MACRO-DISTRIBUTIONAL LINKAGES

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The traditional macro 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)

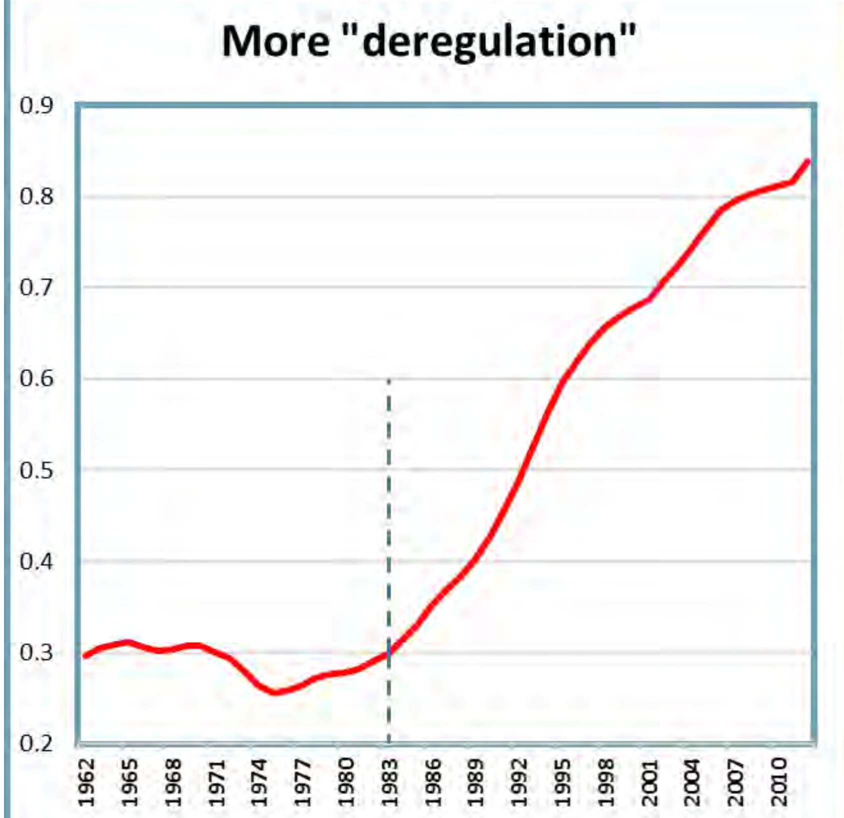
Traditional Narrative: Growth trumps distribution

- 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)

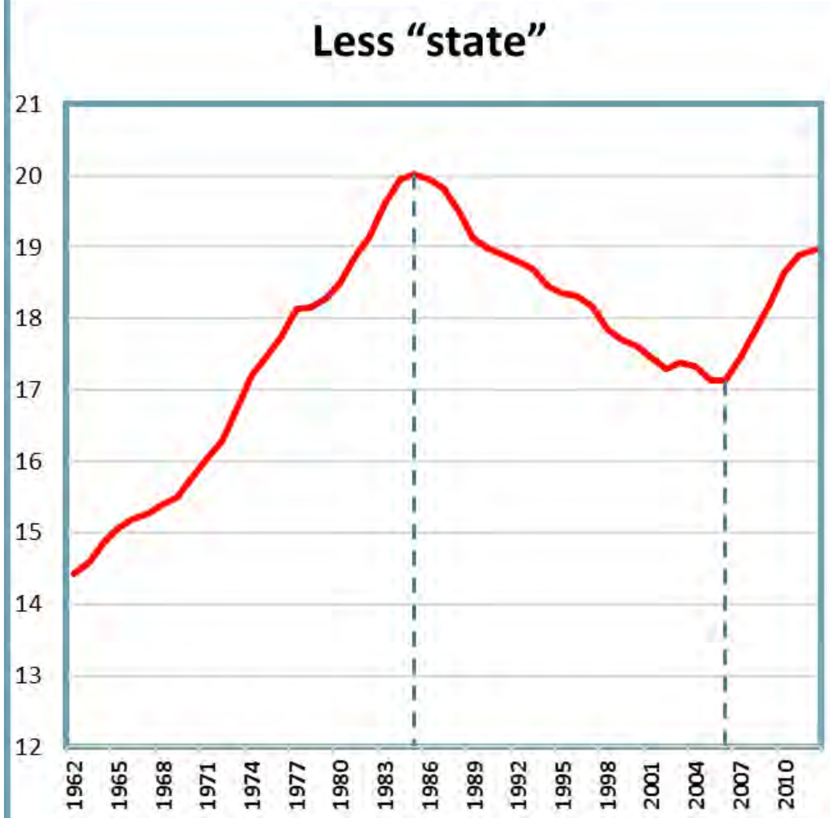
- Echoed by Lucas in his famous quotes
  - *"Is there some action a government of India could take that would lead the Indian economy to grow like Indonesia's? If so, what, exactly? The consequences for human welfare involved in questions like these are simply staggering: Once one starts to think about 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



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)



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

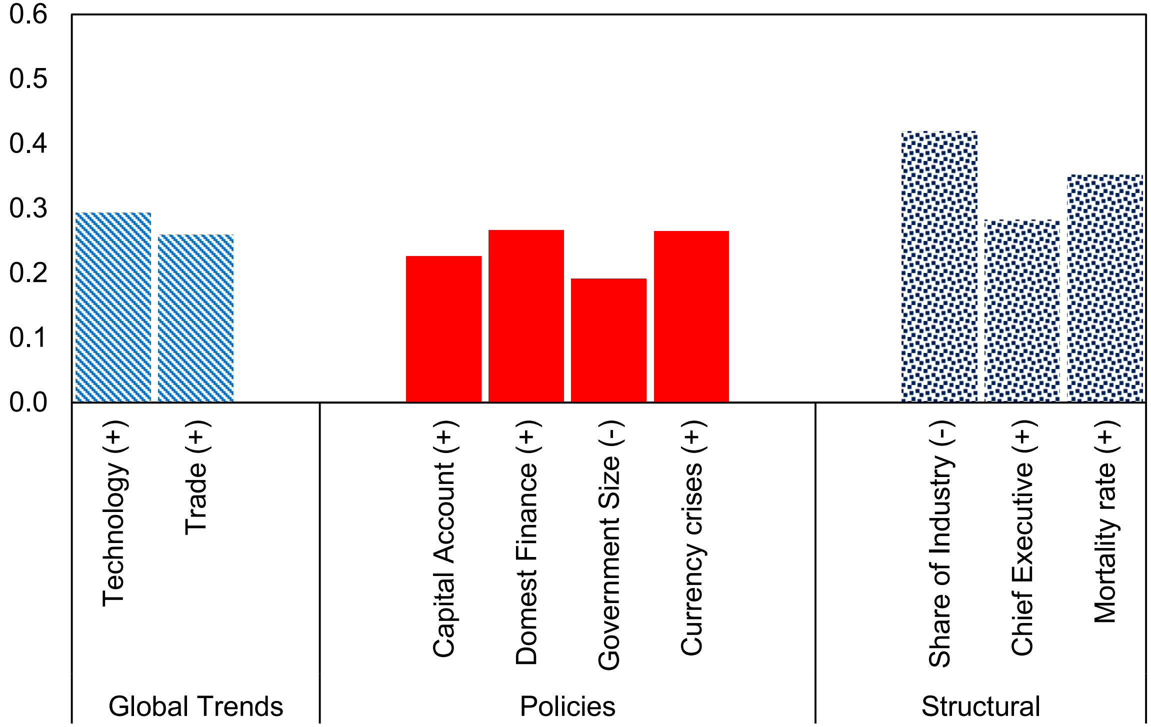
2) Virtually all policies pose efficiency-equity tradeoffs

- 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).*

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

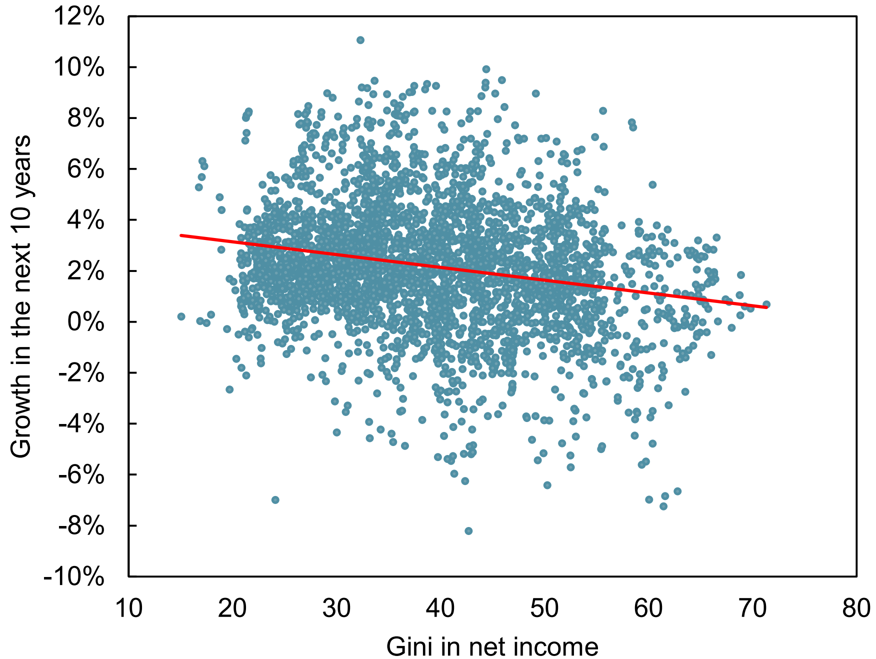
GROWTH, INEQUALITY AND REDISTRIBUTION

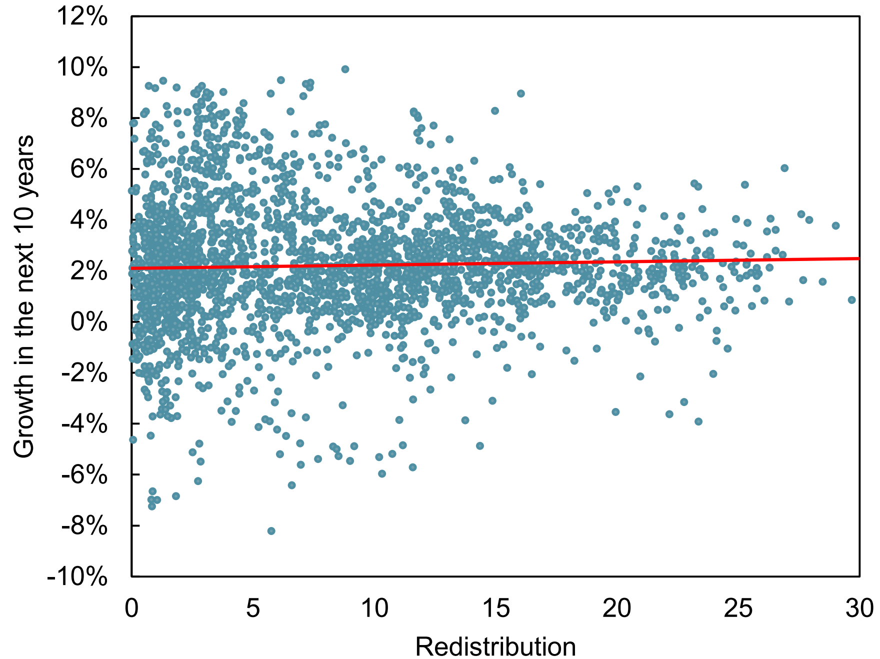
Contribution and Key findings

- 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



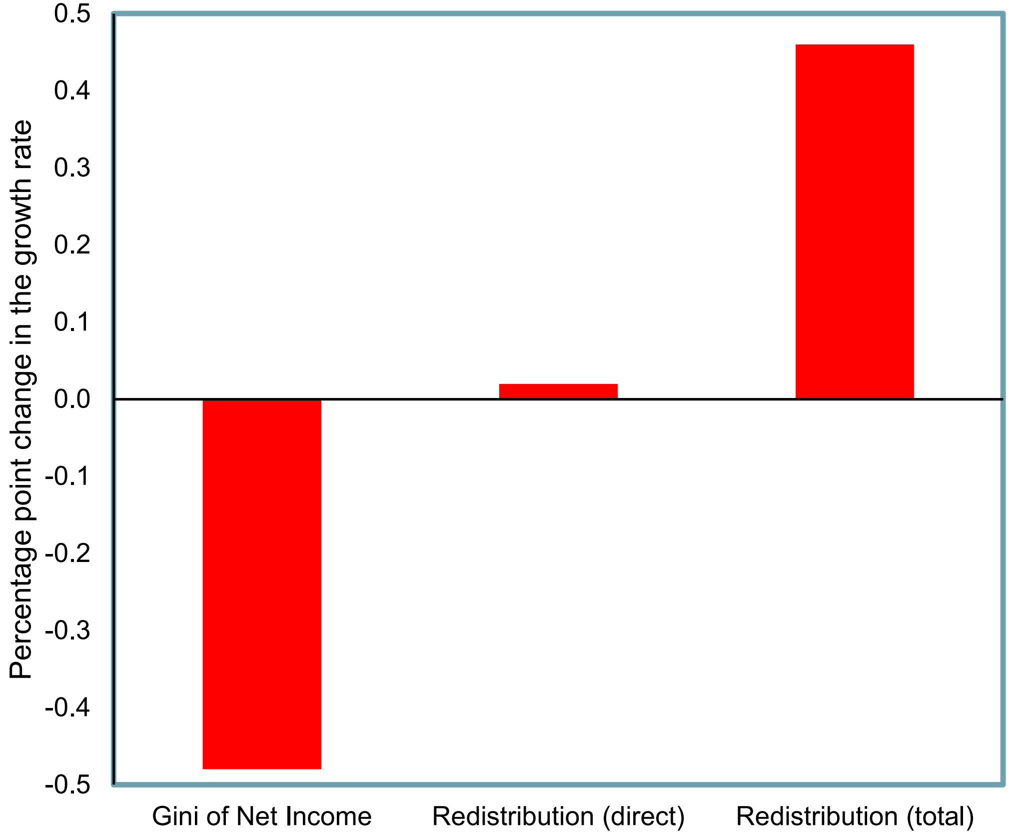


- ***Strong negative relation between the level of net inequality and growth in income per capita over the subsequent period***
- ***Weak (positive) relationship between redistribution and subsequent growth***

Source: Ostry et al (2014)

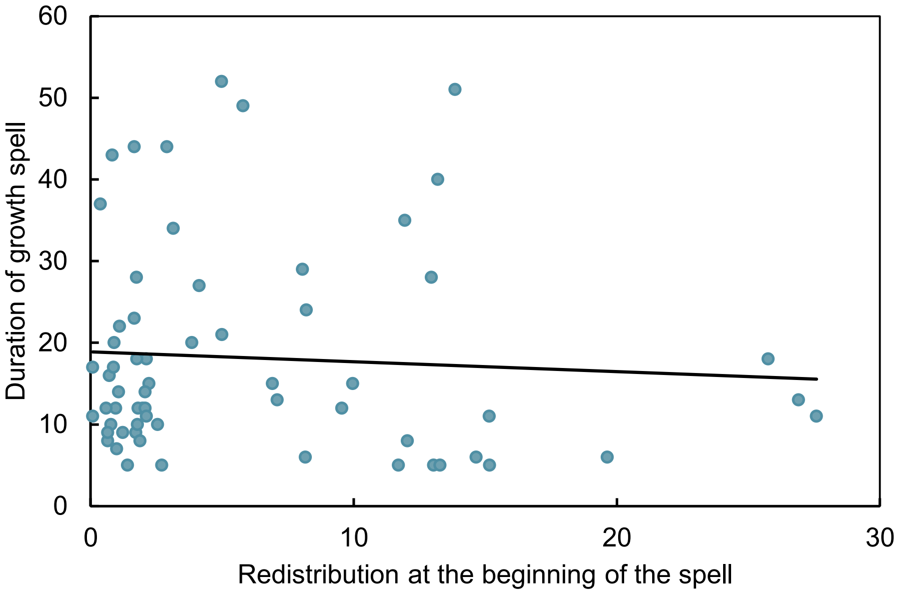
Baseline results for growth: the effects Graphically

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*

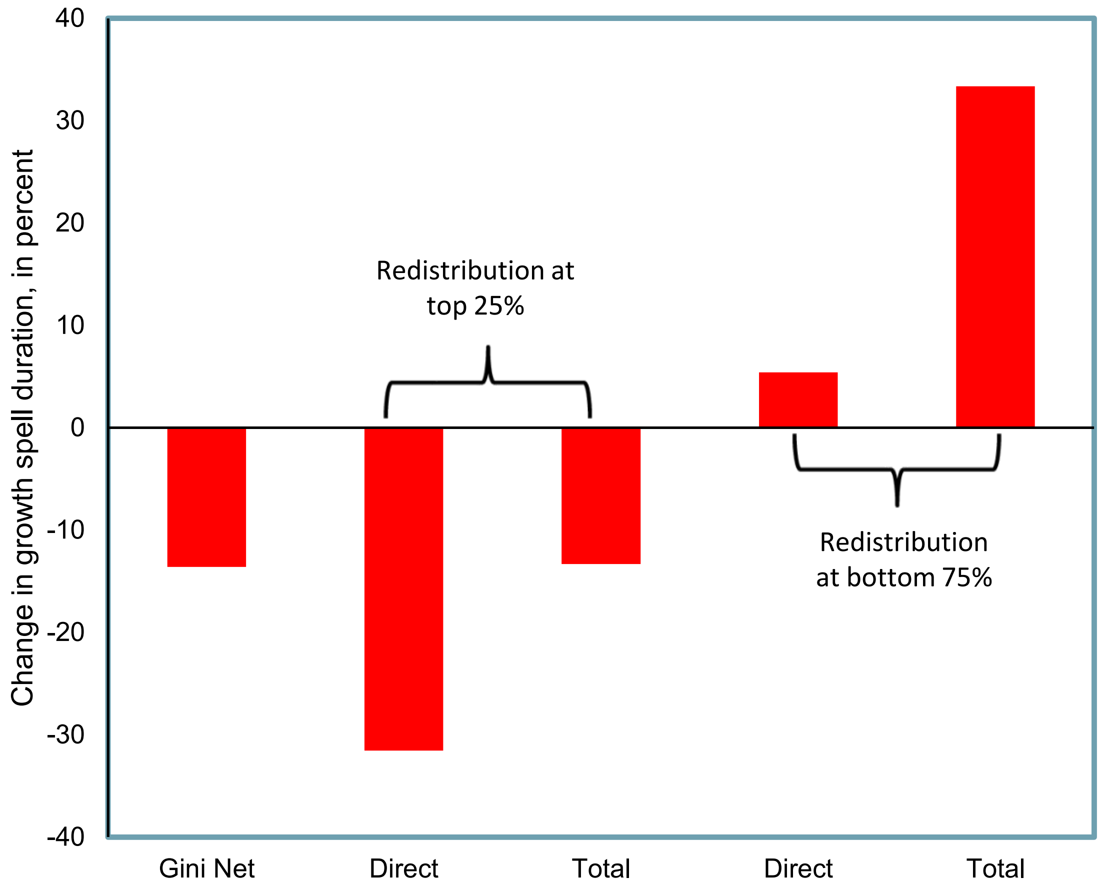
INEQUALITY LOWERS DURATION OF GROWTH SPELLS REDISTRIBUTION DOESN'T AFFECT DURATION



- ***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*

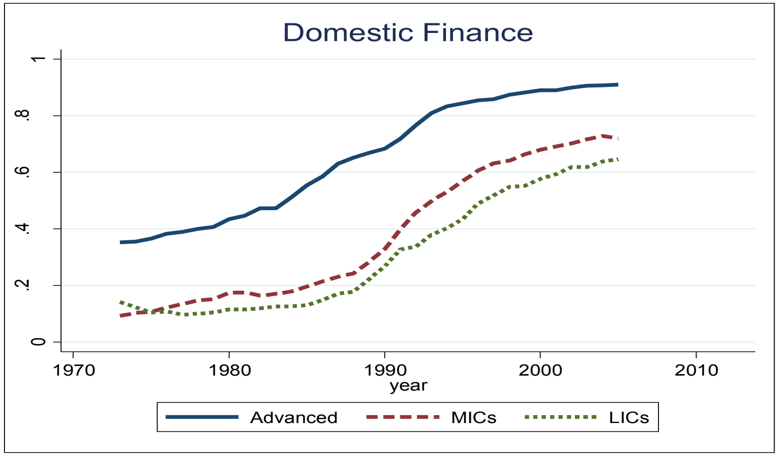
- *For smaller redistribution (less than 13 Gini points) the overall effect is growth-positive: roughly neutral direct effects of redistribution, and a protective effect of the resulting reduction in inequality*

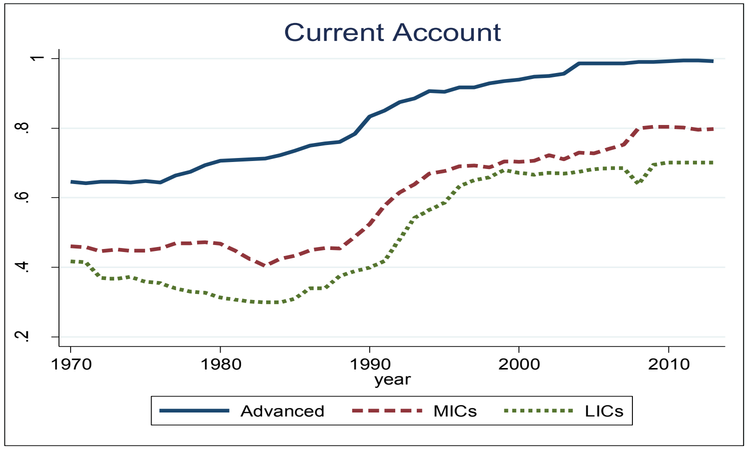
Growth-equity Tradeoffs in structural reforms

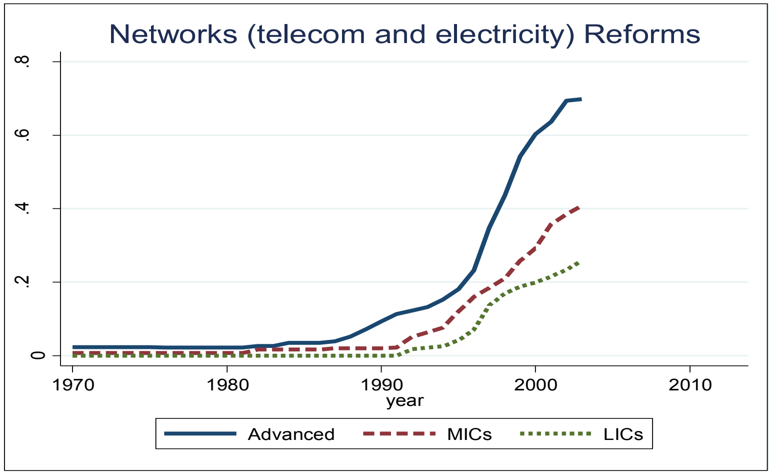
QUESTIONS

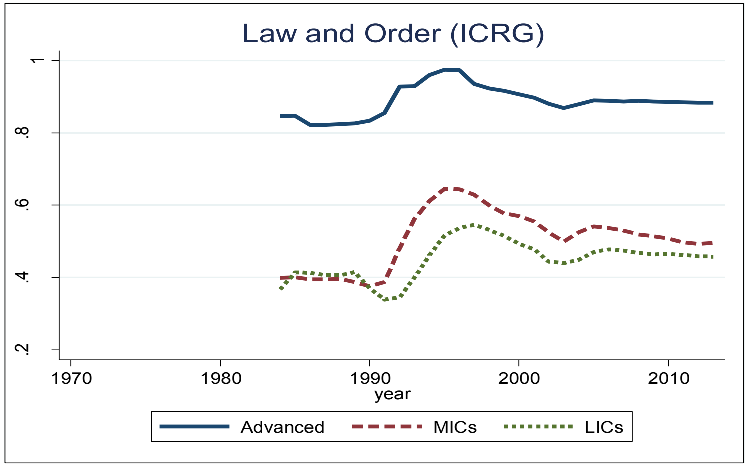
- Do structural reforms give rise to growth-equity trade-offs i.e. do reforms that aim to boost potential output also change the distribution of income?
- If reforms increase inequality, what is the total effect of reforms on growth?
  - Higher inequality is bad for growth.
  - If reforms increase inequality, 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



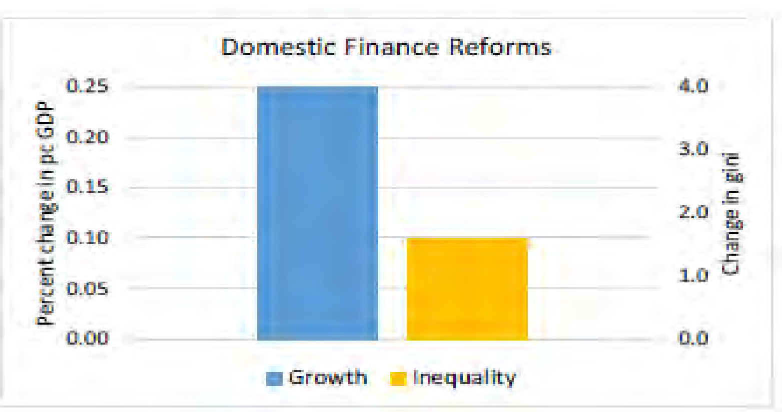


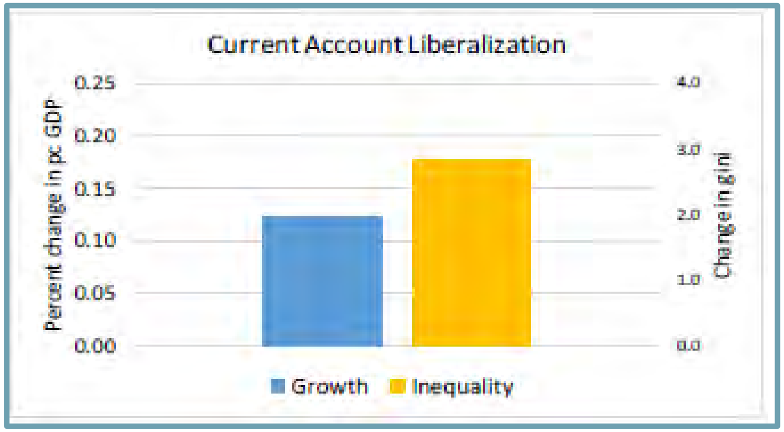


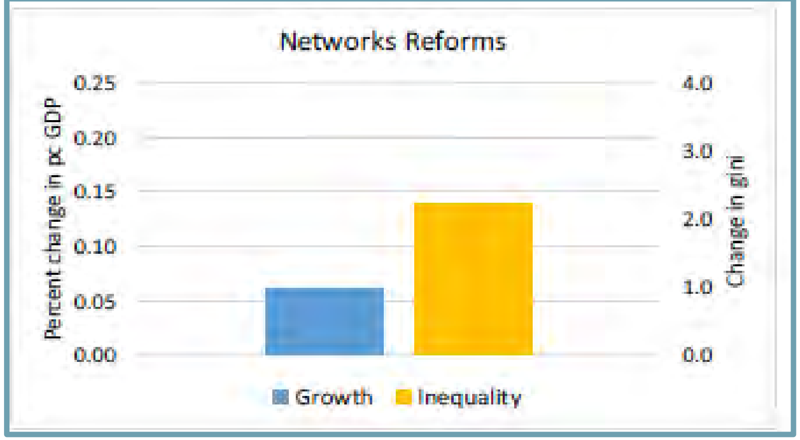


GROWTH AND EQUITY EFFECTS OF STRUCTURAL REFORMS

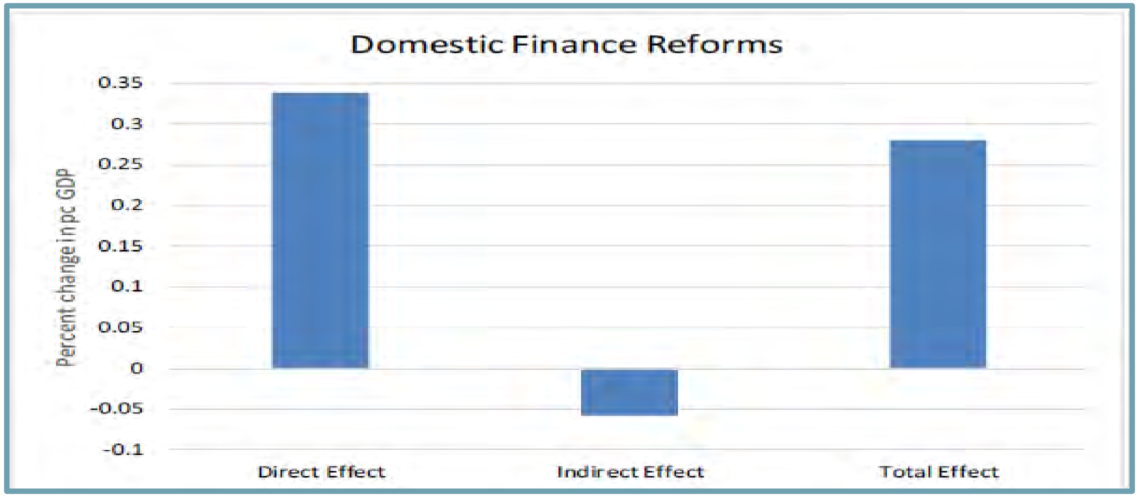
Each panel plots the long-run effect on the level of income and the level of inequality of moving the reform variable from the median to the 75th percentile.

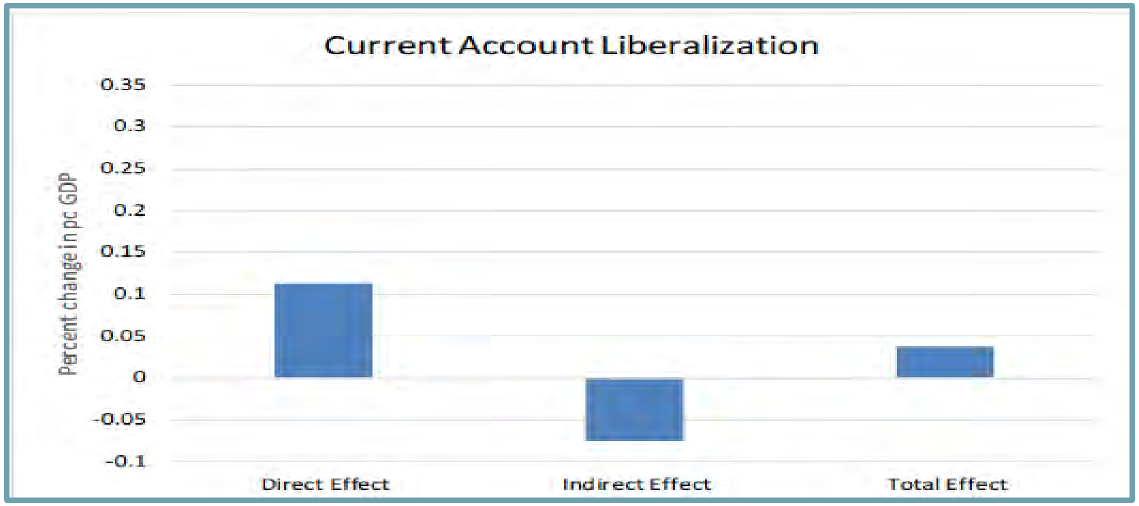






DIRECT AND INDIRECT EFFECTS





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.

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

INTERNATIONAL CAPITAL MOBILITY: STORY LINE

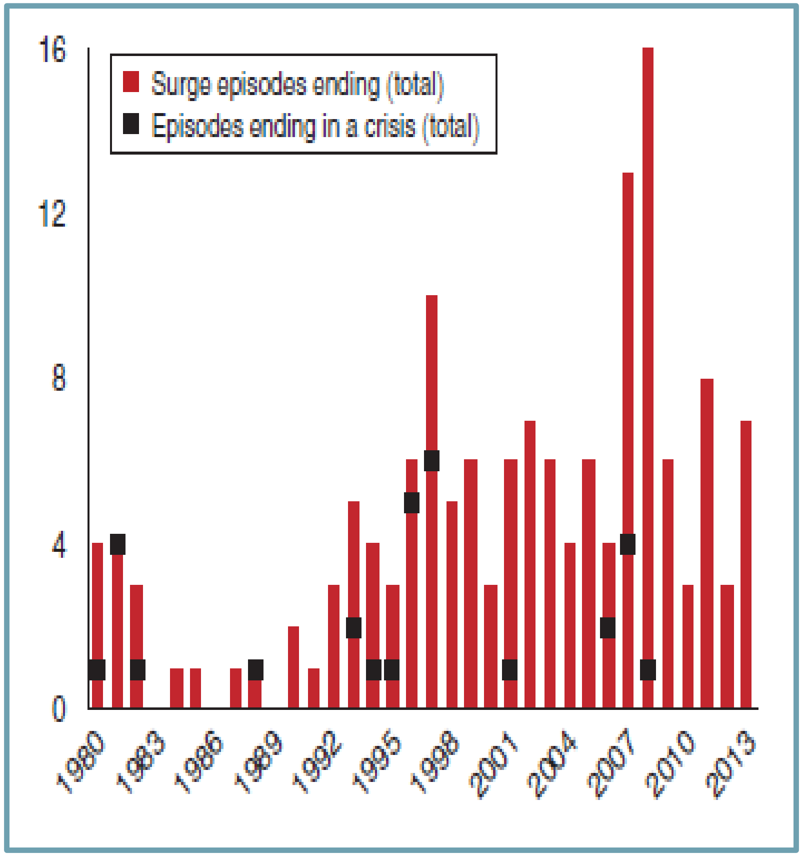
- Great benefits in theory, but growth and risk-sharing benefits are elusive
- In fact, for many countries (particularly EMs), capital flows are source of volatility and crisis
- Evidence also shows adverse distributional impacts
  - Liberalization can increase likelihood of financial crises (↑ inequality 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

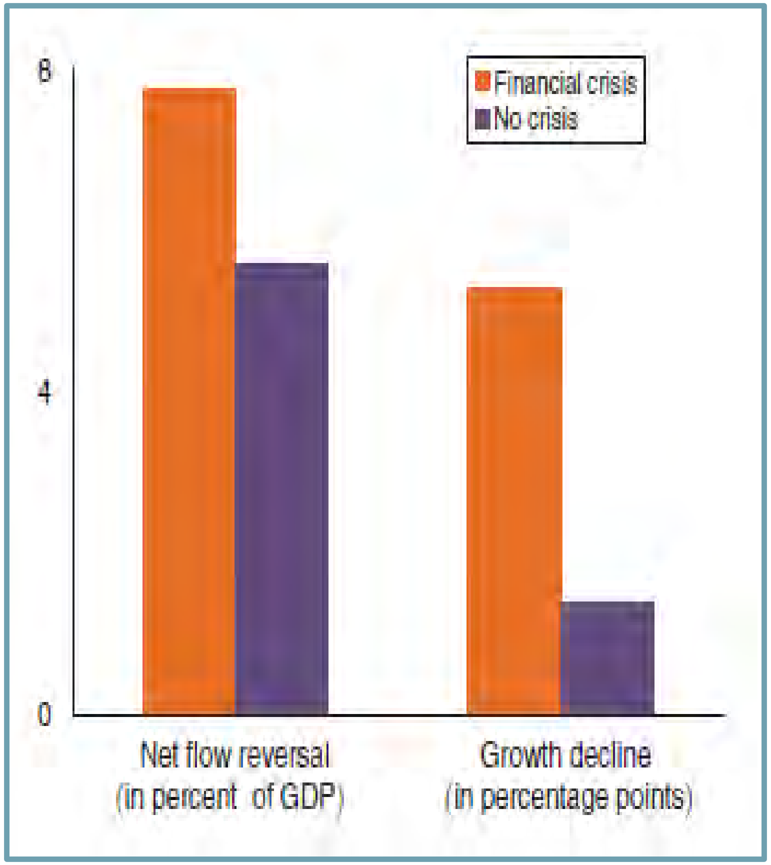
UNCERTAINTY SURROUNDING THE BENEFITS

- 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)

Capital Surges and financial crises

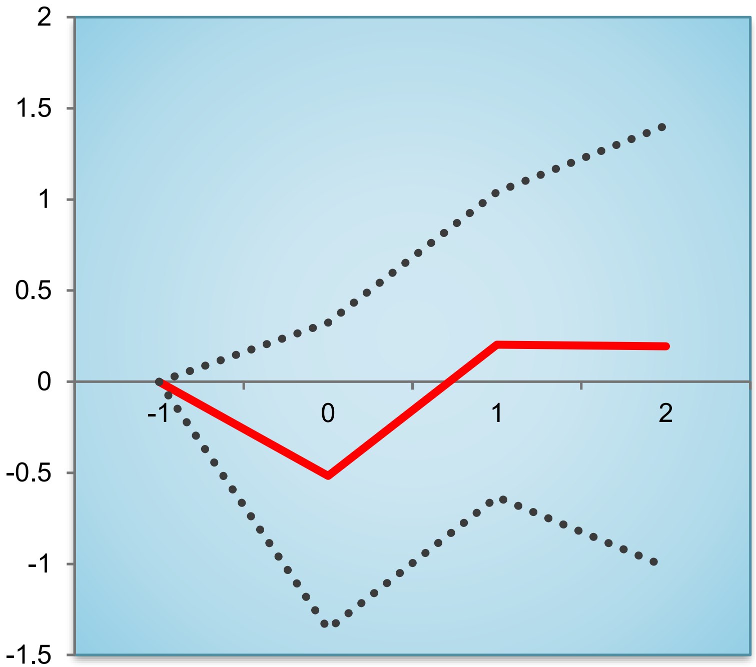




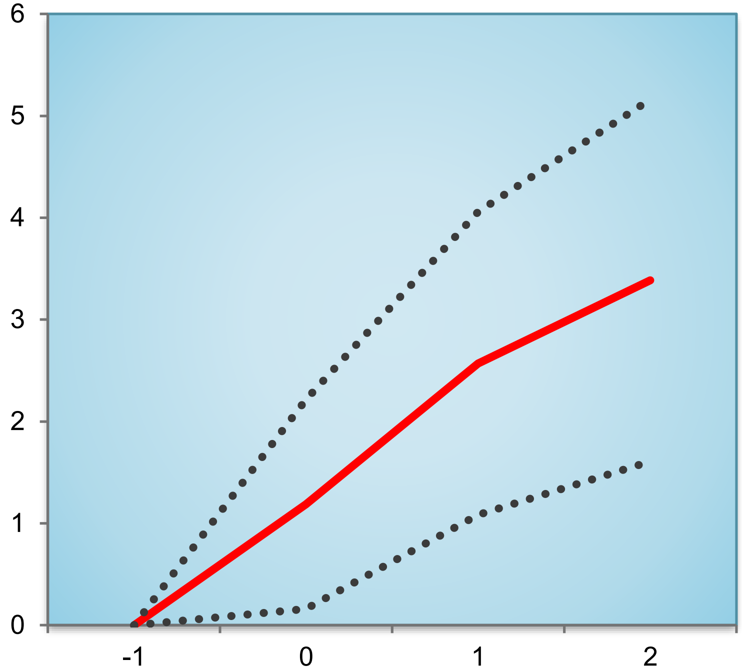
The panel on the left shows the total number of surges ending in a given year and those that end in a financial crisis. The panel on the right compares capital flow reversal and growth between surges that end in a crisis and those that do not. The analysis is based on data for 53 emerging market economies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

EFFICIENCY AND EQUITY EFFECTS

Capital account liberalization: impact on growth is elusive



Capital account liberalization: Inequality goes up



Estimated impact on growth and market Gini following a capital account liberalization episode. Liberalization is measured using the Chinn-Ito index. 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.

Support for capital controls growing

- We are not in Genoa anymore
  - Genoa Monetary Conference (1922): *"All artificial control of operations in exchange… is futile and mischievous"* - a sentiment, however, which lives on in some quarters: *"I have only eight seconds left to talk about capital controls. But that's OK. I don't need more time than that to tell you: they don't work, I wouldn't use them, I wouldn't recommend them"* (Carstens, 2015)
- Bretton Woods architecture recognized that capital controls would be needed
  - Keynes (1944): *"What used to be heresy is now endorsed as orthodoxy"*
  - White (1937): *"Without the co-operation of other countries such control is difficult"*
- In the 1970s, US favored capital mobility – to help generate dollar devaluation
  - And the IMF became a cheerleader for open capital markets: *"What I would like to do is to persuade those of you who remain skeptical… that the benefits of liberalizing the capital account outweigh the potential costs"* (Fischer, 1997)
- But since the GFC, the IMF has outlined a greater role for controls
  - The Economist, commenting on Ostry et al. (2010): *"The IMF…acknowledges that controls on capital inflows can be a useful tool. For an organization that has long focused on the distortions such controls create, the shift is significant. It is also timely."*
  - Even Fischer became a "convert": *"What useful purpose is served by short-term international capital flows?"* (Fischer, 2014)
- Liberalization may reduce welfare in a second-best world (Rodrik, 2015), by causing excessive ER volatility or an ER level damaging for development (Jeanne, 2015)

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

FISCAL CONSOLIDATION: OVERVIEW

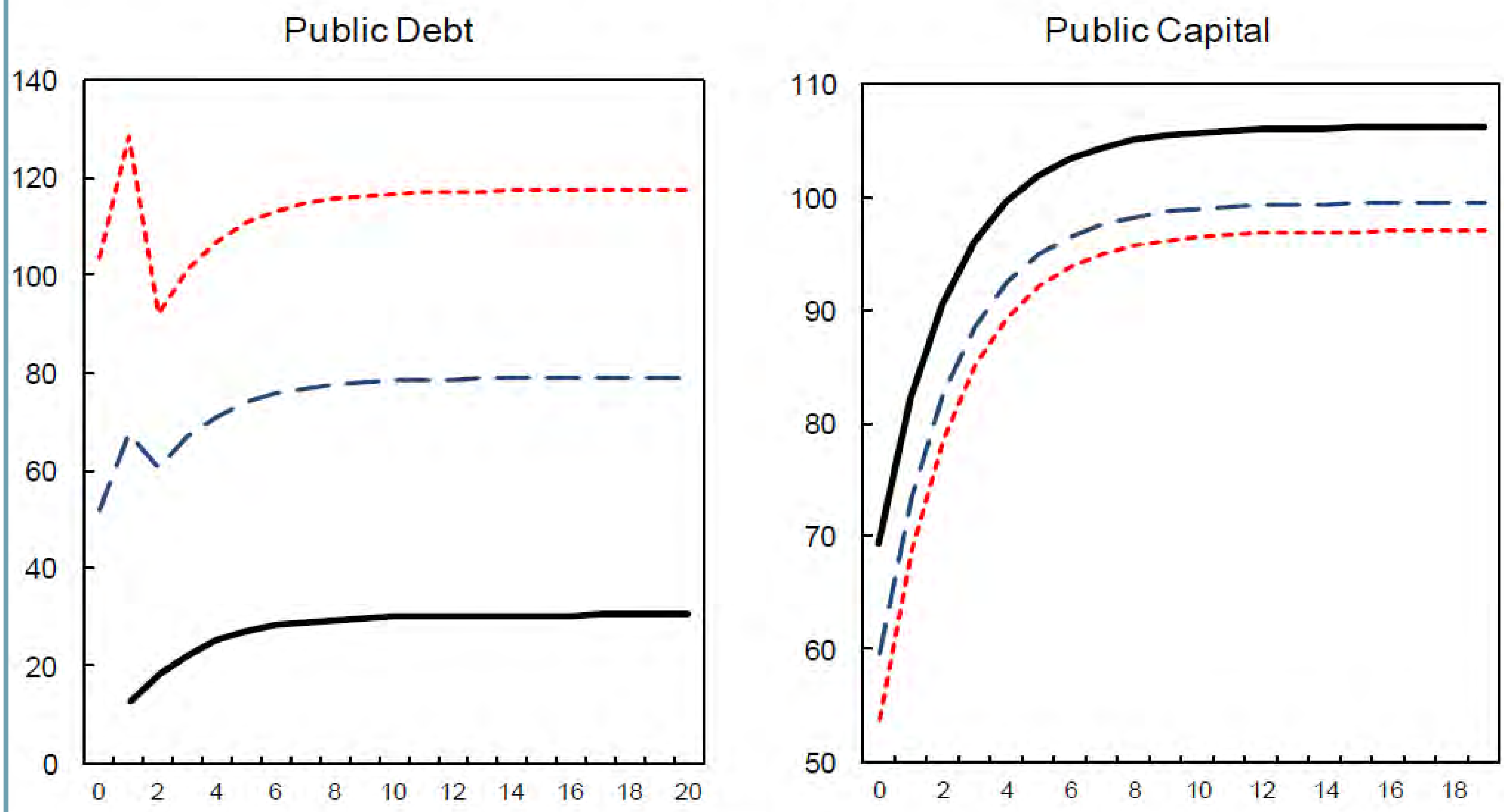
- Public debt has been an obsession in some quarters, with a clarion call to reverse the build-up during the global financial crisis
  - to lay a foundation for growth
  - to insure against bad shocks in future
- Some countries want to run surpluses to pay down the debt, rather than let debt ratios decline 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

Should debt be scaled down?

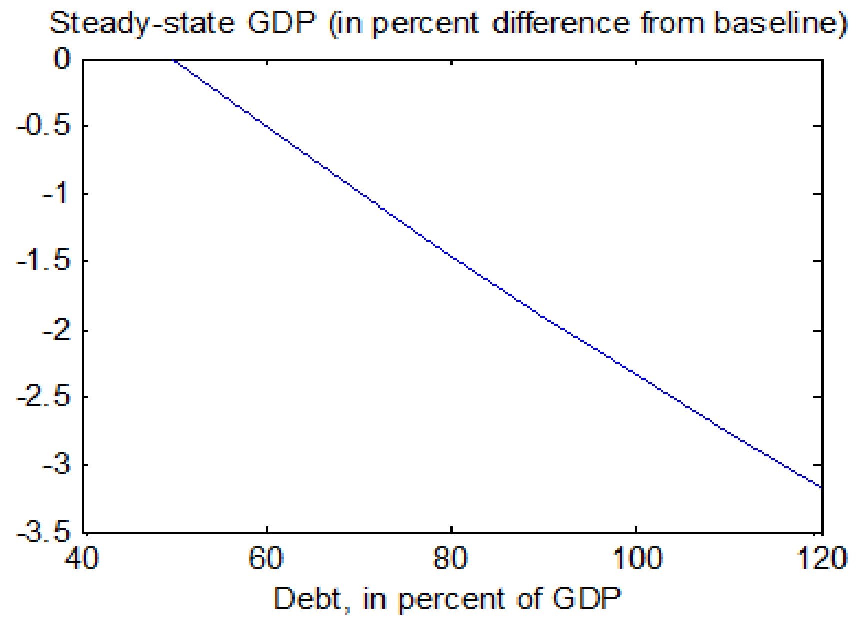
- Recent debates
  - Maastricht? (60 percent of GDP)
  - Reinhart and Rogoff? (90 percent of GDP)
  - At which pace should we pay down this debt? (IMF, 2013)
- Theory provides little guidance
- But few questions asked about whether the debt needs to be paid down in the first place
- Focus is on countries with fiscal space (Mendoza and Ostry, JME, 2008)

OPTIMAL POLICY IS NOT TO REPAY DEBT!

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



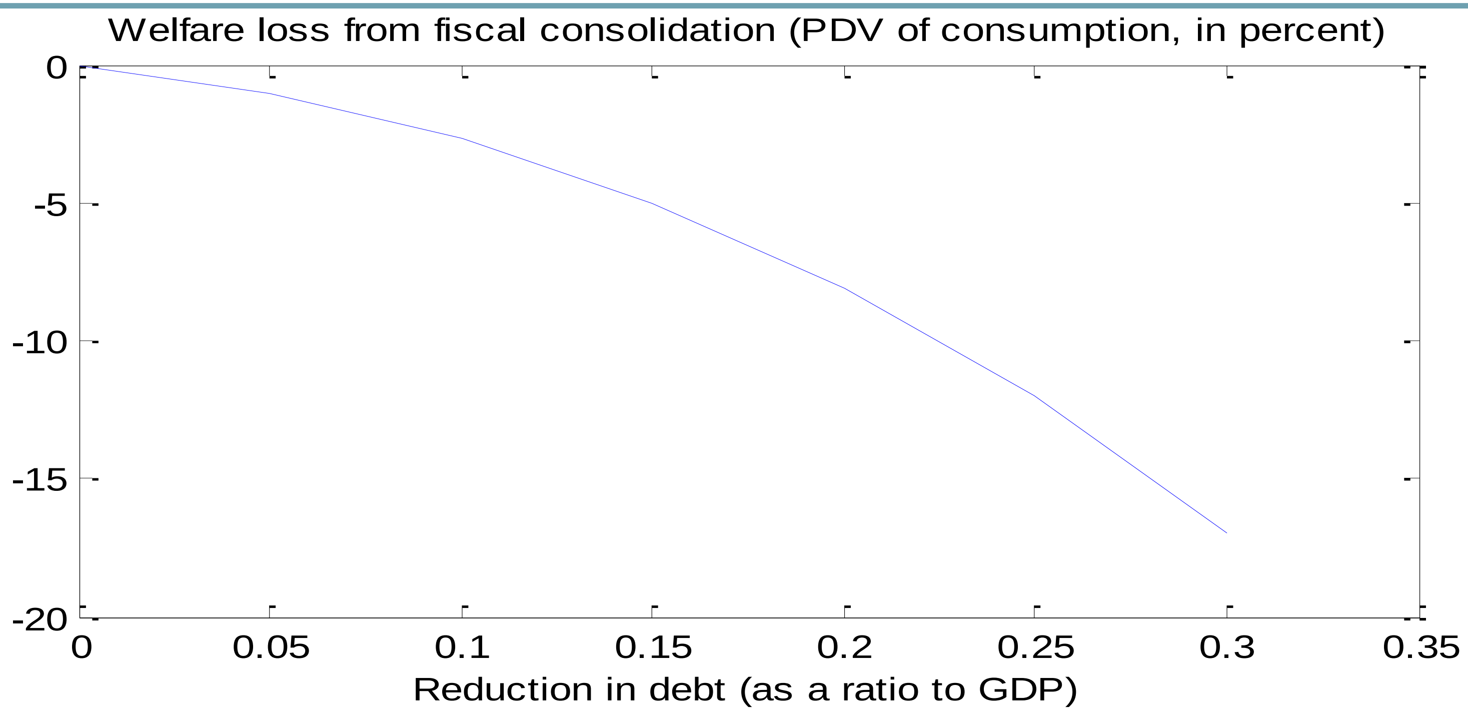
THE COST OF INHERITED DEBT INDEED IS HIGH



For an initial increase in public debt from 50 to 100 percent of GDP:

- GDP is about 2.5 percentage points lower permanently.
- The present value welfare cost of inheriting 50 percent of GDP higher debt is around 30 percent of the initial period consumption.

BUT PAYING DOWN THE DEBT IS EVEN MORE COSTLY: DEBT IS A SUNK COST



- Repaying 10 percent of GDP of debt reduces welfare by 2.7 percent of equivalent consumption (1.7 percent if spread over 10 years)
- The costs are convex in the speed and extent of consolidation

Crisis-insurance benefits of lower public debt are small

Correct but to evaluate this one needs a cost-benefit analysis.

- For debt =120 percent of GDP, the likelihood of a debt crisis is around 2.6 percent per year (Baldacci et al, 2011).
  - It is around 2.4 percent if debt is 100 percent of GDP
- Over a 20 year horizon, the expected number of crises is 0.52
- The cost of a fiscal crisis is around 15 percent of GDP
- Expected cost of fiscal crisis ≈ 0.52*15 ≈ 7.8 percent of GDP
- If debt goes down from 120 to 100 percent of GDP

  Benefits = Δ Expected cost ≈ 7.8 - 7.2 ≈ 0.6 percent of GDP
- Compare this to the distortionary costs of bringing debt down

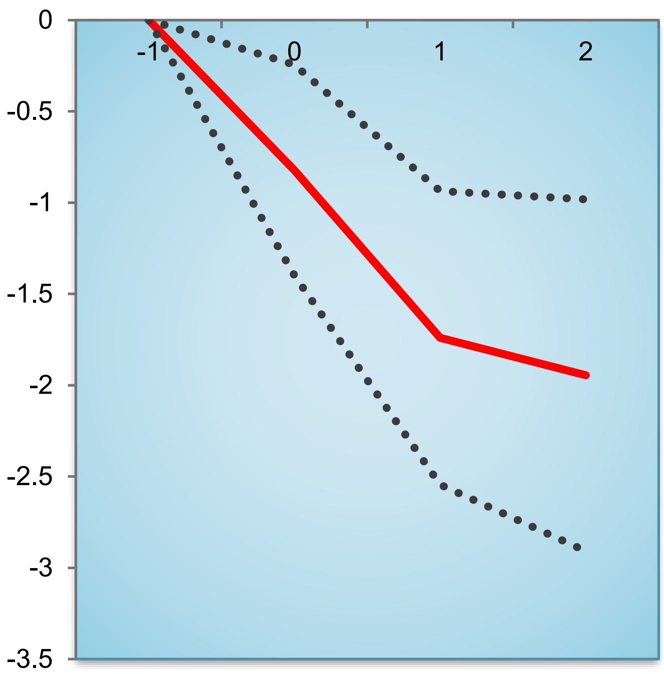
  Cost ≈ 5 percent of GDP
- In any case, more than one way to get debt/gdp down in good times. Better the denominator does the work, rather than target overall surplus.

Austerity is bad for inequality

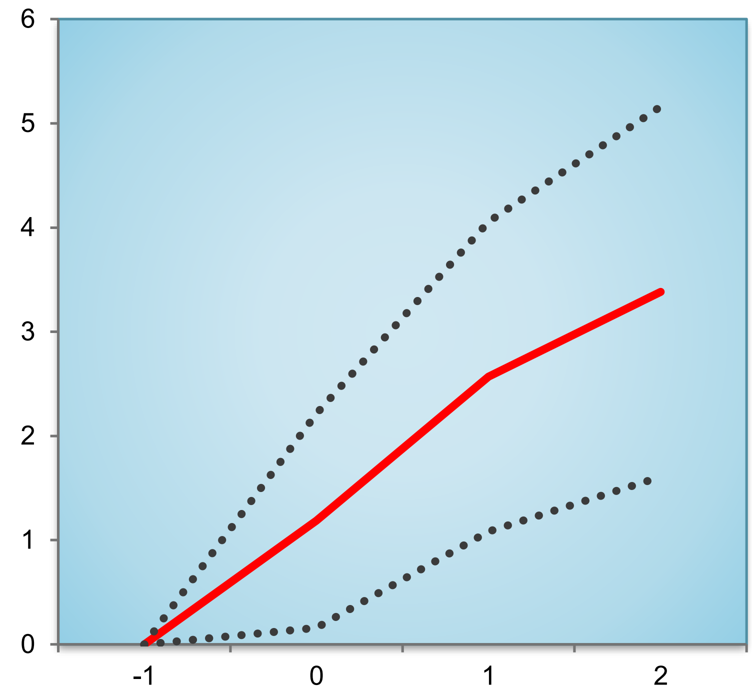
- Historically, episodes of fiscal consolidation have been followed by:
  - a sharp-rise in long-term unemployment, which is an important channel for increases in inequality
  - a bigger contraction in wages than in profits
  - an increase in the Gini coefficient

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…

- A ‘business-as-usual’ view would recommend:
  - Continue to focus on raising aggregate growth,
    - Say ‘I feel your pain’ to those not sharing in the growth
    - Redistribute more if needed to pacify those discontented
  - Press ahead with all manner of structural reforms
    - In particular, push ahead with capital account liberalization
  - On macro policies:
    - Scale down public debt rapidly from current levels

THE BROAD MESSAGE…

- The research summarized here suggests:
  - Growth & distribution are two sides of the same coin: we should focus on both
    - Redress—not merely express anguish over—adverse distributional effects
  - Be cognizant of growth-equity tradeoffs in macro & structural policies
    - How can we design policies so growth benefits go up, equity costs go down?
    - Design policies from the outset so that extreme distributional impacts are muted
    - 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