

INEQUALITY, GROWTH, AND POLICY

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The views expressed in this presentation are those of the author and do not necessarily represent those of the IMF or IMF policy.

THE TRADITIONAL ECONOMIC NARRATIVE

1) We should worry about growth, not its distribution

- Growth will trickle down
- Redistribution is harmful to growth

2) We know the economic policies that deliver growth

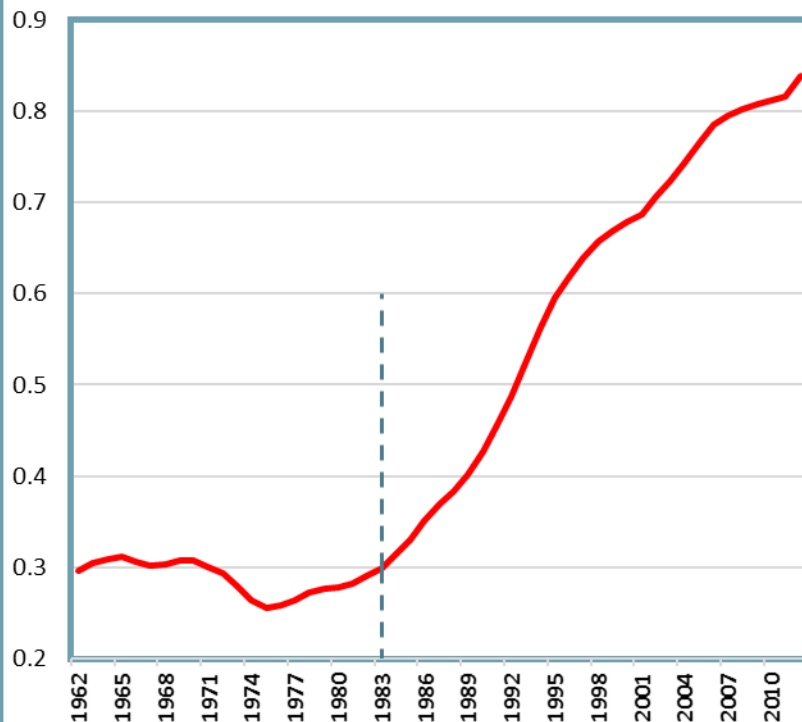
- structural reforms (liberalization; deregulation)
- globalization
  - trade, international capital flows, immigration
- macroeconomic stability (low public debt-to-GDP; low inflation)

TRADITIONAL NARRATIVE: GROWTH TRUMPS DISTRIBUTION

- Roots of trickle-down in Schumpeter
  - *“The capitalist achievement does not typically consist in providing more silk stockings for queens but in bringing them within reach of factory girls.”* (Capitalism, Socialism and Democracy, 1942)
- Echoed by Lucas in his famous quotes
  - *“Is there some action a government of India could take that would lead the Indian economy to grow like Indonesia's? If so, what, exactly? The consequences for human welfare involved in questions like these are simply staggering: Once one starts to think about them, it is hard to think about anything else.”* (On the Mechanics of Economic Development, JME 1988)
  - *“Of the tendencies that are harmful to sound economics, the most seductive, and in my opinion the most poisonous, is to focus on questions of distribution.”* (Minneapolis Fed Annual Report, 2004)

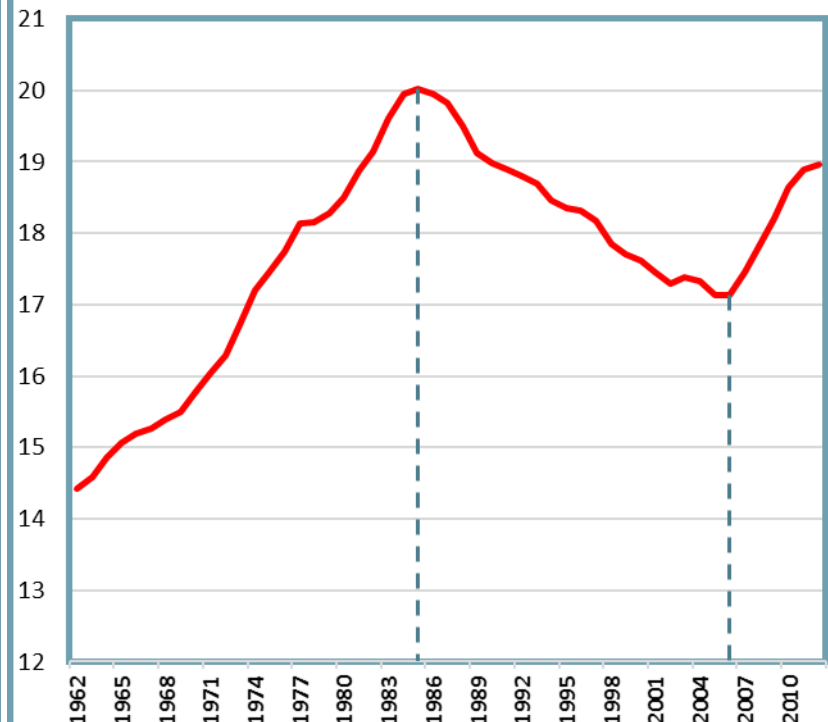
PUSH TOWARD STRUCTURAL REFORMS, MACROECONOMIC STABILITY

More "deregulation"



Composite index of policies to increase competition and to deregulate. Index takes values between 0 and 1. The median value across countries is shown. The index is smoothed using a 5-year moving average. Source: Ostry et al (2016)

Less "state"



Government Expenditures as a share of GDP (including health and education). The median value across countries is shown. Data is smoothed using a 5-year moving average. Source: Penn World Table 9.0

THE MACRO-DISTRIBUTIONAL VIEW

1) Growth and distribution should be analyzed together

- Results on links among growth, inequality and distribution

2) Economic policies pose efficiency-equity tradeoffs

- structural reforms: do they deliver growth? what are equity effects?
  - Growth-equity tradeoffs of structural reforms
- globalization: does it work for all?
  - Effects of capital account liberalization (“financial globalization”)
- macro stability: how low to go (with debt limits, inflation targets)?
  - Effects of fiscal consolidation (“austerity”)

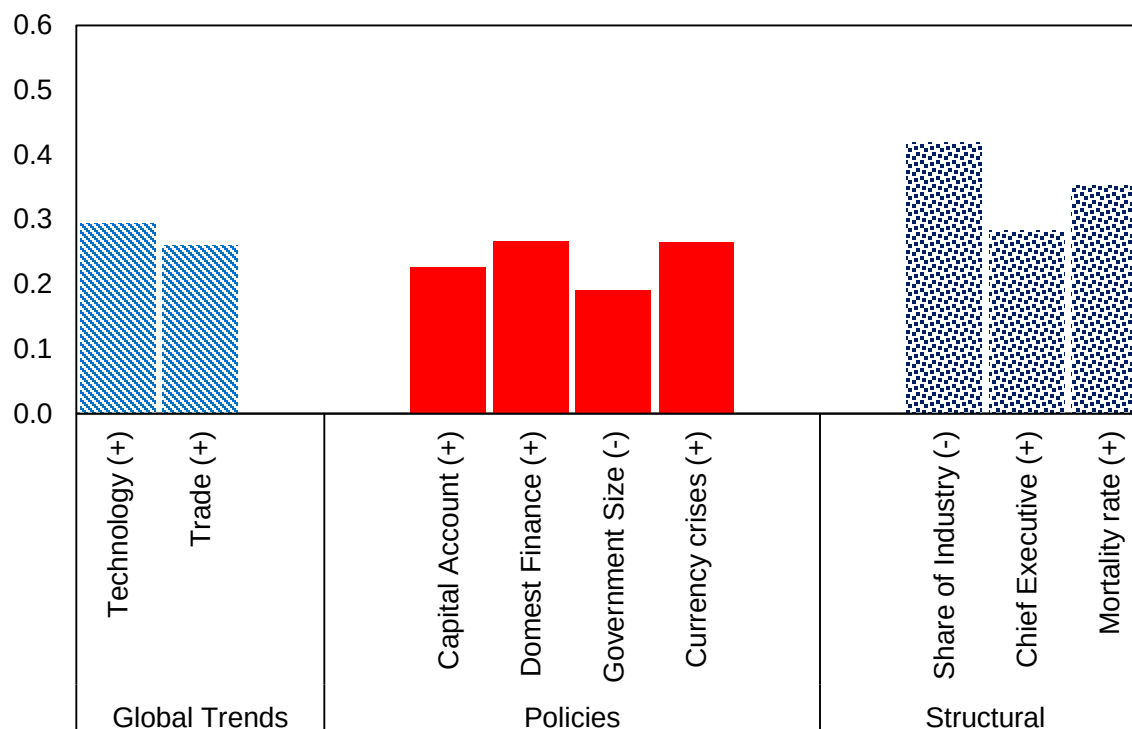
MAIN FINDINGS

1) Fragile growth and inequality are two sides of the same coin

2) A wide range of policies pose efficiency-equity tradeoffs

- Many structural policies deliver some growth but also raise inequality
- Globalization doesn't always work for all
  - Episodes of capital account liberalization followed by increased inequality, little benefit to growth, increased volatility
- Austerity can be costly
  - Episodes of fiscal consolidation hurt short-run growth & raise inequality
  - Paying down debt rapidly can be more costly than living with it

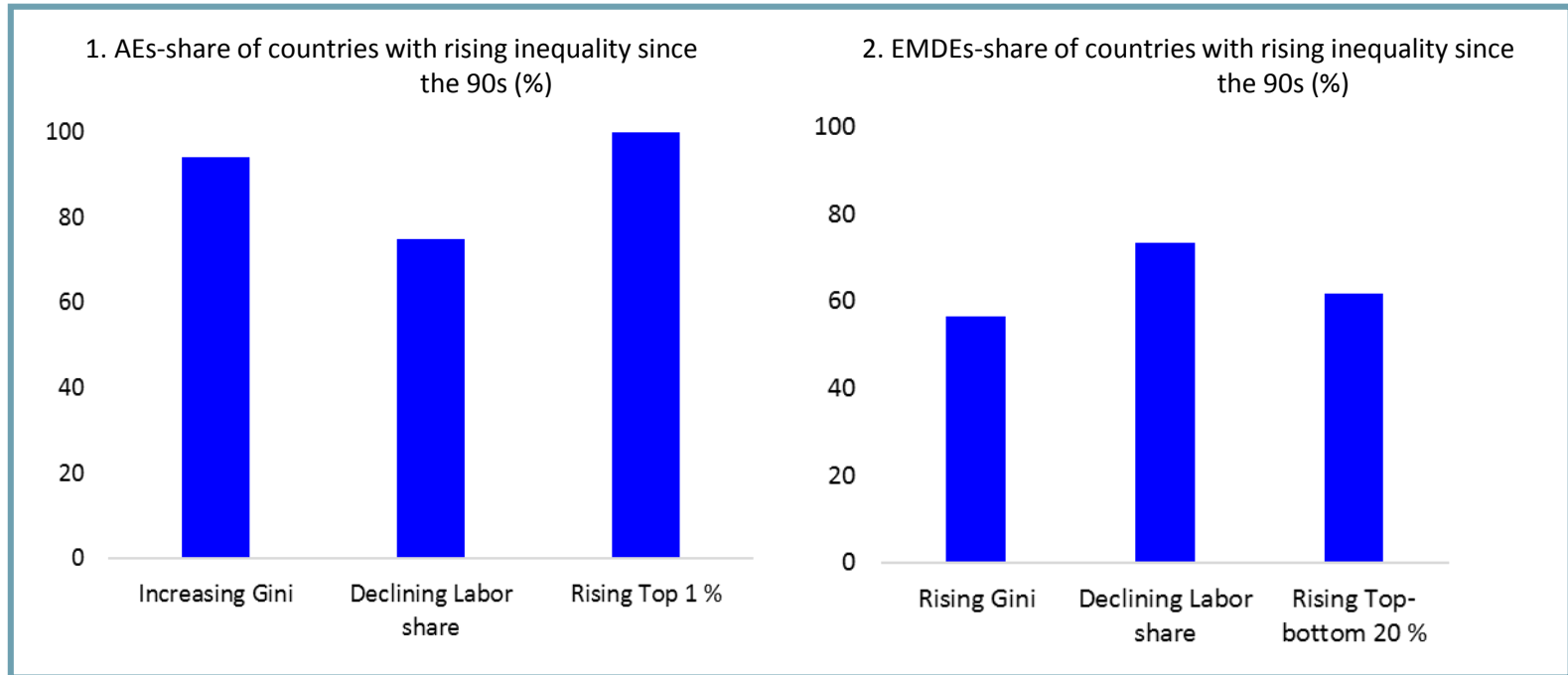
POLICIES ARE A KEY DRIVER OF INEQUALITY



Determinants of the Gini measure of inequality based on a panel regression (90 countries; 5-year averages over 1970-2015 period) estimated using weighted average least squares. Each bar shows the percentage point increase in the Gini from a 1 standard deviation increase in the variable.

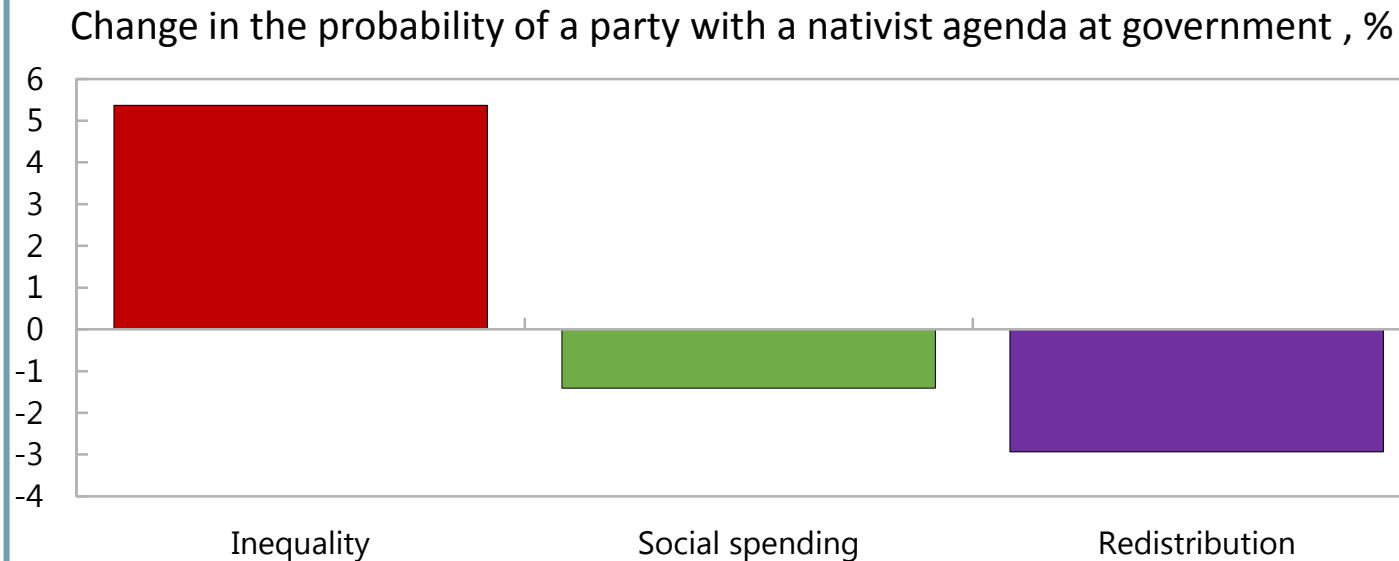
Global trends: 'Technology' is share of ICT capital in total capital stock; 'Trade' is openness variable from Penn World Tables. Policies: 'Capital Account Liberalization' is measured using the Chinn-Ito Index. 'Domestic Financial Reform' is measured as in Ostry et al (2009). 'Government Size' is share of government in GDP; note (-) impact: higher government size reduces inequality. 'Currency crisis' is from Laeven and Valencia; Structural: 'share of industry' is manufacturing value added in GDP; 'Chief Executive' indicates whether govt. head is a military officer; 'mortality rate' (commonly included in inequality regressions). Source: Ostry, Furceri & Loungani (2016).

Globalization Rising; Inclusion Falling



Increased inequality makes growth more fragile (Berg & Ostry, 2011; Ostry et al., 2014)

Fuelling support for protectionism



Note: estimates based on a panel regression framework relating inequality (social spending, redistribution) with the probability of a party with a nativist agenda at government for a sample of 164 countries over the period 1990-2012. The effects of inequality (social spending, redistribution) are based on their interquartile differences and panel regression coefficients. Social spending=education and health spending as share of GDP; Redistribution=difference between market and net Gini.

RELATIONSHIP OF FINDINGS TO ONGOING DEBATES

- Great concern has been voiced about inequality recently -- impact on social cohesion; political capture by elites, etc.
  - Our finding: there is a direct **economic cost** to inequality -- it leads to lower and less durable growth
- Retreat from globalization (Brexit, Trump etc.)
  - Concerns about distributional effects of trade
  - Protests against migrants
  - Our finding: the effects of financial globalization should be part of the discussion -- it contributes as much to inequality as trade; it lowers workers' bargaining power and income share
  - In fact, financial globalization can make it difficult to mitigate distributional effects of international trade - it leads to a race to the bottom in taxation, eroding revenues needed for social benefits

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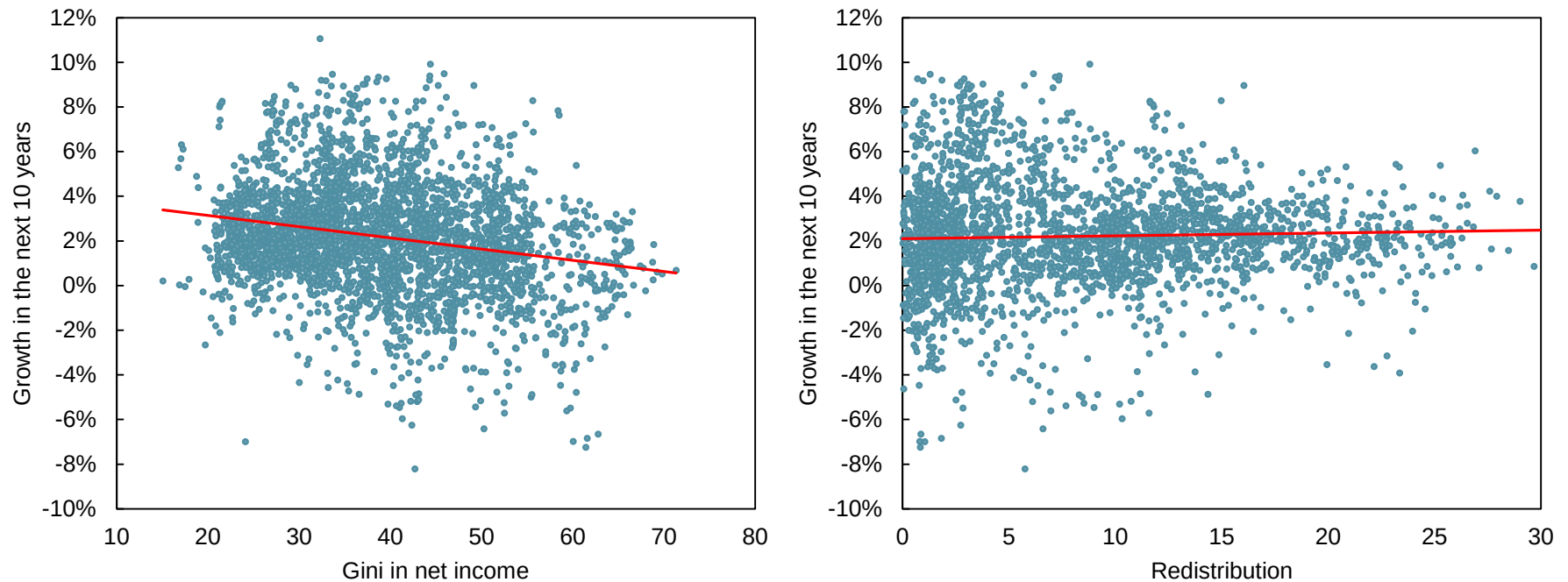
GROWTH, INEQUALITY AND REDISTRIBUTION

CONTRIBUTION AND KEY FINDINGS

- Two approaches
  - Panel growth regressions (growth rate over five-year horizons)
  - Growth spell duration analysis
- Data on inequality and redistribution
  - Recently-complied cross-country dataset (Solt (2009))
  - Distinguishes market and net income inequality
  - Direct calculation of redistribution
(Gini of market income - Gini of net income)
- Key findings
  - Lower net inequality drives faster/more durable growth, for a given level of redistribution
  - Redistribution appears generally benign in its impact on growth
    - Only in extreme cases, some evidence of direct negative effects on growth
  - The combined direct and indirect effects of redistribution are pro-growth

INEQUALITY IS FOLLOWED BY WEAKER GROWTH

REDISTRIBUTION DOESN'T HURT GROWTH

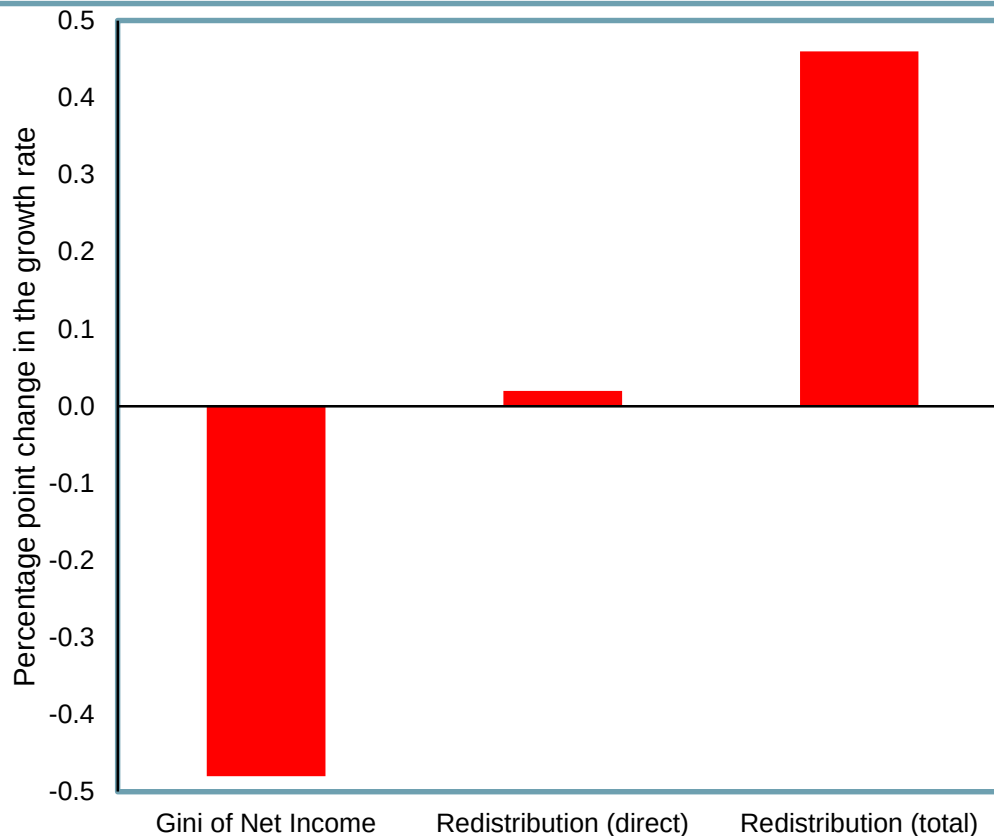


- *Strong negative relation between the level of net inequality and growth in income per capita over the subsequent period*
- *Weak (positive) relationship between redistribution and subsequent growth*

Source: Ostry et al (2014)

BASELINE RESULTS FOR GROWTH: THE EFFECTS GRAPHICALLY

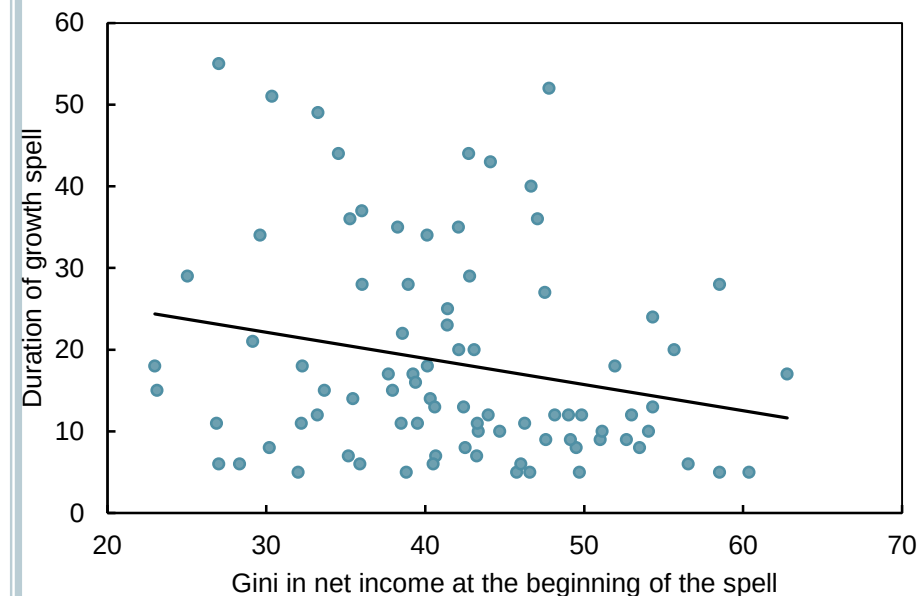
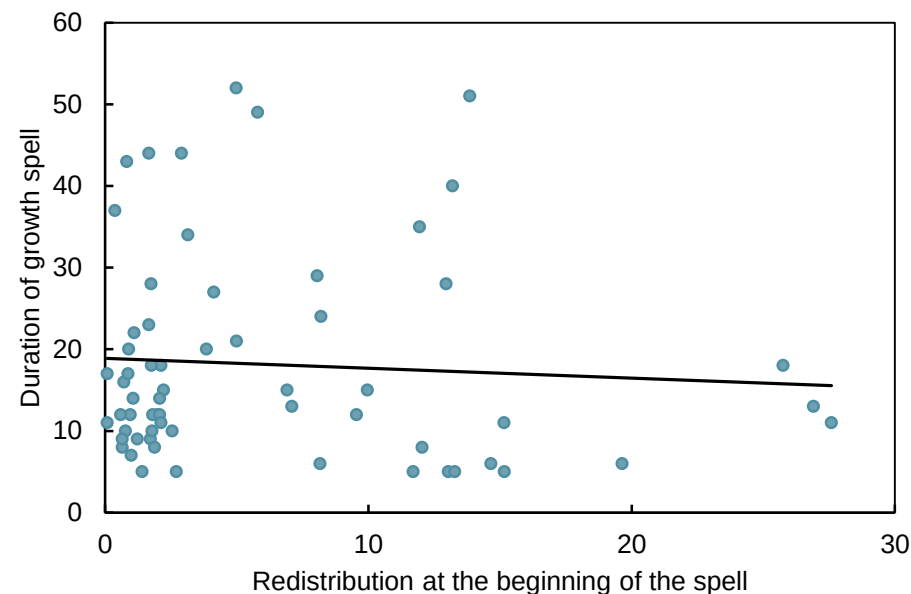
The effect of inequality and redistribution on growth (10 percentile increase from median)



- An increase in **net Gini** from **37** (such as in the United States in 2005) to **40** (such as in Morocco in 2005) decreases growth on average by **0.5** percentage points, that is, from 5 percent to 4.5 percent per year (holding redistribution and initial income constant)
- An increase in **redistribution** from the 50th to the 60th percentile (also roughly a 3-Gini-point change) increases the growth rate slightly (controlling for inequality and initial income)
- The **total** effect of a 10-percentile change in redistribution is to increase the annual growth rate by **0.5** percentage points

INEQUALITY LOWERS DURATION OF GROWTH SPELLS

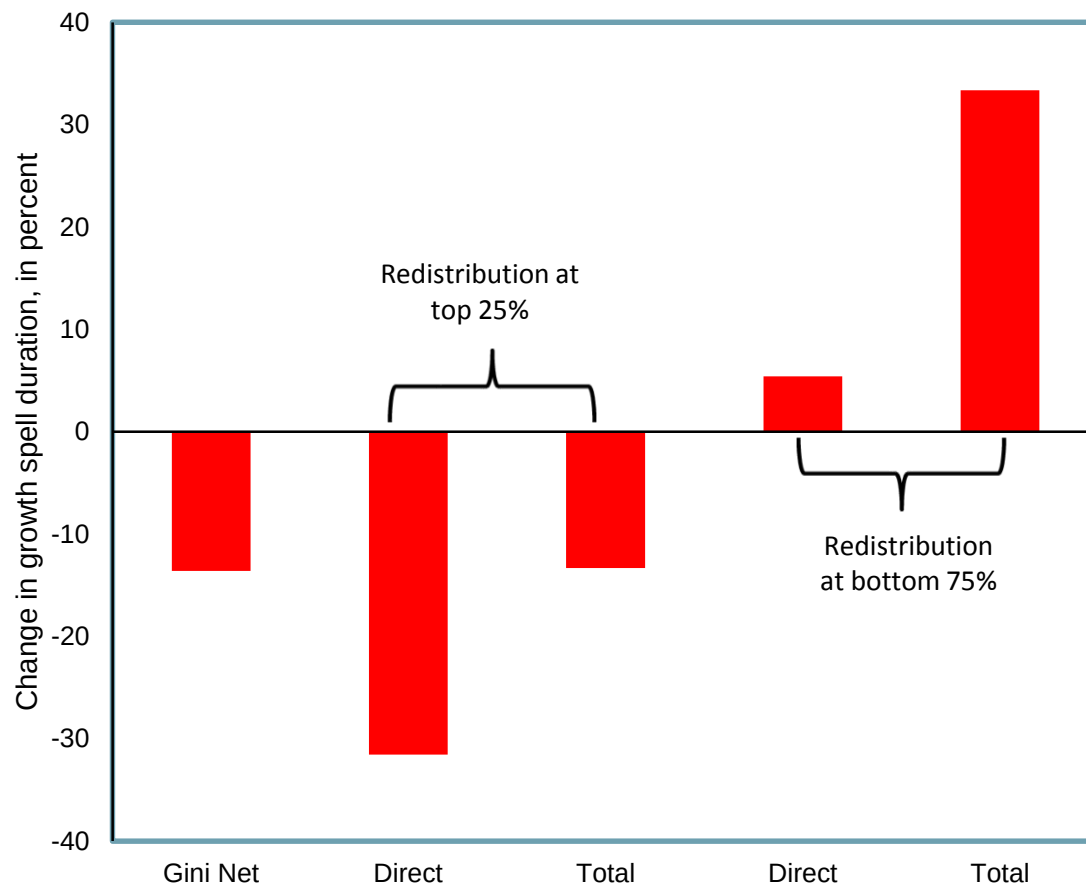
REDISTRIBUTION DOESN'T AFFECT DURATION



- *Strong negative relationship between the level of net inequality and the duration of growth spells*
- *Weak (negative) relationship between redistribution and the duration of growth*

BASELINE RESULTS FOR GROWTH SPELLS: THE EFFECTS GRAPHICALLY

The effect of inequality and redistribution on growth spell duration
(10 percentile increase in each variable)



- For large redistributions, the estimated negative effect of redistribution on growth duration is somewhat larger than the estimated positive effect of the resulting reduction in inequality
- For smaller redistribution (less than 13 Gini points) the overall effect is growth-positive: roughly neutral direct effects of redistribution, and a protective effect of the resulting reduction in inequality

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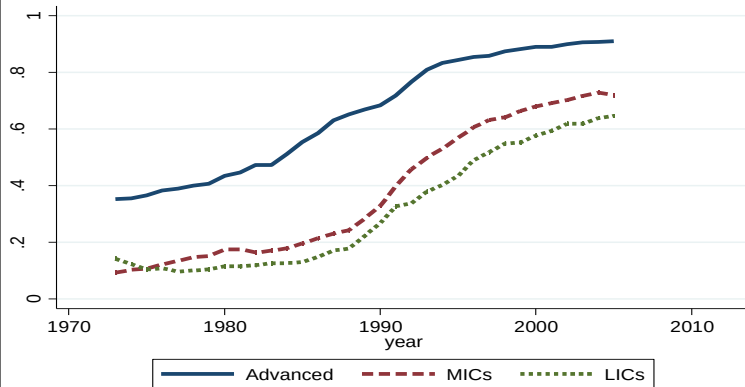
GROWTH-EQUITY TRADEOFFS IN STRUCTURAL REFORMS

QUESTIONS

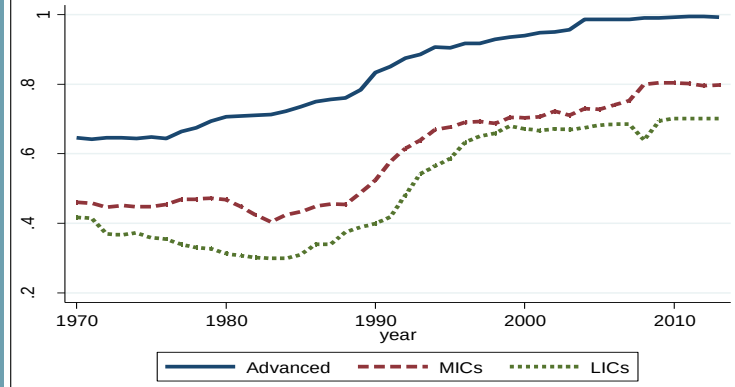
- Do structural reforms give rise to growth-equity trade-offs i.e. do reforms that aim to boost potential output also change the distribution of income?
- If reforms increase inequality, what is the total effect of reforms on growth?
  - Higher inequality is bad for growth.
  - If reforms increase inequality, then the increase in inequality can dampen growth
  - What is the net effect of reforms on growth after taking into account the increase in inequality?

REFORM INDICES OVER TIME BY INCOME LEVEL

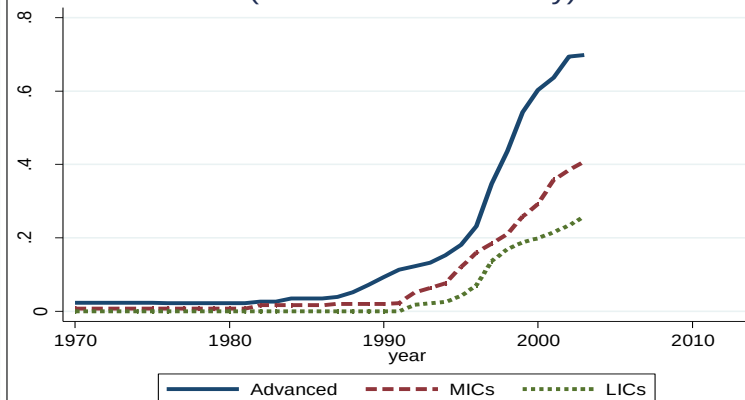
Domestic Finance



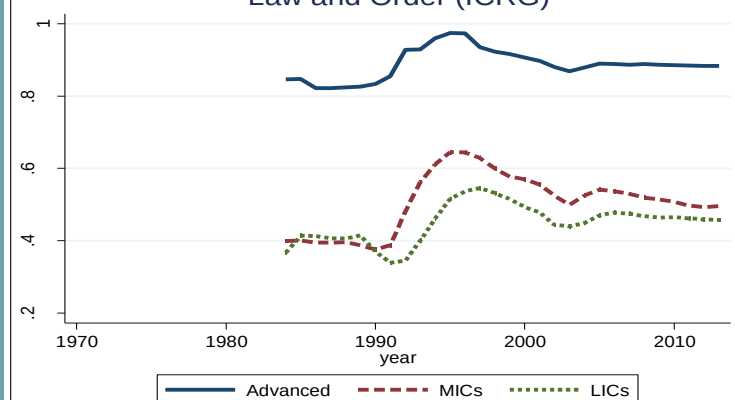
Current Account



Networks (telecom and electricity) Reforms

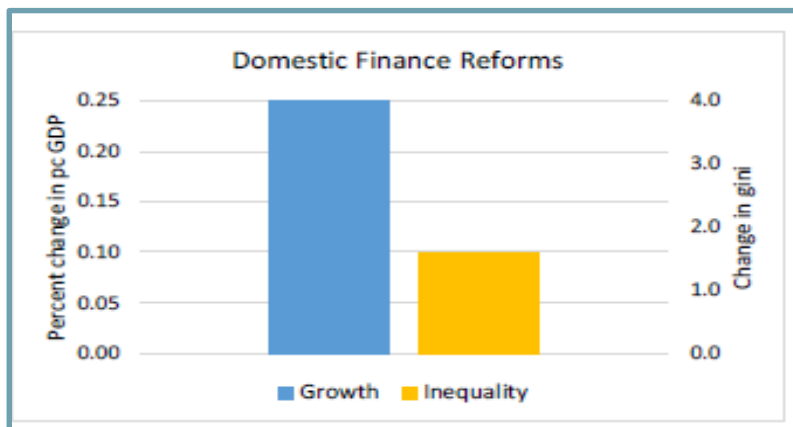
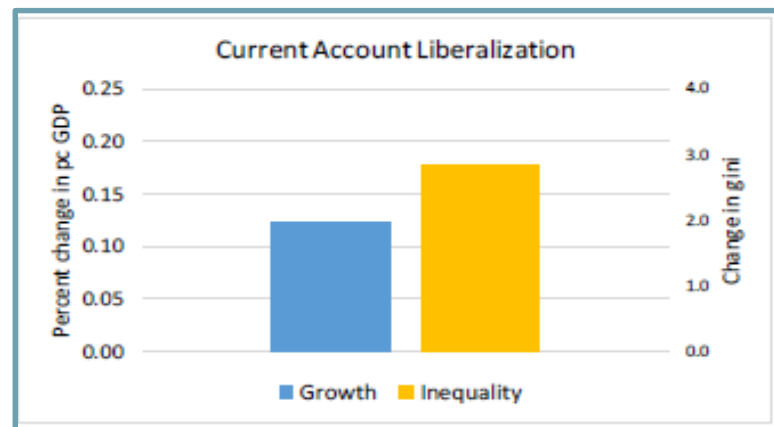
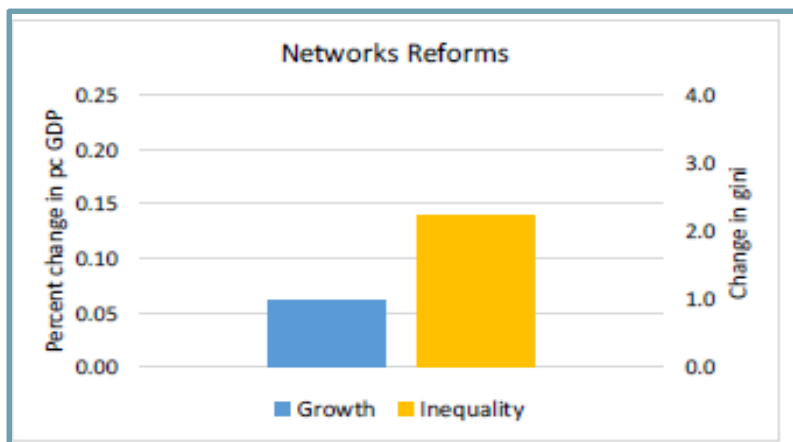


Law and Order (ICRG)

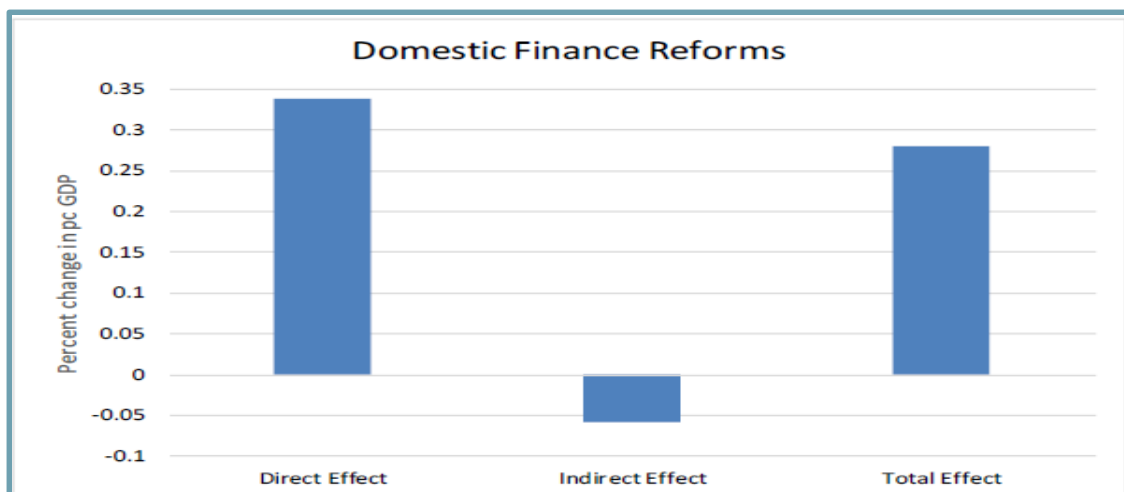
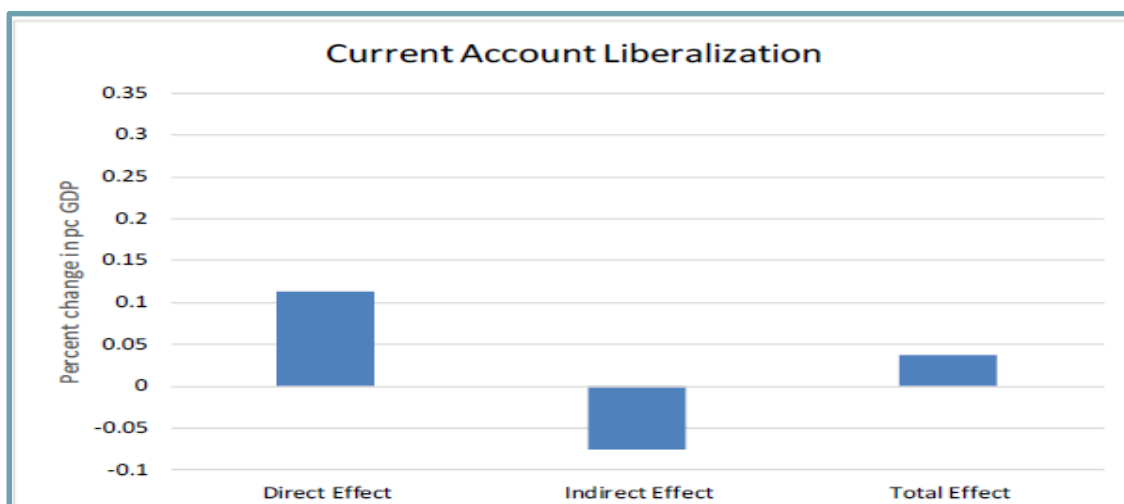


GROWTH AND EQUITY EFFECTS OF STRUCTURAL REFORMS

Each panel plots the long-run effect on the level of income and the level of inequality of moving the reform variable from the median to the 75th percentile.



DIRECT AND INDIRECT EFFECTS



What is the net effect of these reforms on growth after taking into account the higher inequality?

Combine the growth and inequality regression results and simulate to answer this question.

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**EFFICIENCY-EQUITY TRADEOFFS:
CAPITAL ACCOUNT LIBERALIZATION
("FINANCIAL GLOBALIZATION")**

INTERNATIONAL CAPITAL MOBILITY: STORY LINE

- Great benefits in theory, but growth and risk-sharing benefits are elusive
- In fact, for many countries (particularly EMs), capital flows are source of volatility and crisis
- Evidence also shows adverse distributional impacts
  - Liberalization can increase likelihood of financial crises (↑ inequality if disproportionate impact on poor)
  - Capital mobility acts as 'threat' to locate production abroad (↑ inequality as labor bargaining power and labor share declines)
- Causality may run from financial integration, to crisis propensity, to inequality, to fragile growth
- Given the evidence, our view on international capital mobility has evolved towards greater acceptance of:
  - Capital controls to lower volatility and odds of crisis
  - Redistribution & pre-distribution tools to mitigate distributional impacts

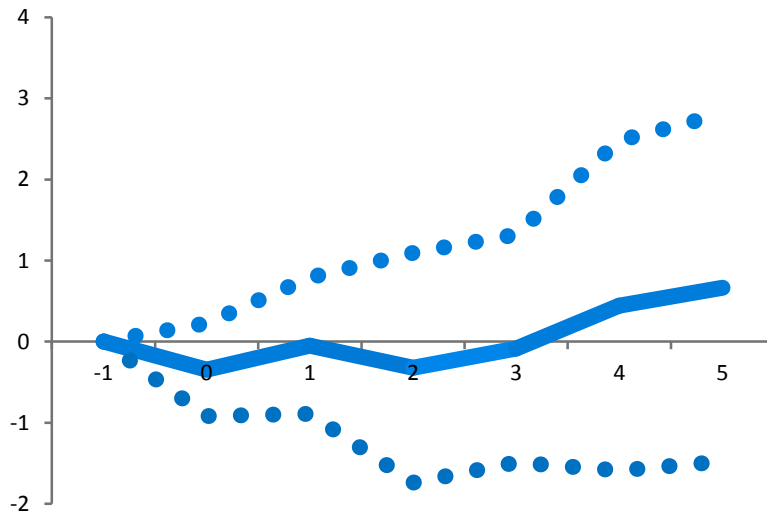
UNCERTAINTY SURROUNDING THE BENEFITS

- Overall, the positive impact of capital account liberalization on growth is small
  - Unbundling the flows: FDI vs. “hot money”
- Sequencing matters: liberalization of capital account ahead of domestic financial reforms lowers growth benefits and raises stability risks (in terms of both macro volatility and crisis propensity)
- But even appropriately sequenced liberalization creates costs:
  - Exchange rate volatility
  - Macro and financial stability risks

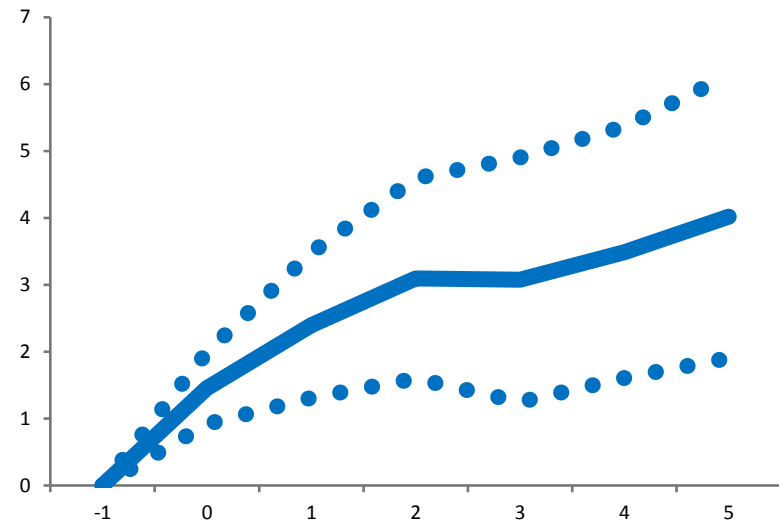
Source: Ostry et al (JIE, 2012)

Insignificant output gains but significant increases in inequality

Panel 1. Output (%)



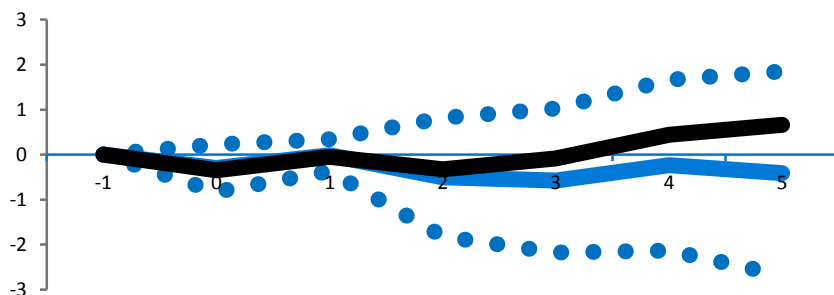
Panel 2. Gini (%)



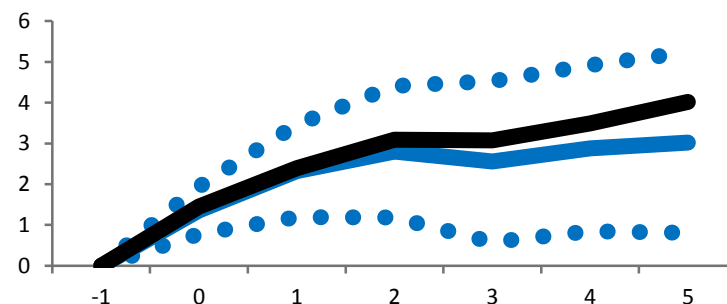
Note: The solid lines indicate the response of output (inequality) to a capital account liberalization episode; dotted lines correspond to 90 percent confidence bands. The x-axis denotes time. $t=0$ is the year of the reform.

...the results are robust to endogeneity checks

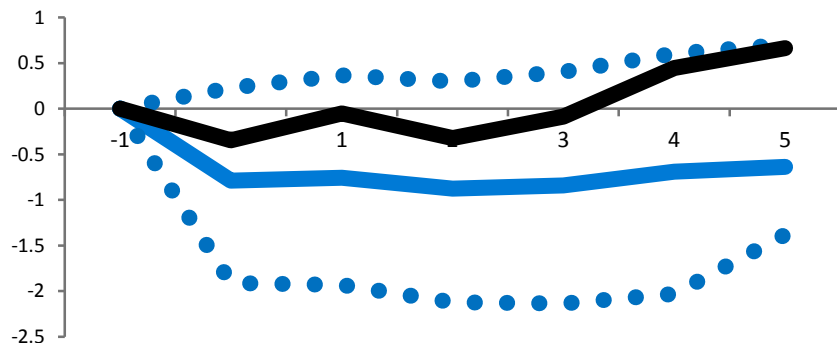
Panel 1. Output (%)—controlling for growth expectations



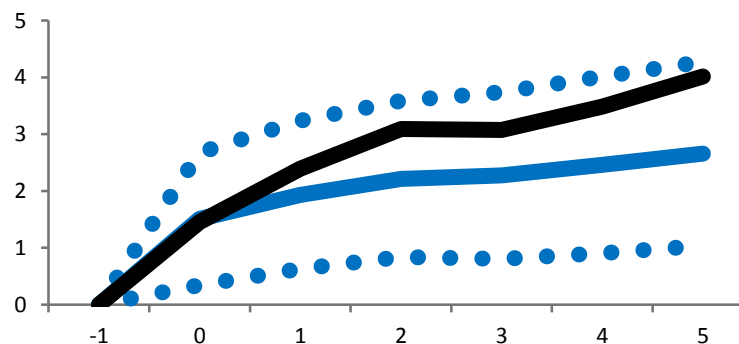
Panel 2. Gini (%)—controlling for growth expectations



Panel 3. Output (%)—IV



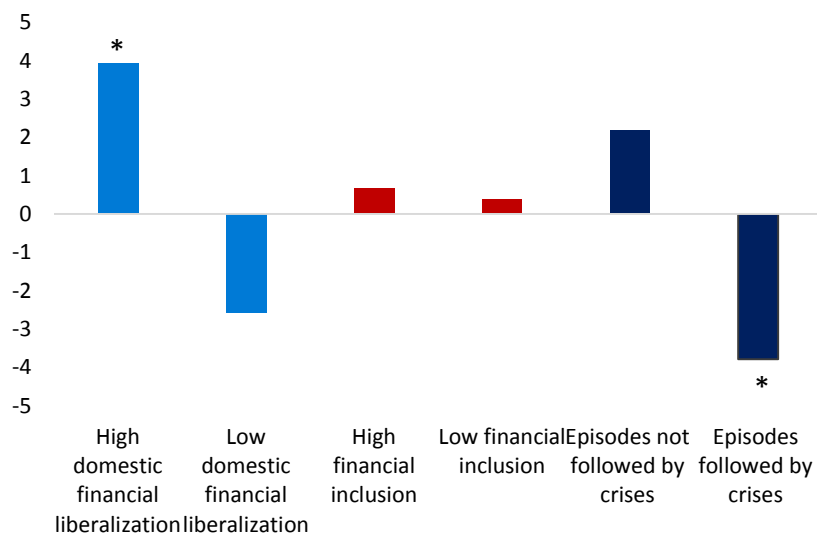
Panel 4. Gini (%)—IV



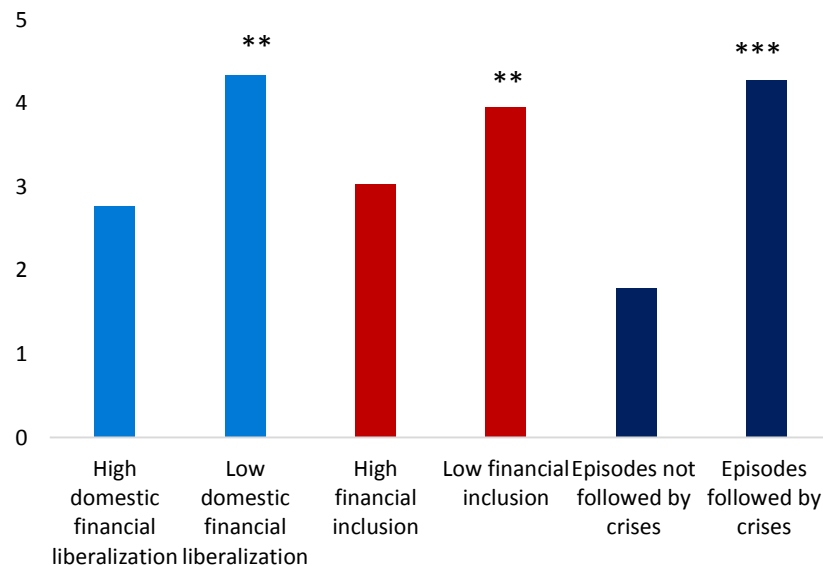
Note: The solid lines indicate the response of output (inequality) to a capital account liberalization episode; dotted lines correspond to 90 percent confidence bands. The solid black lines denote the baseline effect.

But output & distributional effects depend on institutions

Panel 1. Output (%)

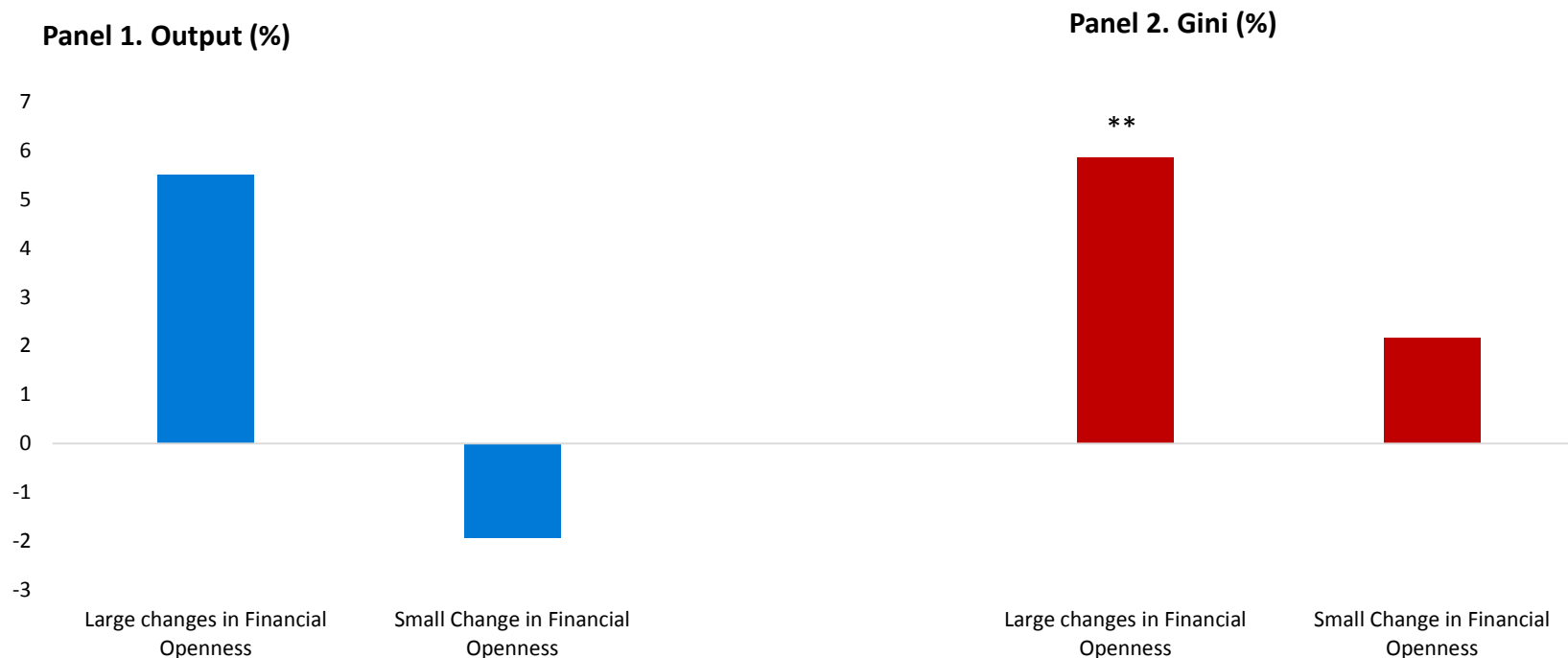


Panel 2. Gini (%)



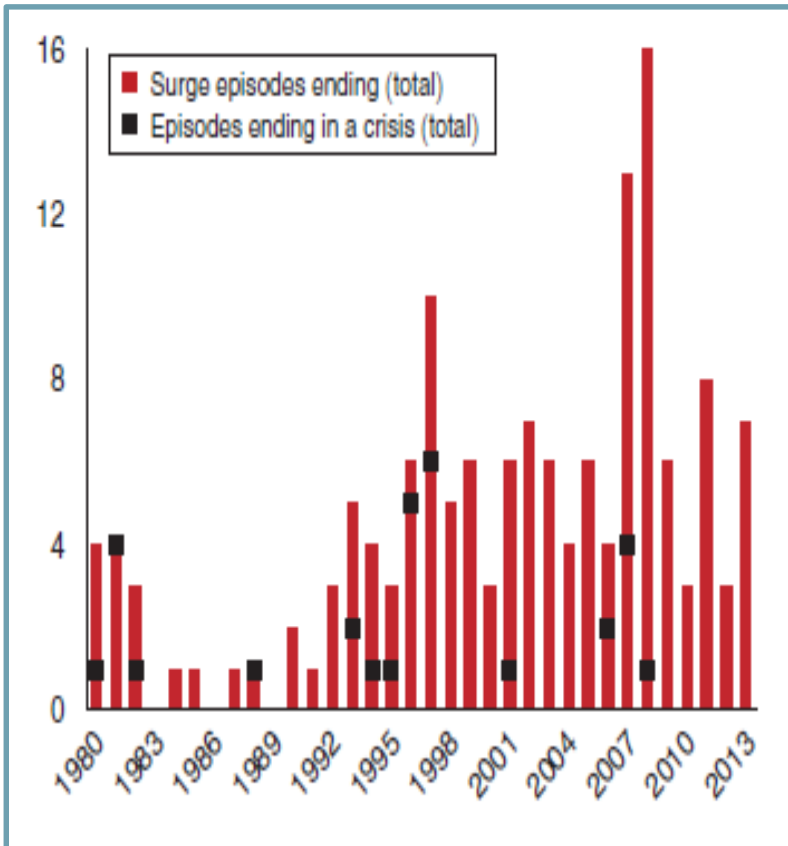
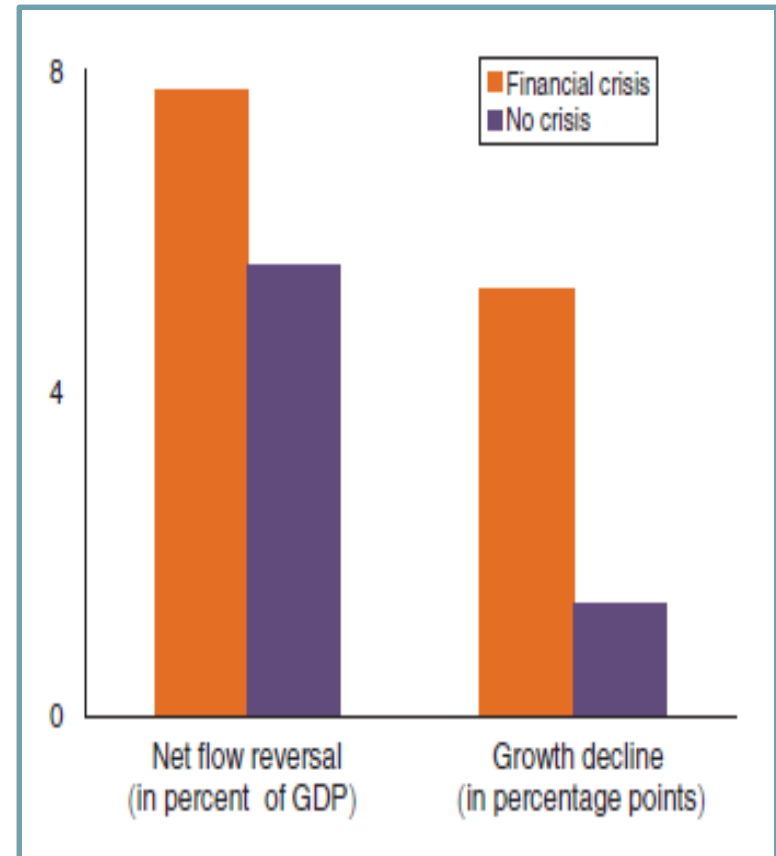
Note: Medium-term effects (that is, after five years of the reform). ***, **, * denote significance at 1 percent, 5 percent and 10 percent, respectively.

... and on the extent of capital flows (de facto measure)



Note: Medium-term effects (that is, after five years of the reform). ***, **, * denote significance at 1 percent, 5 percent and 10 percent, respectively. Blue (red) bars denote the medium-term response (that is, five years after the reform) of output (inequality). Flows defined as the cumulative 5-year change in total asset and liabilities as percent of GDP after the reform.

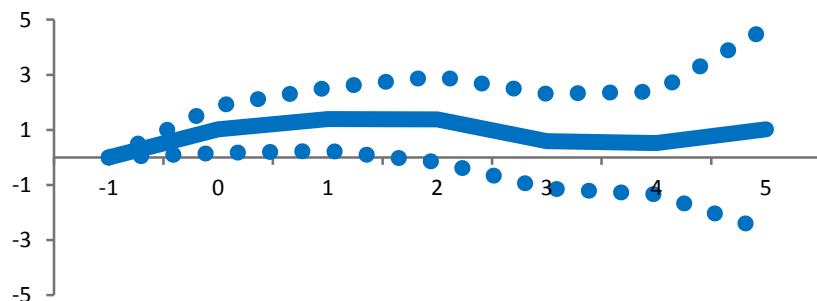
CAPITAL SURGES AND FINANCIAL CRISES



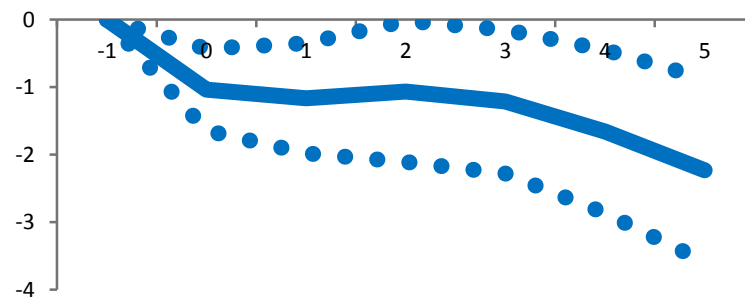
The panel on the left shows the total number of surges ending in a given year and those that end in a financial crisis. The panel on the right compares capital flow reversal and growth between surges that end in a crisis and those that do not. The analysis is based on data for 53 emerging market economies over 1980-2014. Source: Ghosh, Ostry and Qureshi (AER P&P, 2016)

Sectorally, short-term output gains, significant decline in labor share

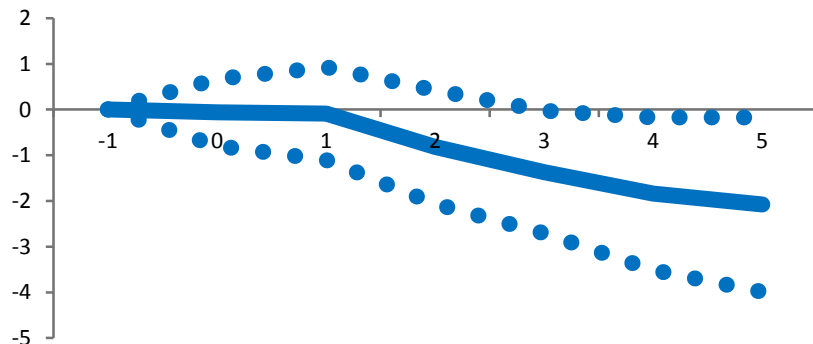
Panel 1. Output (%)—external financial dependence



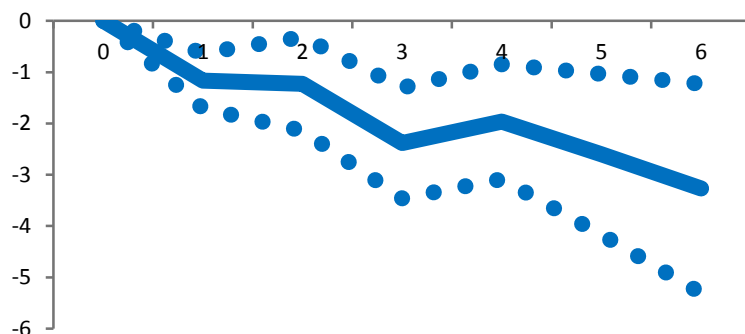
Panel 2. Labor share (ppt)—external financial dependence



Panel 3. Labor share (ppt)—natural layoff rate



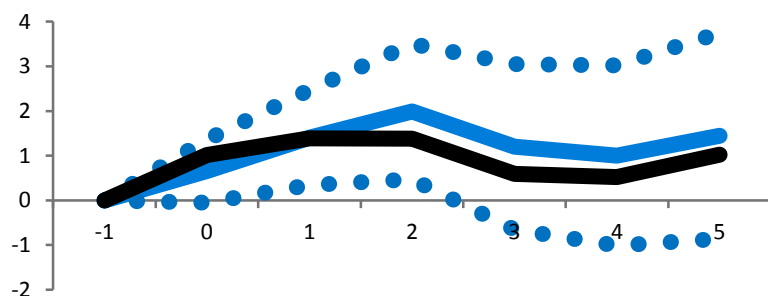
Panel 4. Labor share (ppt)—EOS >1



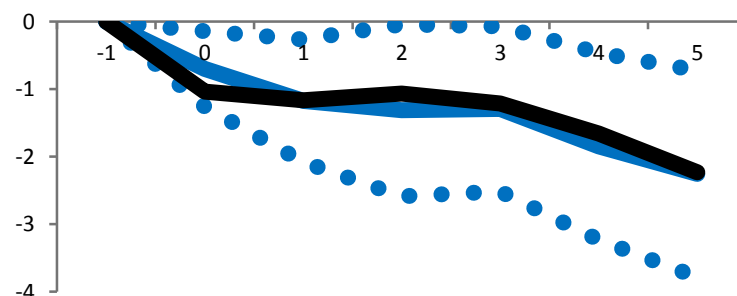
Note: Solid line denotes the differential effect of capital account liberalization episodes between a sector with a high external financial dependence/layoff rate/elasticity of substitution (at the 75th percentile) and a sector with a high external financial dependence/layoff rate/elasticity of substitution (at the 25th percentile).

Results robust to controlling for domestic finance reforms...(and trade reforms, and technology)

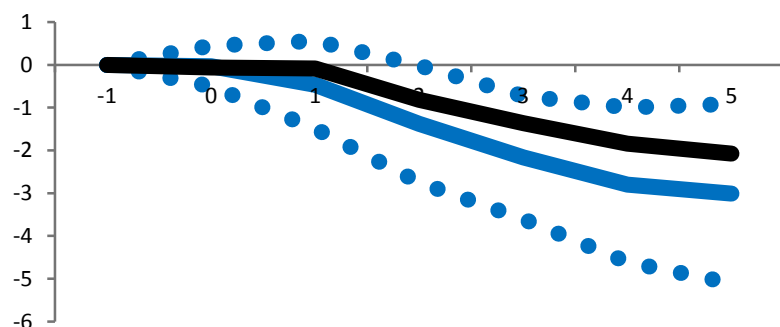
Panel 1. Output (%)—external financial dependence



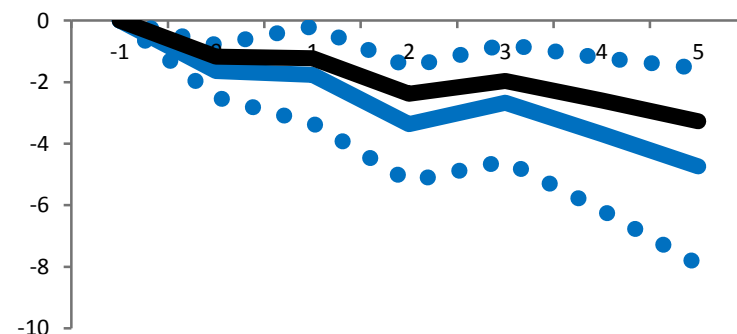
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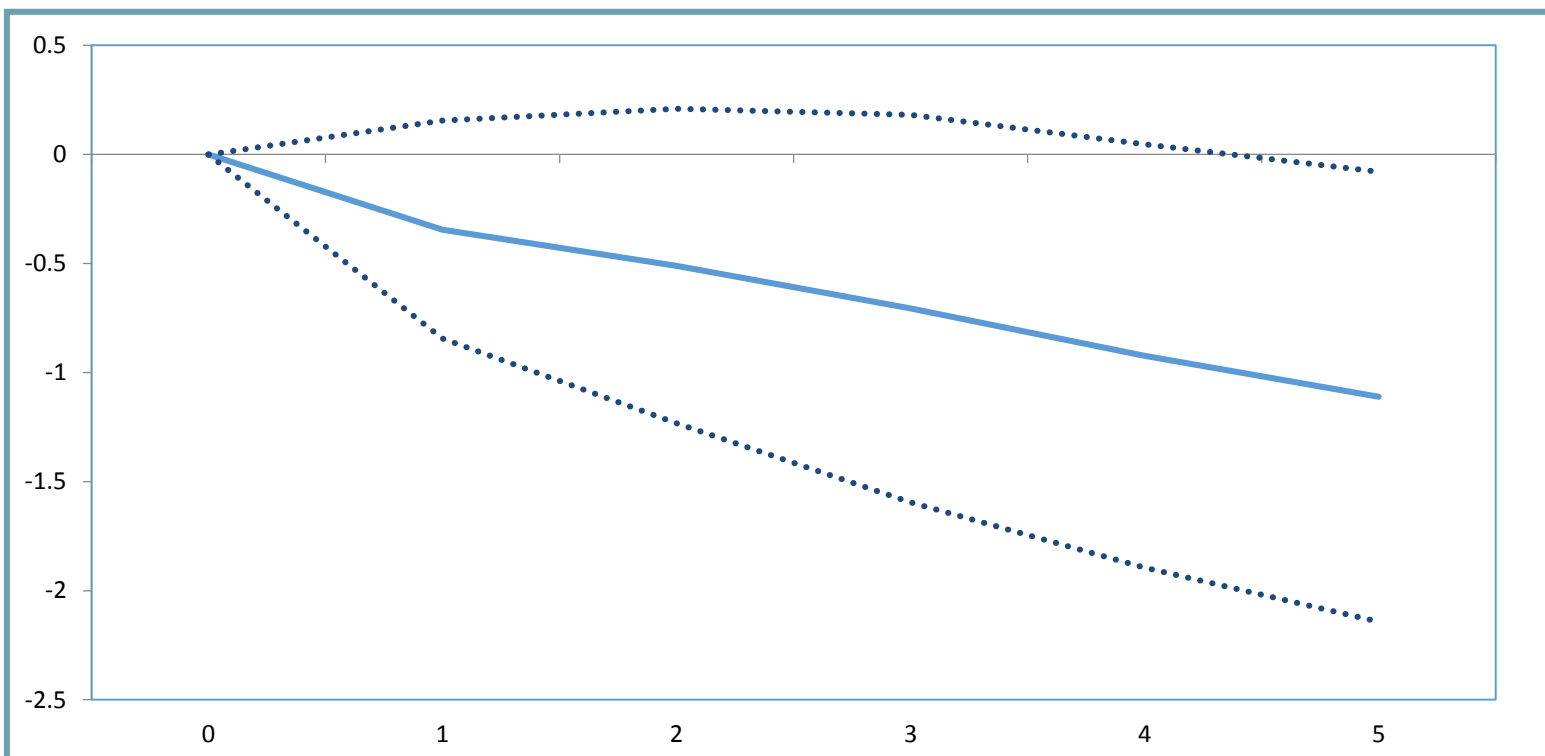


Panel 4. Labor share (ppt)—EOS >1



Note: Solid blue line denotes the differential effect of capital account liberalization episodes between a sector with a high external financial dependence/layoff rate/elasticity of substitution and a sector with a high external financial dependence/layoff rate/elasticity of substitution). Black lines denote baseline effects.

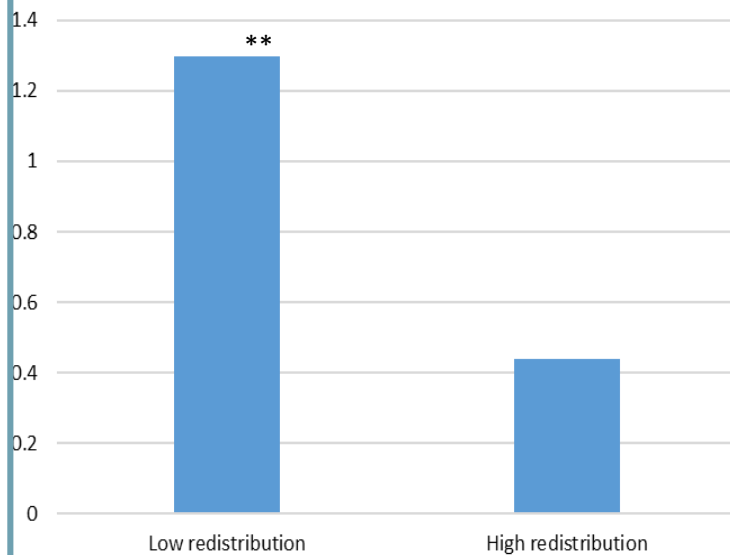
Less redistribution, even though needed more



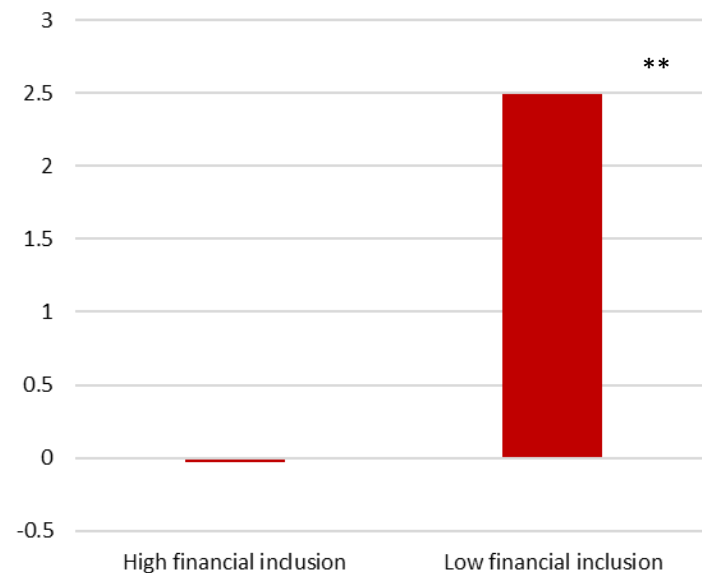
Note: redistribution = difference between market Gini and net Gini. Vertical axis measure percent change. Estimated impact on growth following a capital account liberalization episode. Liberalization is measured using the Chinn-Ito index. Estimates are based on an autoregressive distributed lag model. The horizontal scale is in years after the episode. See Furceri, Loungani and Ostry (2017) for details.

Sharing the benefits helps

1. Redistribution reduces the impact of financial globalization on inequality...



2. ...as does financial inclusion



Note: estimated impact on net Gini following a capital account liberalization episode. Liberalization is measured using the Chinn-Ito index. Estimates are based on an autoregressive distributed lag model. The horizontal scale is in years before or after the episode. The vertical scale shows percent change. ***, **, * denote significance at 1 percent, 5 percent and 10 percent, respectively. See Furceri, Loungani and Ostry (2017) for details.

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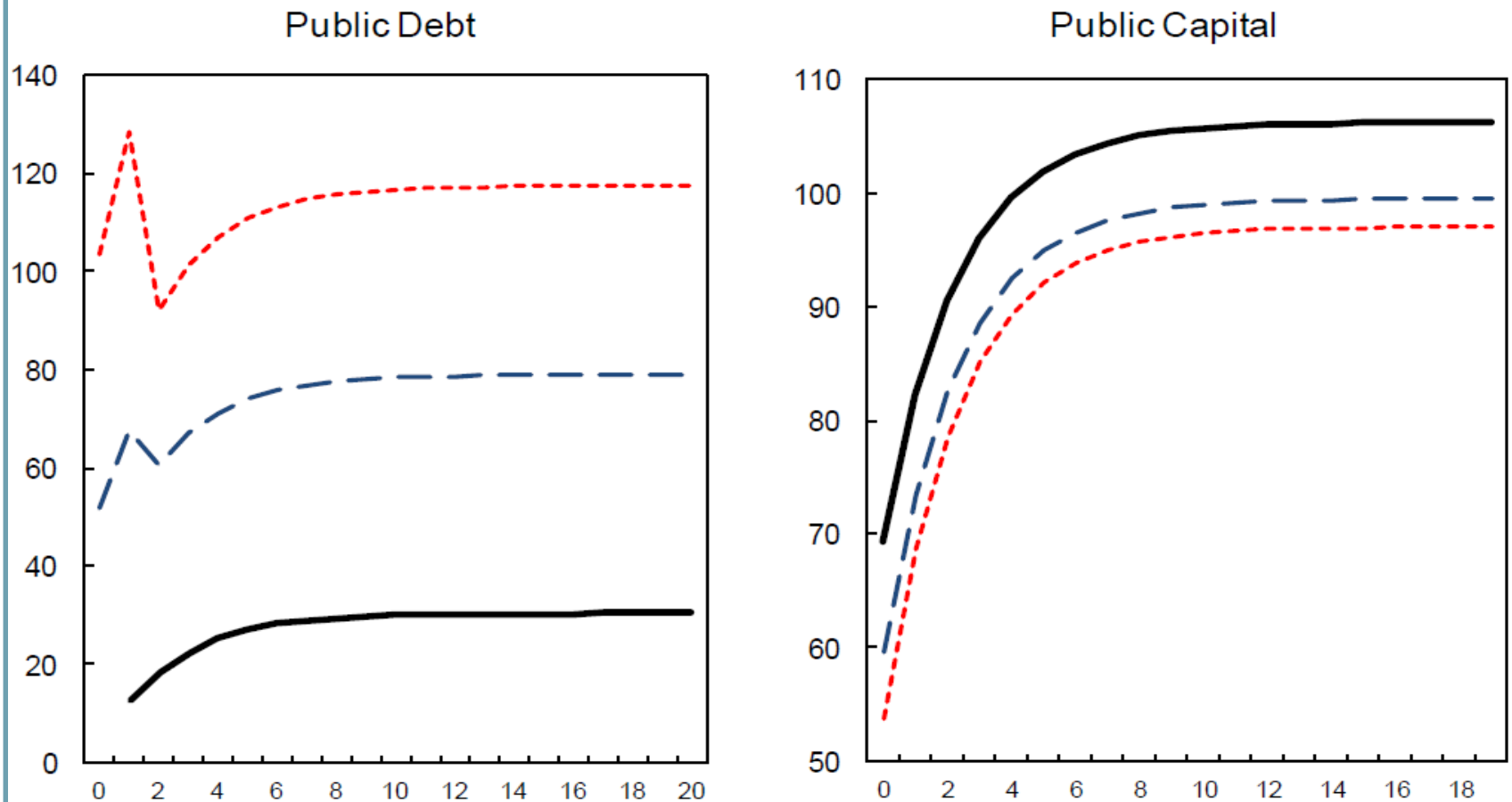
**EFFICIENCY-EQUITY TRADEOFFS:
FISCAL CONSOLIDATION
("AUSTERITY")**

FISCAL CONSOLIDATION: OVERVIEW

- Public debt has been an obsession in some quarters, with a clarion call to reverse the build-up during the global financial crisis
  - to lay a foundation for growth
  - to insure against bad shocks in future
- Some countries want to run surpluses to pay down the debt, rather than let debt ratios decline organically through growth
- But paying back the debt rapidly may be the costlier option (Ostry et al., 2014)
- Evidence also suggests adverse distributional impacts of fiscal consolidation
- Hence, given the evidence:
  - Better to live with high debt if fiscal space is ample
  - Design fiscal consolidation to mitigate distributional impacts
  - As in the case of capital account liberalization, use redistribution

OPTIMAL POLICY IS NOT TO REPAY DEBT!

Figure 2. Dynamics Under Low, Medium, and High Initial Debt
(in percent of GDP) 1/

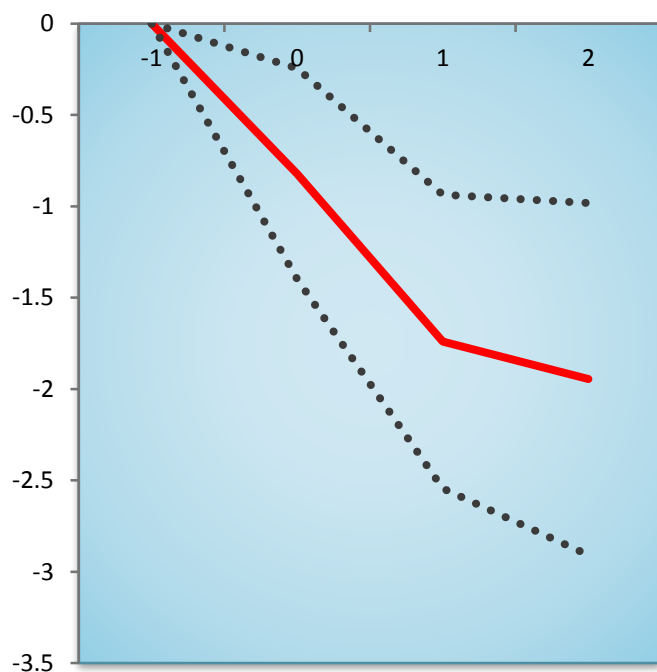


AUSTERITY IS BAD FOR INEQUALITY

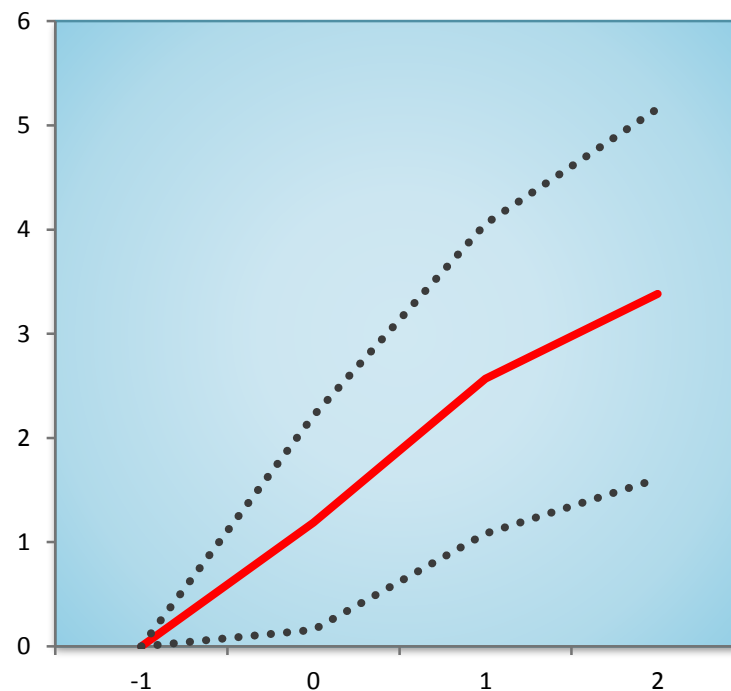
- Historically, episodes of fiscal consolidation have been followed by:
  - a sharp-rise in long-term unemployment, which is an important channel for increases in inequality
  - a bigger contraction in wages than in profits
  - an increase in the Gini coefficient

EFFICIENCY-EQUITY EFFECTS OF AUSTERITY

Fiscal consolidation lowers growth:
no 'expansionary austerity'



Fiscal consolidation raises
inequality



Estimated impact on growth and market Gini following an episode of fiscal consolidation. Episodes are based on the narrative approach. Estimates are based on an autoregressive distributed lag model (ARDL). The horizontal scale is in years before or after the episode. The vertical scale shows percent change. See Ostry, Loungani and Furceri (2016, F&D) for details.

THE BROAD MESSAGE...

- High inequality and low & fragile growth are two sides of the same coin--a dangerous gamble therefore to 'go for growth' and assume equity will take care of itself
- Fear of using fiscal redistribution is overblown. In fact, on average in the data, redistribution is a pro-growth policy through the greater equality it engenders. The 'leak' in Arthur Okun's bucket has not been large in practice
- Evidence on financial globalization
  - Costs in terms of increased volatility are high
  - Output benefits elusive and shared unevenly
  - Other effects: a race to the bottom on taxes? Reduced redistribution?
- Be cognizant of growth-equity tradeoffs in macro & structural policies
  - How can we design policies so growth benefits go up AND equity costs go down?
  - Use of complementary policies: “trampoline” policies—such as job retraining and assistance with search—to help workers bounce back from job displacement
  - Redistribution: greater reliance on wealth and property taxes, more progressive income taxation, and better targeting of social benefits
- On macro policies:
  - Case for paying down public debt is weak—living with debt is a better policy when fiscal space ample