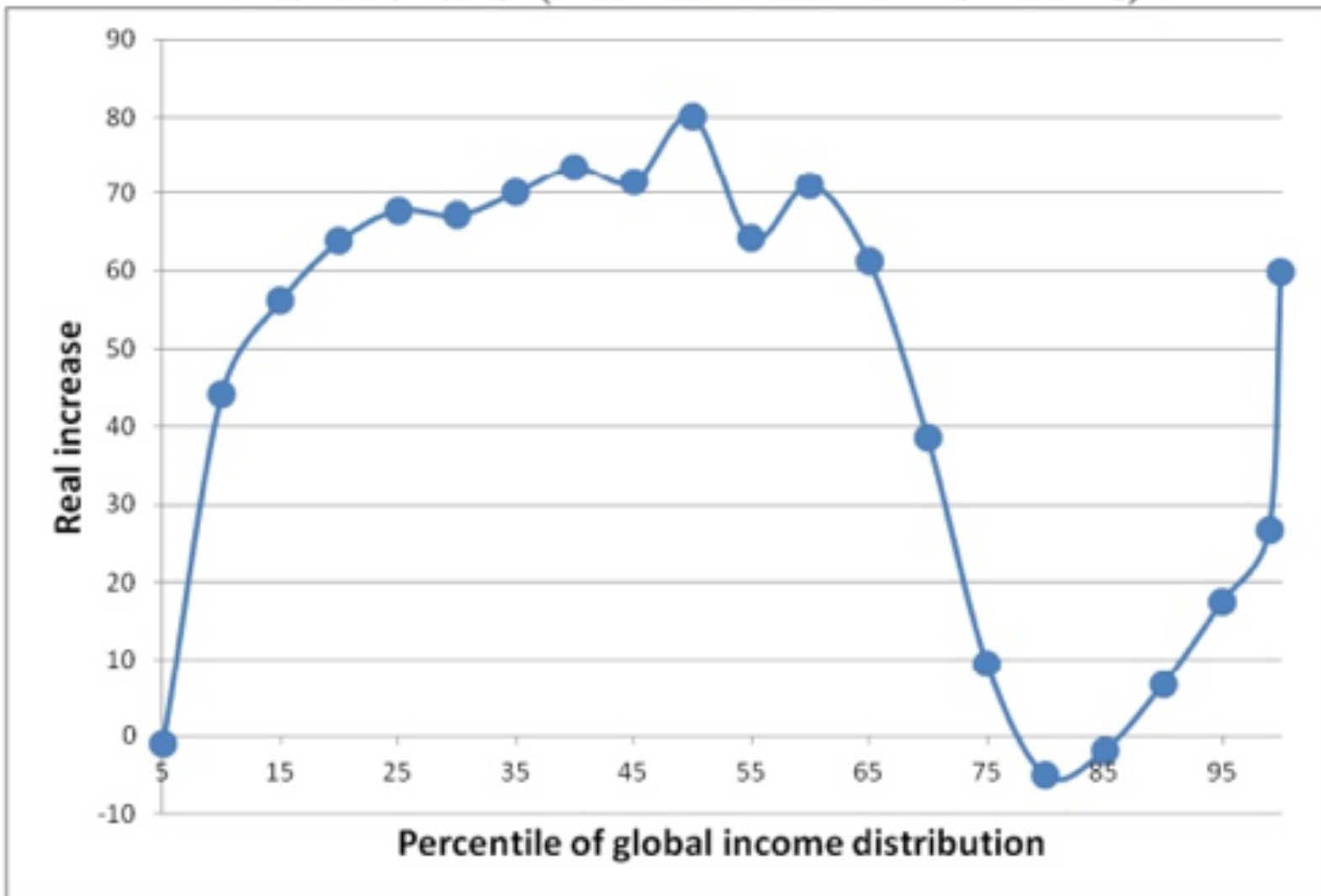# Gratuitous CORE graph slide.

Country vs Class over time (Milanovic 2005)

Our recent history.

Figure 4. Change in real income between 1988 and 2008 at various percentiles of global income distribution (calculated in 2005 international dollars)

How are Incomes Compared Across Countries

Problem: Incomes in different countries are computed in different currencies.

Solution 1: Compute incomes in a common currency by converting using the exchange rate.

Example: Suppose I make US$40,000 (US dollars). How does this compare to €35,000 (Euros)? One Euro sells for 1.32 dollars. So, the Euro income expressed in dollars is:

$$1.32€/\$*35,000=US\$46,200$$

How are Incomes Compared Across Countries?

But….. Have you ever lived in or traveled to a developing country?

- Goods are much cheaper (particularly non-tradable goods like housing and transportation).
- So $40,000 is worth more in Rwanda than in the U.S.

So, we can compute 'purchasing power parity' adjusted incomes. We take a basket of goods that would be consumed by an average consumer and ask how much cheaper that basket would be in another country. Suppose a basket of goods (e.g. house and food) would cost US$100 but only 14 Pesos in Mexico. Then we multiply incomes in Mexico by 100/14.

Survey data radically undersamples "where the money is".

Key point: the "data" do not speak alone.

What basket you pick is not an innocent choice.
- Some world average (Geary-Khamis) or a particular country.
- Country average or some particular percentile or poverty lines.
- Baskets are not independent of price: Substitution and quality biases

Comparable price data is scarce: ICP project.
- But has to make lots of assumptions about what goods are comparable.
- Within country price differences very important.
  - Deaton and Heston 2005: China's GDP fell by 40% after new ICP prices.

Alwyn Young (2012) Morten Jervens (2013) African national income accounts are in awful shape.

Per capita GDP, 2000

	PWT Version		
	6.2	6.3	7.0
United States	100	100	100
Sweden	73	69	78
Hong Kong	79	83	73
Singapore	86	90	98
Brazil	21	21	20
South Africa	24	22	15
China	12	10	7.4
India	7.7	6.8	4.7
Kenya	3.7	5.0	2.9

Mean absolute deviation between 6.3 and 7.0 is 25 percent!

Beyond GDP

Many things matter besides GDP
- Health, crime, environment, substantive freedoms, etc.

Lots of work on this, most famously Sen on capabilities.
- Birthed the human development index.

Problem: ad hoc, no disciplined way to reach a decision on what to include in an index and how to weight different components.

'Money isn't everything, not having it is?"

Another way to rank countries in terms of "well-being".

Suppose you had to live in a country for a year, but you had to live the life of a random person in that country.

What country would you pick?

How much would you pay to play that lottery in the US?

ones and Klenow 2014

Idea: Use the Rawlsian intuition to construct a "theoretically consistent" measure of well-being.

You don't know who you are going to be in country X (random over age and consumption), with flow utility from living u, log utility over consumption and linear utility in leisure.

Account for life expectancy at birth, e, consumption of goods and services c, leisure l,

Assume lognormal consumption with mean c, and inequality measured by the variance of log consumption σ^2

With these assumptions.

$V(e,c,l, \sigma\uparrow2)$=E[u+log (C)+l]= e(u+log(c) +l-$\sigma\uparrow2$ /2)

Can calculate this for every country

- US data pin down u. (40 year old in US values remaining life 6 million)
- use formula from lognormal distribution of income to invert Gini coefficient to get σ^2

Then ask: how much extra consumption λ do you need to make you indifferent between lottery in the US and country X (say India)

$V(e\uparrow US ,c\uparrow US ,l\uparrow US , \sigma\uparrow2 US\uparrow)=V(e\uparrow India ,\lambda\uparrow India \ c\uparrow India , l\uparrow India , \sigma\uparrow2 India\uparrow)$

# Figure 7: Welfare using Macro Data, 2007

Welfare, λ
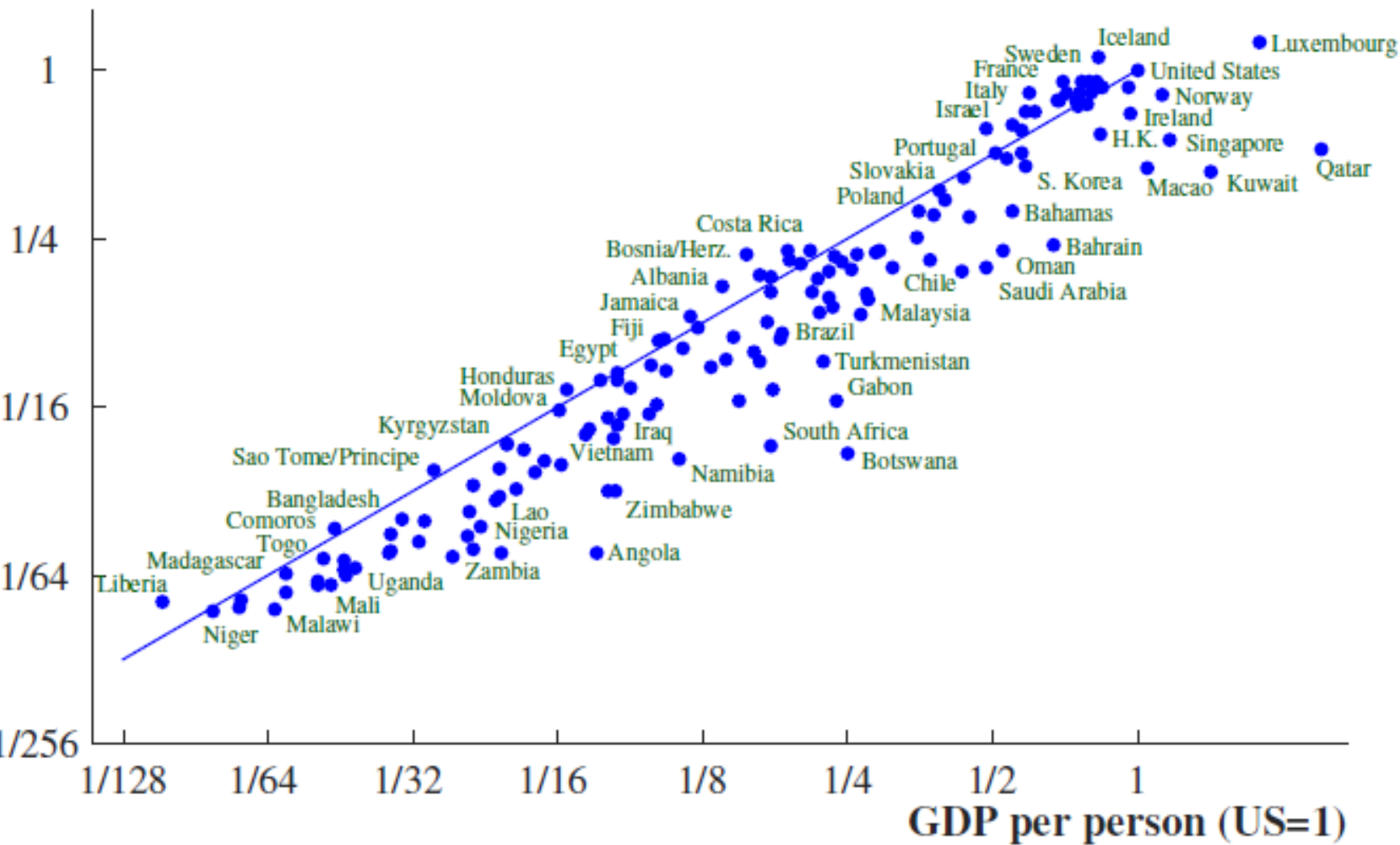
(a) Welfare and income are highly correlated at 0.96...

Within-Country Inequality and Development

Kuznets inverted U hypothesis:

- New sector (e.g. industry) emerges, initial inequality increases as early adopters make a lot of money, but then as sectoral transition completes inequality falls.
  - Politics an important component of the reduction in inequality.

ndeed very nice K-curve in cross-country
data.
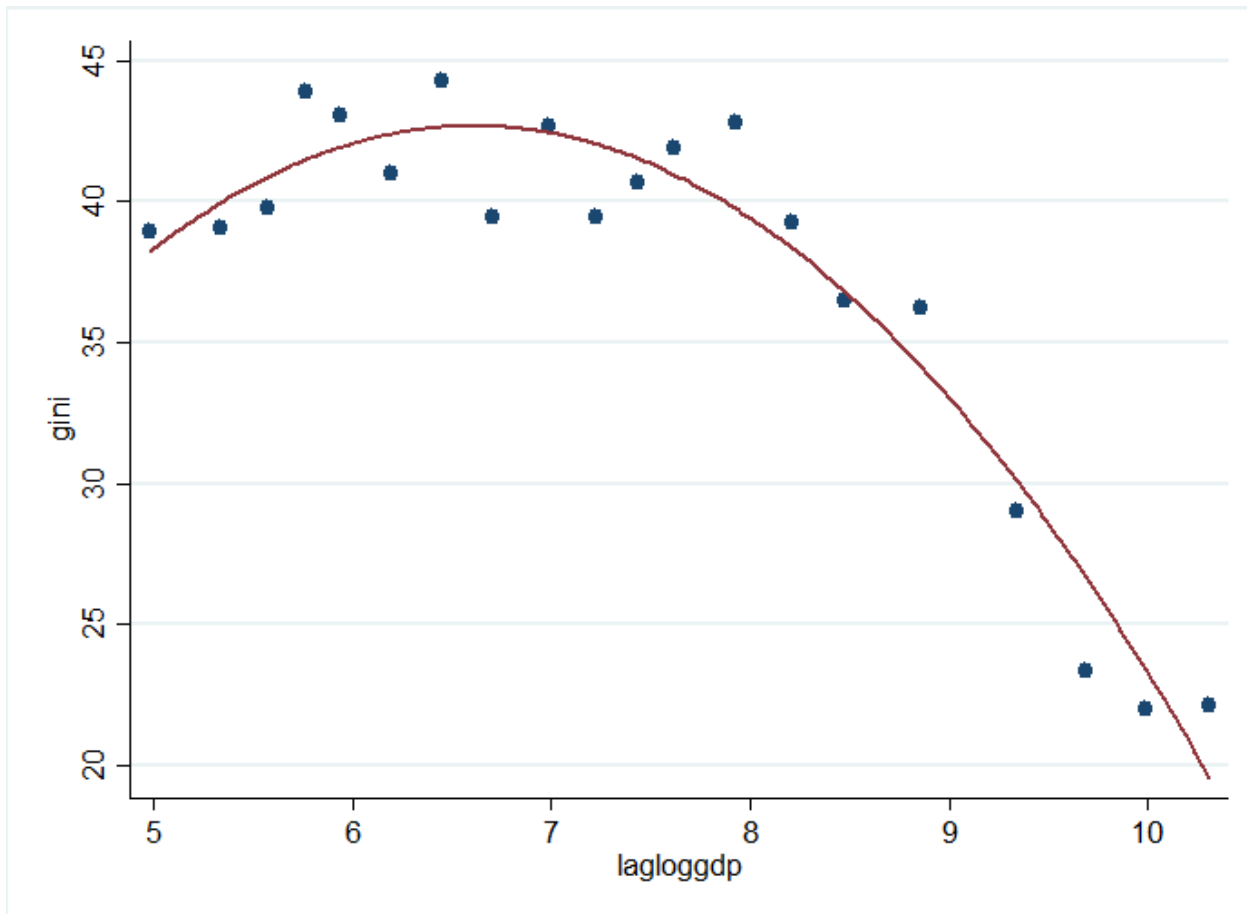
Too many stories consistent with K-curves.

Why does structural change go along with inequality, anyway?
- East Asian counterexamples?
- Focus on "political" vs "economic" stories rather than malign and benign.

Economic stories: Lewis-isian turning points as a sectoral transition completes.
- Equilibrium (either via tech change, factor accumulation, or market forces) restored between new and old sector, rents gone.

Political stories: Polanyi's double-movement reasserts itself.
- (Social) Democracy and War.
- Egalitarian Political Revolutions at the peak of Kuznets curves.

A proposed synthesis…

Generalized Technological Shift Happens (steam, gasoline engines, mass electrification, computers, internet).

If barriers to adoption low, early adopters make out like bandits, and use newfound wealth to try to "pull up the ladder", consolidating political and economic barriers to entry, locating monopolies abroad, inheritance, etc.

Sometimes this works, sometimes it doesn't.

- Depends on political institutions and degree of initial income inequality.

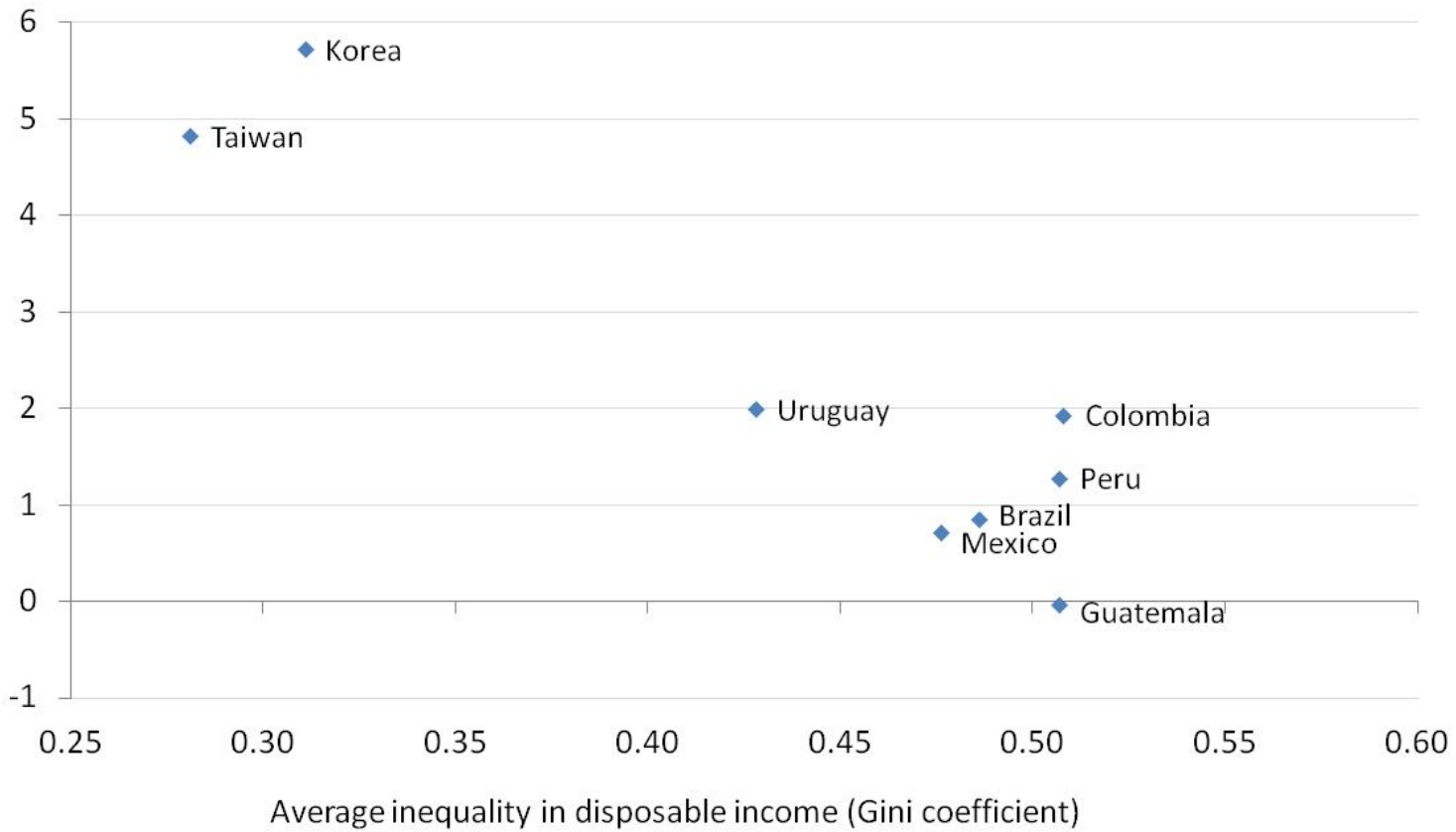When it works, get delayed "political Kuznets plateau".

Otherwise rapid and endogenous "economic Kuznets peak"

- Different mechanisms imply different K-cycle amplitude and frequency.

Some evidence: never-democracies vs others and always-democracies vs others.
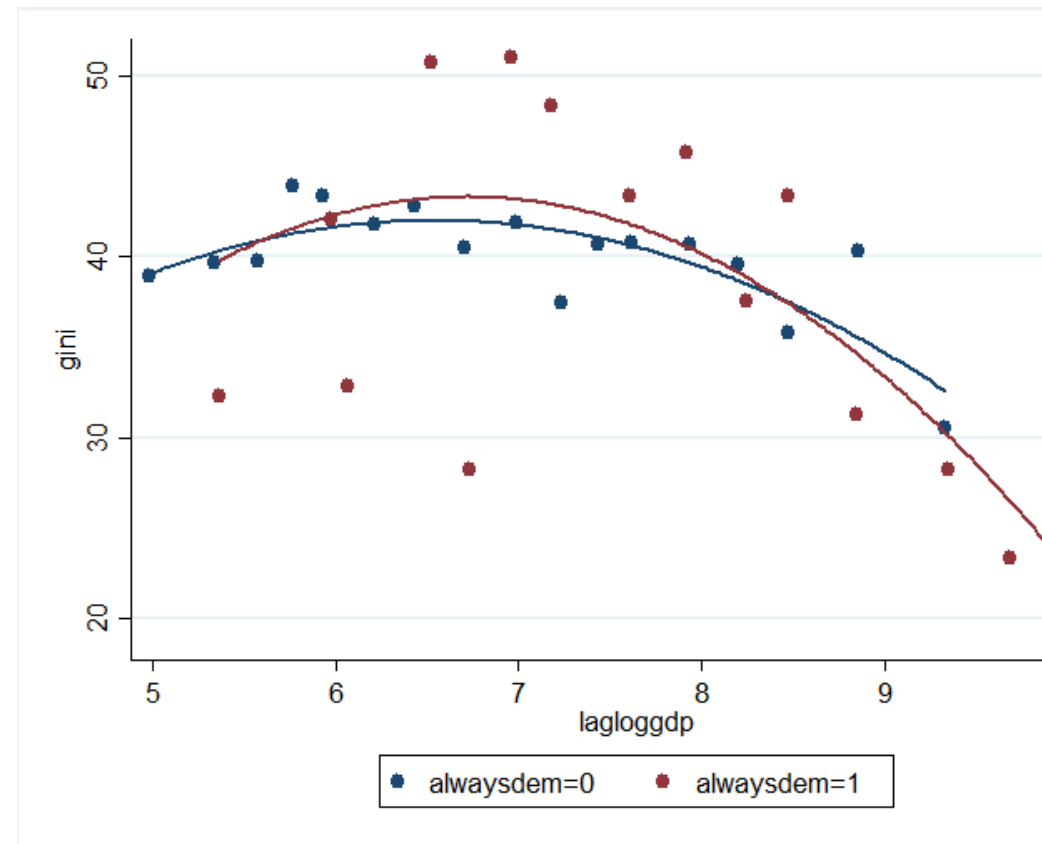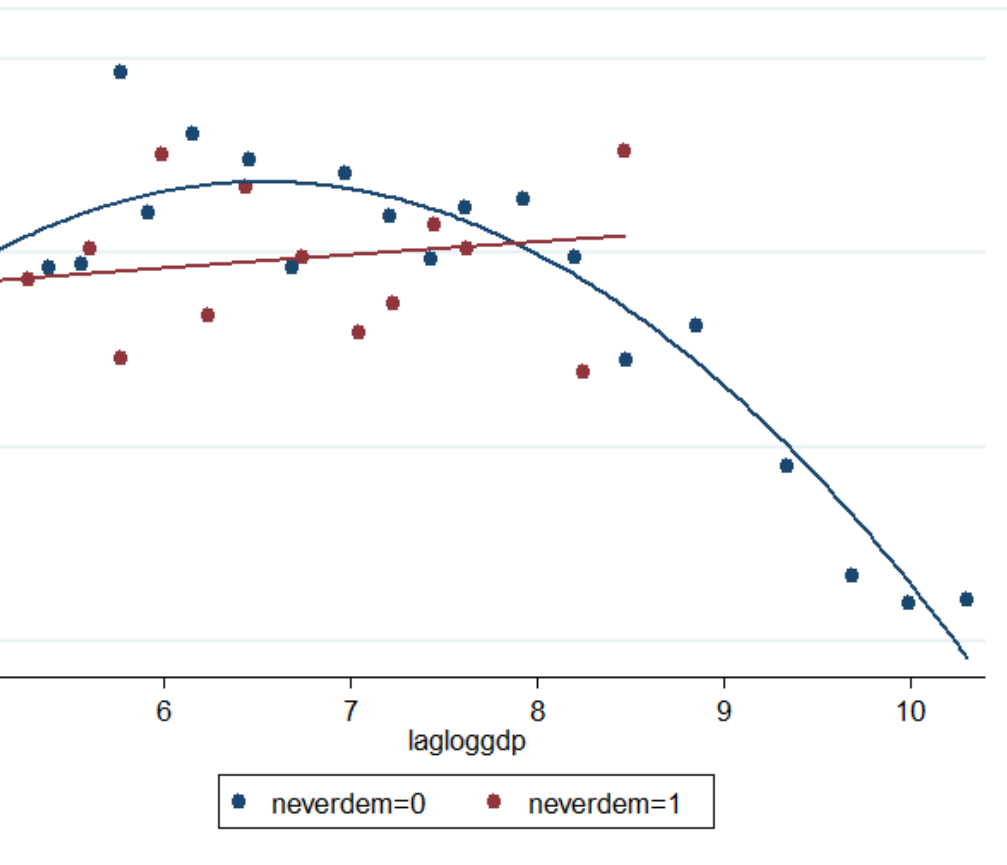
Need inequality for growth?
Growth causes inequality?

Inequality within and between
Mostly bc of China

Global inequality

Inequality between countries

Within country inequality: 0.68 - 0.60 = 0.08

Inequality within countries increases

Within country inequality: 0.69 - 0.51 = 0.18

Growth of the world's largest very poor countries, China and India, takes off
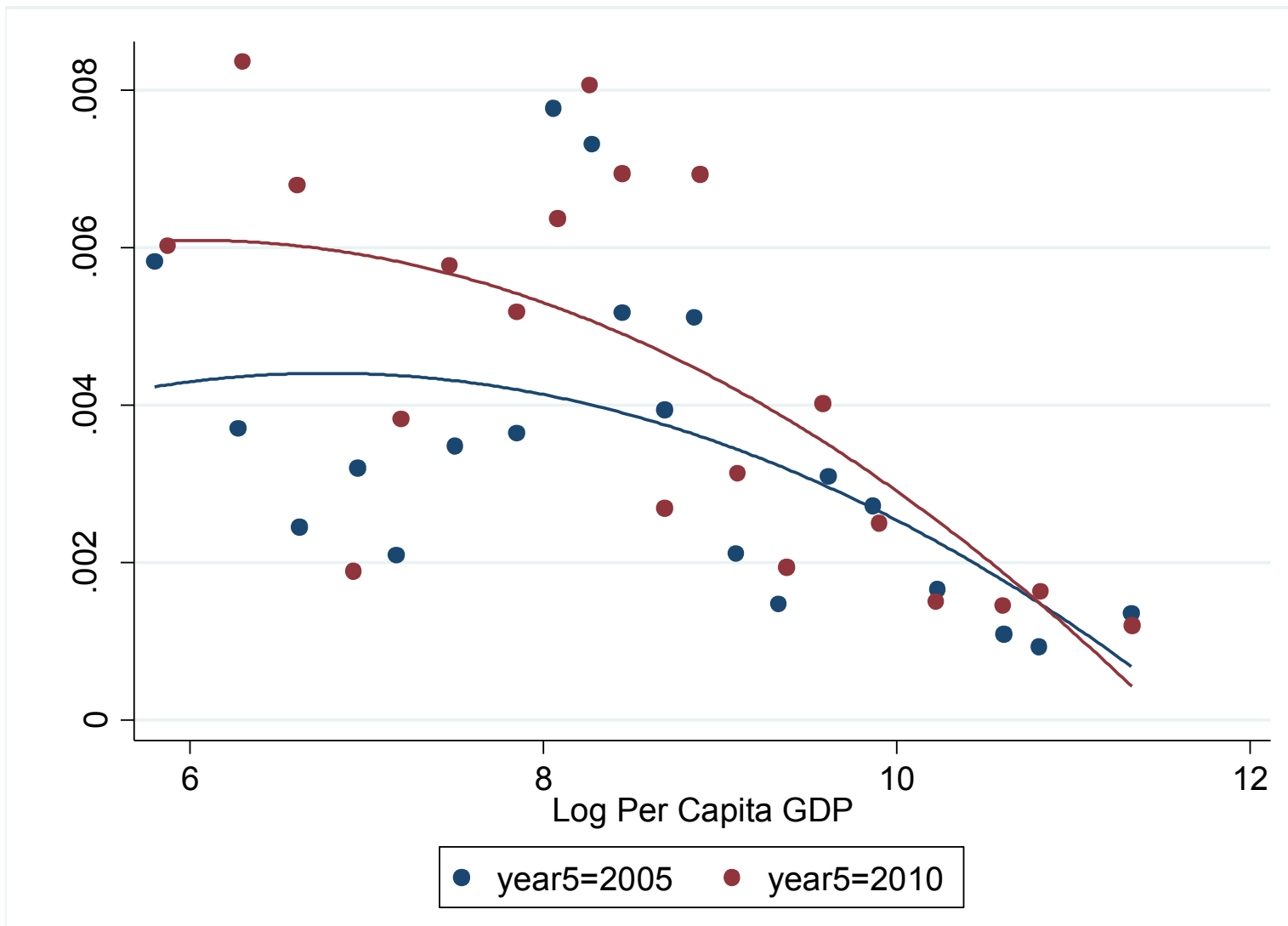
Migration and Development.

If you believe the determinants of underdevelopment are durable country-specific things like "institutions", perhaps best route towards alleviating global inequality is international migration.

But: countries that admit most impoverished migrants are also most repressive towards those migrants.

Indentured labor old form of facilitating migration.

Many people from poor countries want to come.

Trade-off between internal and global nequality? (Weyl 2015)

Figure 4: The cross-sectional relationship between internal equality (MLD of income within the country after taxes and transfers, x-axis) and openness to inequality-reducing immigration (reduction in global MLD of income through immigration to that country per person in the country, y-axis). The left panel includes all UN-labeled "developed countries" and the right panel only those outside the Gulf Cooperation Council.

One of the most distinctive things about the UAE

89% of the population is migrant.

98% of the private workforce.

Migrants are on the Kafala system.

Common in the GCC countries (Origins in British Political Authority).

Tied to particular employers on 3-year contracts.

When contract expires, worker has to renew with previous employer or leave country for at least 6 months.
  * Require No-Objection certificate.

Repealed in Jan 2011.

At the beginning, when I gave my one-month notice to move to another job, my boss said OK, but at the end of the month he said no, he needs me, it is not his problem I didn't want to continue in that job

- Worker interviewed by the National

They beat me up.. asking me to confess I was involved in starting the strike.

The men said they were not allowed to hold onto their passports, in spite of promises to the contrary..

- "Workers at N.Y.U.'s Abu Dhabi Site Faced Harsh Conditions," NYT, May 18, 2014

This system is attacked a lot by activists.

Human Rights Watch 2014 report: "I Already Bought You"

"Under the UAE's visa sponsorship system (known as *kafala*), a foreign worker's ability to enter, live, and work legally in the UAE depends on a single employer who also serves as the worker's visa "sponsor."[33] Not only does this system give employers inordinate control over the worker, but UAE laws have few safeguards for migrant workers to escape from this dependency in cases where the relationship becomes exploitative or abusive."

A more economics-ish criticism

This is a clear example of a monopsonistic labor market.

Employers have market power over their workers when their contracts expire.

Also means workers are technically exploited, in a neoclassical sense.
- Wages are below marginal product.

Paper: Uses 2011 reform to estimate degree of monopsony power and rate of neoclassical exploitation (wage = 50% of marginal product pre-reform).

Monopsony in labor markets is pervasive.

Search frictions, commuting costs, amenities and social relationships on the job mean that jobs are imperfect substitutes for each other from worker POV.

Explains many empirical puzzles in economics (e.g. gender gaps), most prominently lack of minimum wage effects on employment (Card and Krueger 1995, Dube, Lester, Reich JOLE 2015)

But direct estimates of the effect of labor market competition are few.

Kafala system reform allows one such estimate, in a clearly uncompetitive environment.

w

MPL

MCL-pre

MCL-post

w_c((1-q)L_c)-pre

w_c((1-q)L_c)-post

post

pre

L_c-pre   L_c-post

(1-q(w_c))L_c
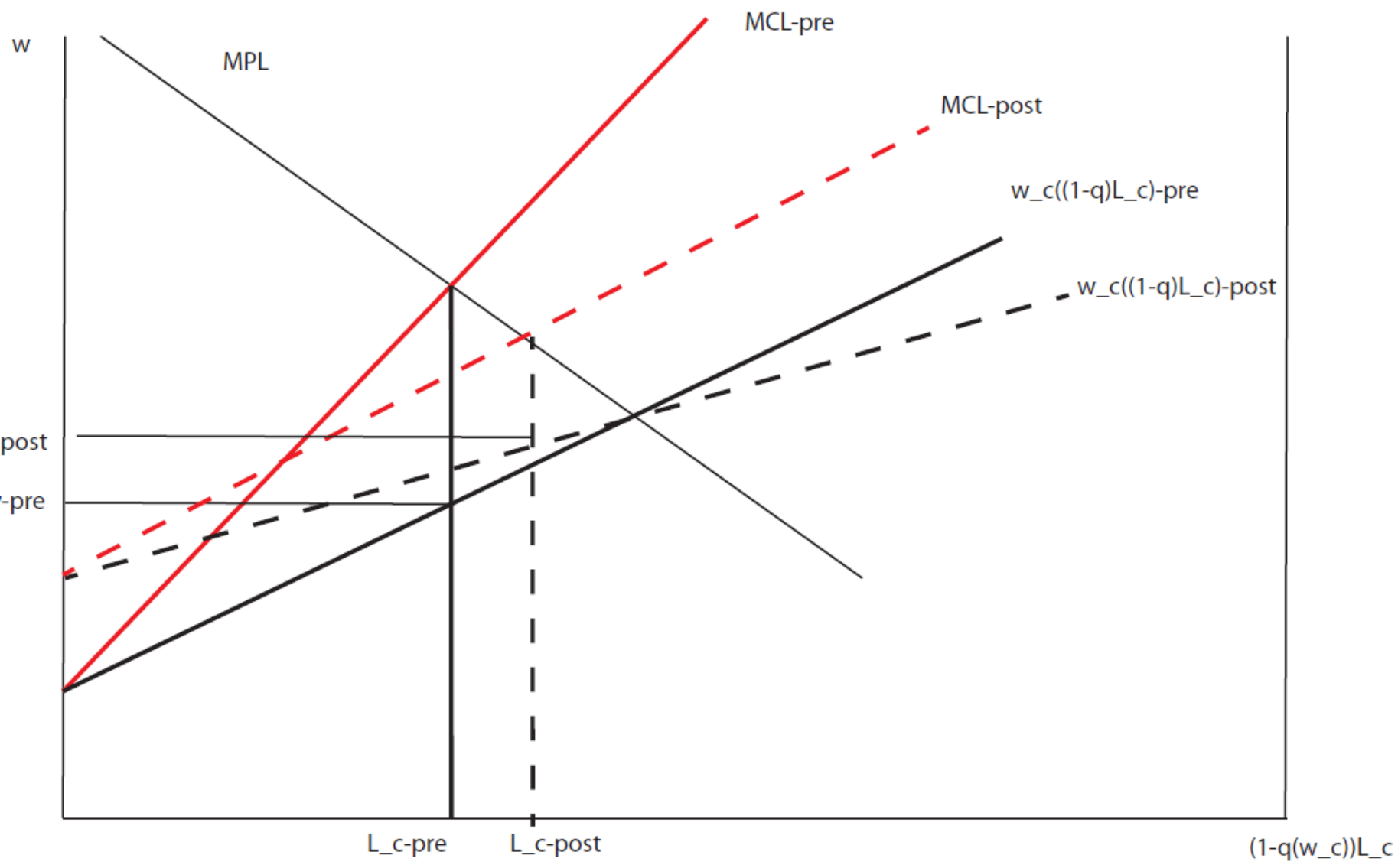
dentification strategy

Nice feature of reform: workers had to stay with their old employers until their contract/visas expired.
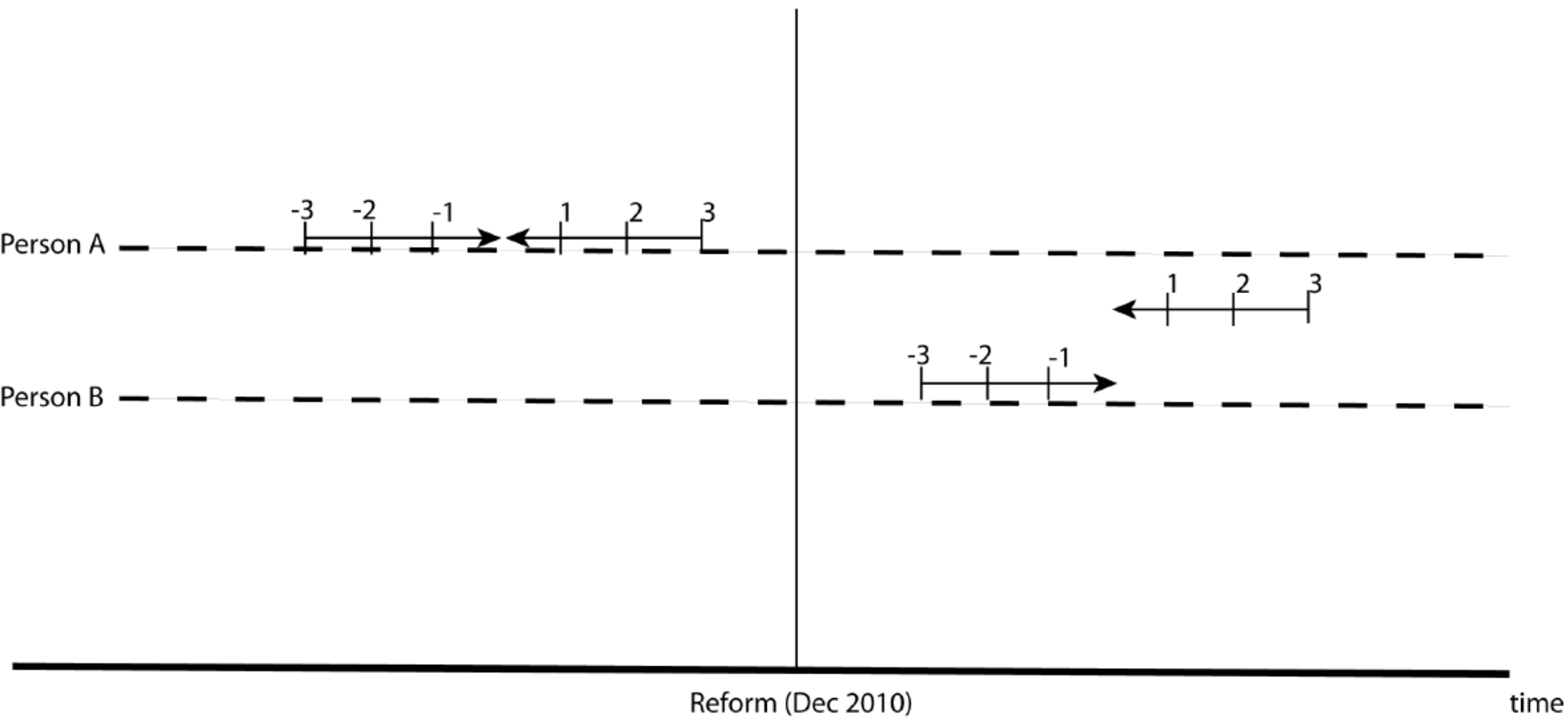
Contracts universally 3 years in length.

Workers whose contracts expired before the reform had to stay with their employers or go back to source country.

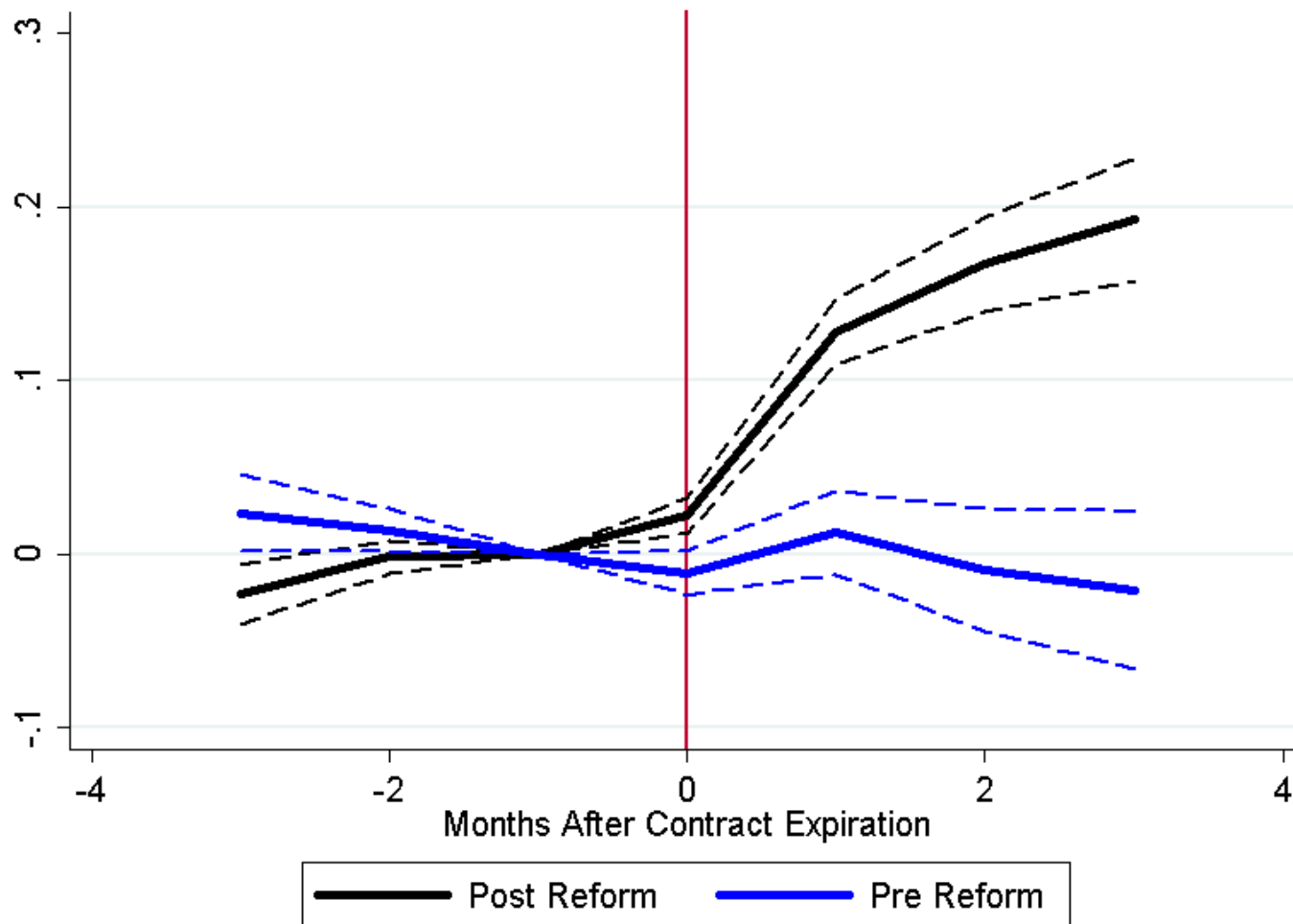Workers whose contracts expired after the reform could find a new employer.

- Expect to see jumps in wages around contracts that expire post reform relative to pre-reform.
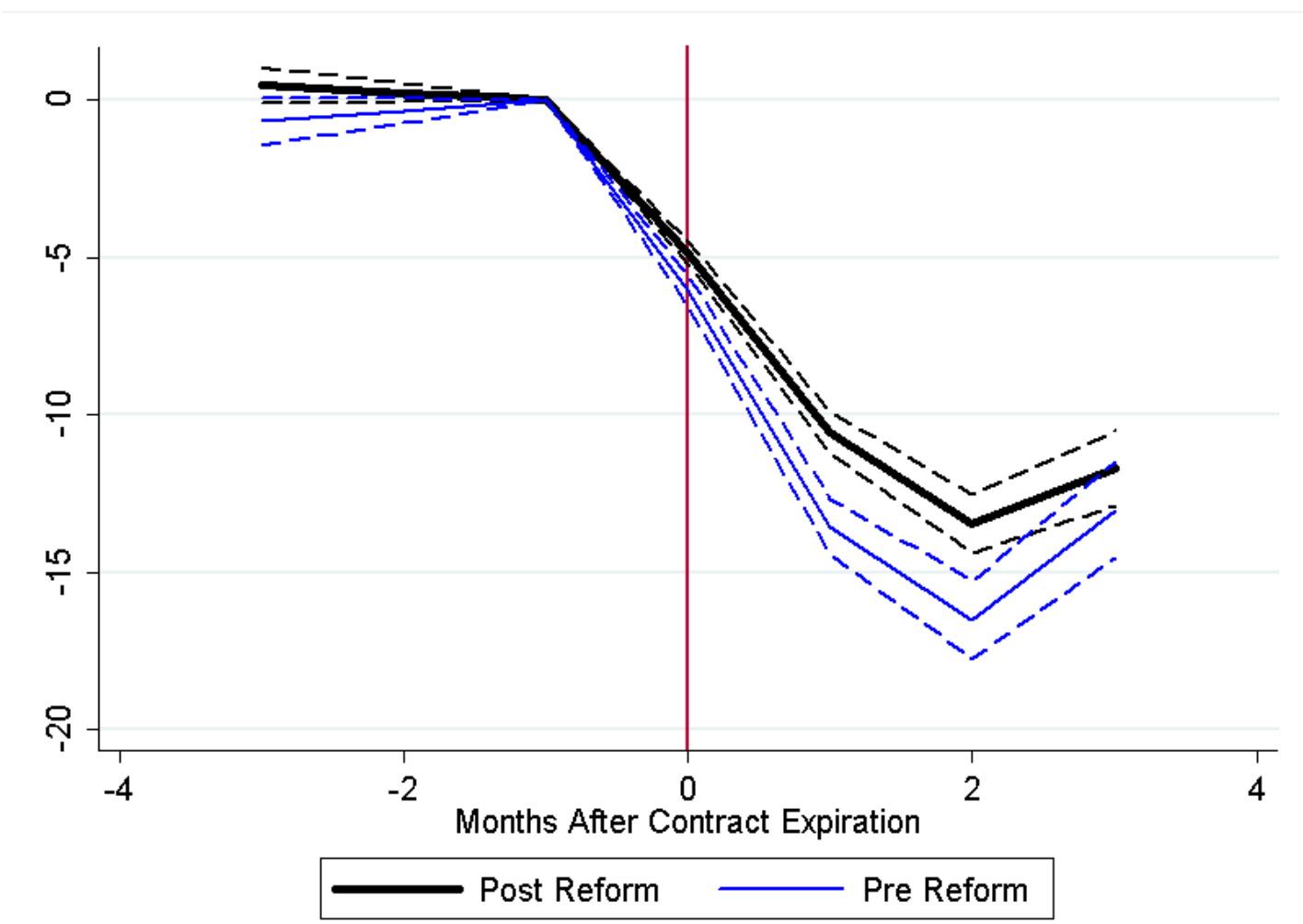
dentification strategy

~11% increase in earnings

ncrease in probability of staying with firm.

Neoclassical Rates of Exploitation

Adapt Lerner condition from product markets for factor markets.

MPL-w=w/elasticity of labor supply facing the firm

We find denominator of RHS = 10% fall in separations/ 10% earnings=

Implies MPL/w=2, or 50% rate of exploitation.

- Vedder 1978: w= 48% of MPL for slaves.
- Isen 2014: w=75-80% of MPL for workers (identified using sudden deaths).

Can use this to impute "reparations bill" activists are demanding for N
Abu-Dhabi, Guggenheim, etc.

- Just double actual wage bill.

A better class of models.

But monopsony is just one of a general class of models with an old and distinguished vintage.

- Mid-20th century Institutionalist labor economists had a view that labor was "not a commodity like any other".
  - 1946 AER debate: Lester arguing with Machlup and Stigler over the minimum wage.
  - Solow 1979: If the wage enters the short-run production function..in a labor augmenting way….the cost minimizing wage is the one that minimizes the cost of a unit of effort or effective labor.
- Wide variety of models with two characteristics:
  - Wages are a labor-augmenting input, so output=f(w,l)
  - Employers set wages, but don't necessarily want the lowest wage possible.
  - Monopsony, efficiency wages, adverse selection, firm-specific human capital and intra-firm bargaining between workers and firms can all be shown to yield models like this.